

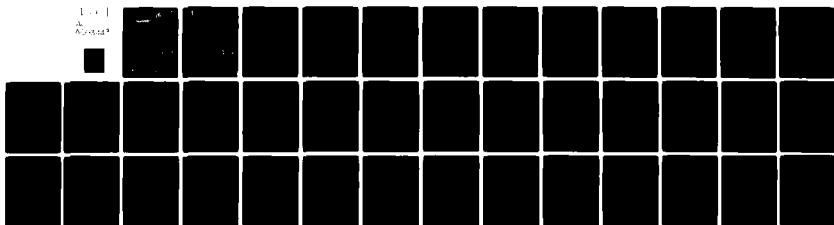
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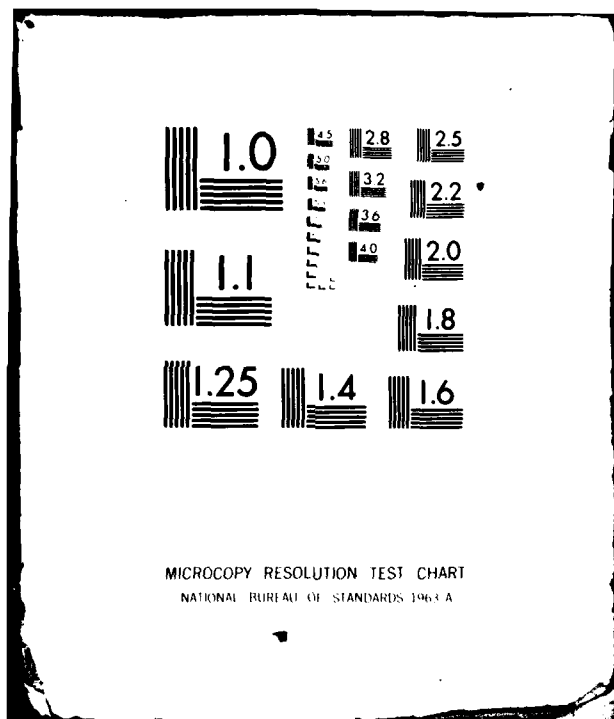
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**HUMRRO ACTIVITIES IN SUPPORT OF
THE SELF-PACING OF FOUR U.S. ARMY TRADOC
PROGRAMS OF INSTRUCTION**

March 1976

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Prepared for TRADOC/TMI
Ad Hoc Group on Self-Pacing
Under Contract No. DAAJ02-76-C-0014

**HUMRRO
Human Resources Research Organization
300 North Washington Street
Alexandria, Va. 22314**

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self-pacing Military Policeman (MOS 95B) Corrections Specialist (MOS 95C) Light Vehicle Driver (MOS 64C) Field Wireman (36K)		
performance-oriented training criterion-referenced testing		
20. ABSTRACT (Continue on reverse side if necessary and identify by block number)		
Technical assistance was provided to the TRADOC/TMI ad hoc group responsible for developing plans for converting four MOS-producing courses to criterion-referenced, performance-oriented courses in a self-paced mode. The courses were: Military Policeman (MOS 95B); Corrections Specialist (MOS 95C); Light Vehicle Driver (MOS 64C); and Field Wireman (36K). HumRRO scientists interacted with proponent school staff and with members of the TRADOC/TMI ad hoc group to determine: (a) present course status; (b) Enlisted Personnel Management System (EPMS) considerations; (c) best course of action to be followed; and		

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- (d) specific responsibilities for accomplishing course conversion.
 Prior to making site visits to the Military Police School, Transportation School and the Signal School, HumRRO developed an analytic framework for the systematic study of each course. Included in this framework was a set of questions designed to elicit the information required for making these courses criterion-referenced, performance-oriented, and self-paced.

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INTRODUCTORY NOTE

In 1976, HumRRO provided technical assistance to the TRADOC/TMI ad hoc group responsible for developing plans for converting four MOS-producing courses to criterion-referenced, performance-oriented courses in a self-paced mode. The courses were: Military Policeman (MOS 95B); Corrections Specialist (MOS 95C); Light Vehicle Driver (MOS 64C); and Field Wireman (36K).

The major activity called for in accomplishing this work was a series of three 2-day visits to the proponent Army Service Schools for the courses under consideration--the Military Police School at Fort McClellan, Ala.; the Transportation School at Fort Eustis, Va.; and the Signal School at Fort Gordon, Ga.

During each of the site visits, HumRRO scientists interacted with proponent school staff and with members of the TRADOC/TMI ad hoc group to determine: (a) present course status; (b) Enlisted Personnel Management System (EPMS) considerations; (c) best course of action to be followed; and (d) specific responsibilities for accomplishing course conversion.

Prior to making the site visits, HumRRO staff developed an analytic framework for the systematic study of each course. Included in this framework was a set of questions designed to elicit the information required for making these courses criterion-referenced, performance-oriented, and self-paced. Particularly important to HumRRO staff and to the TRADOC/TMI ad hoc group were the extent to which: (1) the existing courses were developed following the principles of Instructional System Design, and (2) they already incorporated the procedures of performance-oriented training.

Following the site visits, HumRRO staff presented oral and written reports to TRADOC/TMI. The three original written reports have been collated into this single report to make the information available to researchers and practitioners alike.

The following-named HumRRO scientists performed the site visits and prepared the separate reports: Military Police School: Dr. John E. Taylor, Dr. Richard Suchman, and Mr. Michael McCluskey; Transportation School: Dr. William H. Melching, Dr. John E. Taylor, and Mr. Michael McCluskey; and Signal School: Dr. John E. Taylor, Ms. Jacklyn E. Hungerland, and Mr. Michael McCluskey.

72W10-CA-76-6

**SELF-PACING MOS INSTRUCTION FOR
MOTOR TRANSPORT OPERATOR (64C)**

**Report of Site Visit to
US Army Transportation School**

**22-23 March 1976
(Project SITES)**

**Prepared for TRADOC/TMI
Ad Hoc Group on Self-Pacing
Under Contract No. DAAJ02-76-C-0014**

April 1976

**HUMAN RESOURCES RESEARCH ORGANIZATION
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PURPOSE OF SITE VISIT

Under the provisions of Contract No. DAAJ02-76-C-0014, issued under Basic Agreement No. DAAJ02-76-A-0004, a three-member team from Western Division, HumRRO, made a two-day site visit to the US Army Transportation School to provide technical assistance to a TRADOC/TMI ad hoc group to determine the readiness of the 64C course for conversion to self-pacing.

The two days were spent in large-group discussion with representatives from a variety of agencies who have interest in the 64C course. Major information sources were the representatives from the Transportation School and Forts Dix and Leonard Wood. Documents made available during the visit were reviewed. An appendix to this report lists conference attendees and the documents reviewed. Inasmuch as no 64C training is conducted at Fort Eustis, there were no opportunities to observe classes in operation.

The team determined: the present status of each course, the anticipated impact of EPMS, the best courses of action to be pursued in self-pacing each course, and HumRRO/service school responsibilities in accomplishing course conversion. Close attention was given to the extent to which (1) the courses had been developed following the principles of instructional systems development, and (2) the courses had already incorporated the procedures of performance-oriented training and criterion-referenced testing. The team also effected information exchanges and coordination among

all participants (ad hoc group, proponent school, course personnel, and HumRRO) in order to expedite the initiation of course conversion.

FINDINGS

Course Content. Training for this MOS is conducted at Fort Dix and Fort Leonard Wood. At present, both sites produce light (up to 5T truck) and heavy (over 5T truck) operators, and both sites follow the current Army Subject Schedule in determining instructional content. Sequence and content of instruction are much the same at the two sites. At Fort Dix, however, no FTX is conducted, there is no training in the 5T dump truck, and most driving is on improved roads.

The Transportation School recently completed a systems-engineering of the job of Motor Transport Operator. A panel of experts prepared the list of tasks; 31 of the tasks were assigned to Skill Level 1 and selected for formal acquisition. Other tasks were rejected because they needed no training or could be acquired on the job. The ITP is not ready yet, and in this regard, the T-School hopes the self-pacing effort will provide useful information.

In analyzing the job, the T-School combined the 20 and 30 levels into Skill Level 1. Thus, the first step in the MOS became 64C10. This level of skill means that the graduate can operate both light and heavy vehicles.

The T-School has also drafted Soldier's Manuals for Skill Levels 1, 2, and 3. The Manual for Skill Level 4 is in process. The T-School is seeking information from the field (Korea and Europe) about

its analysis of the job and list of critical tasks. It is confident that the 31 Skill Level 1 tasks selected for training will not be modified on the basis of field feedback. Thus, the tasks on the Skill Level 1 list and those cited in the first Soldier's Manual are in complete agreement.

Methods. Both training centers indicated that about 20% of their training is given in classroom conferences. Typically, the first week is devoted mostly to written materials (forms and records). The remaining instruction is strictly "hands-on."

Both centers have and use performance tests to evaluate trainee progress, but there was some complaint that they consume a lot of time (up to 39 hours) and are not integrated with the tasks they are intended to measure.

Special handout materials are given to students at both centers, but there is a minimal requirement for students to study by reading. While quantitative data were not provided, training personnel from both centers reported that the reading ability of trainees tended to be low (as low as 3rd grade level for some). All agreed that self-paced training materials must be designed with this limitation in mind.

Instruction is lock step for all except a few trainees. A small number of trainees have had experience driving trucks before entering the Army, and although only a few can operate a standard transmission, some trainees are able to progress in a non-lock-step fashion.

There is much interest in and enthusiasm for self-pacing at both centers. Fort Dix personnel, for example, developed a tentative plan for instituting self-paced training prior to the meeting of the ad hoc committee. The Fort Dix self-pacing plan seeks to shorten the course, accelerate the progress of students, let each student move at his own speed, and give training in heavy equipment first, following that with light equipment. This course would be based on the same driver tasks as those in the present course. They are anxious to get a self-pacing program under way. The Fort Leonard Wood people displayed a similar eagerness to get going.

Two recent visits greatly influenced center personnel. At the Dallas Skyline Career Development Center personnel observed self-pacing in action. This visit convinced them that self-pacing was a viable procedure and that it would most likely work in the Army. A subsequent visit to a Ryder Corporation driver simulator was equally impressive. Capable of monitoring the driving performance of several people simultaneously, as various problems were imposed, the simulator was viewed by Fort Dix personnel as offering a significant alternative to actual driving experience.

Resources. Both centers are short of 5T tractor/trailers, but there are no other limitations currently due to number of vehicles or to fuel. There is a limitation in number of driver supervisors, however, and this means that trainees do not get as much "hands-on" practice as trainers think is necessary.

ETV is apparently more plentiful at Fort Dix than at Fort Leonard Wood, and TASO facilities are also more plentiful at Fort Dix. Fort Leonard Wood has a good tape/slide capability.

At Fort Leonard Wood Drill Sergeants provide counseling to trainees, perform administrative work, and teach certain company subjects (PE, D&C). It is similar at Fort Dix but the DSs are not used to teach any technical subjects.

At both sites course instructors have generally had long tenure. Most have been through the ITC but not since it has acquired a performance-orientation. Both sites predict that instructors will resist self-pacing.

Some trainees have truck-driving experience prior to their 64C training, and as a result, they may complete training early. At Fort Leonard Wood at present, however, the center has been unable to obtain PCS orders early for such people. Thus, training time saved has not been capitalized upon. The Fort Dix Center has been able to move graduates out early. Fort Leonard Wood intends to arrange for similar contingencies with their local AG office.

At Fort Leonard Wood the motor pool is under control of the training battalion and, therefore, responsive to needs of MOS 64C training. At Fort Dix the motor pool is under the brigade and is not as responsive to maintenance needs as training personnel would like.

Operation and Management. The number of persons entering the course at each installation is approximately 60 per week. At any

one time there may be from 350 to 450 students in training. The proportion of females in each class varies widely--from about 5% to 30%. The AFQT scores of students entering training were highly similar at both sites. Categories II and III accounted for the bulk of the distribution (26% and 56% respectively) in a recent period.

Trainees at both sites often march in formation to and from the training area. This is one way in which drill requirements can be met. At the training area they then move to their respective training locations. When the course is self-paced, there should be little change in this feature. Trainees also drive in convoy to training areas, but, under self-pacing this feature may disappear. Additional experience in convoy driving may then need to be scheduled.

At both centers, one day each week is set aside for "company day." Thus, programed and non-programed holidays, clothing issues, guard details, learner permits, etc. can be accommodated easily.

The officer in charge of the course at each center meets monthly with the trainee leaders and reviews progress of the classes. Grips and problems of trainees are disclosed and solutions sought at these meetings.

Course Effectiveness. Both centers have regular procedures for obtaining feedback from trainees about the course. Course segments are judged by trainees in regard to relative ease and difficulty and whether more or less training time is needed. These evaluations are made during and at the end of the course. Both centers keep good records of student progress.

Fort Dix is currently seeking information about the adequacy of performance of graduates from users, but information is only spotty at this time.

Academic attrition is insignificant at both centers. At Fort Leonard Wood a few students are relieved from the course because they cannot properly manipulate a vehicle. Most students are relieved for medical reasons or discharged from the service for disciplinary reasons. It is at times necessary to recycle a student because he has difficulty manipulating a manual gear shift. This usually requires only one week of additional training. Backing with a trailer has proven to be a difficult driver task.

Course length is judged to be more than adequate. In fact, one representative predicted that 50% of the trainees could complete the course in 4 weeks. Some tasks (e.g., gear shifting) could benefit from additional time, while others will need less time. Self-pacing will produce an overall net saving of time.

Deviations from the Ideal. Appropriate terrain areas are available at both sites (sandy and muddy areas, suitable grades, etc.), but Fort Leonard Wood trainees get little or no experience driving on improved roads and in built-up areas. Fort Dix trainees can drive on improved roads, but there is no traffic congestion. The latter is maintained for safety reasons. For a similar reason, trainees at Fort Leonard Wood are prohibited from driving in winter months when roads are ice or snow covered.

Some females enlist to become Heavy Vehicle Operators, and some

center personnel doubt the wisdom of this option, especially when the female is small. Animosity between the sexes was noted at both centers, and claims by males that training personnel showed favoritism to females were also common.

CONCLUSIONS AND RECOMMENDATIONS

This course now reflects: (1) a task list based on the existing Army Subject Schedule (content is largely job-task relevant); (2) the results of being performance-oriented (training techniques are largely directed at the development of job skills); (3) the implementation of criterion-referenced testing (extensive use is made of performance tests in the assessment of student progress); and (4) a lock-step, group-paced mode. The Transportation School has recently completed a job and task analysis of the Motor Transport Operator job, and the tasks from this effort will guide subsequent course construction.

The main activities to be accomplished in 64C are: fine tuning of the new task list; review and refinement, and where necessary, development of new instructional techniques and materials toward the performance orienting of all instructional modules; the review and refinement of the currently used performance tests and procedures and the design and fitting of a self-paced management system to the course.

HumRRO is preparing a formal proposal, for submission under separate cover to the ad hoc group, which will specify: the detailed work to be conducted, the staffing and support required, and a milestone schedule for accomplishing course conversion.

APPENDIX

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DOCUMENTS REVIEWED

Background Information for Course 64C20/30, Ft. Leonard Wood, MD.
(March 1976)

Draft Program of Instruction for Motor Transport Operators Course:
MOS 64C10, Ft. Dix, NJ, 12 Mar 1976

Draft Motor Transport Operators Course: Self-Paced Training, Ft.
Dix, NJ (March 1976)

Task List for MOSC 64C10, Motor Transport Operator (Pay Grade E3/4),
US Army Transportation School, Ft. Eustis, VA (March 1976)

A Concept Program for Energy Conservation in the Vehicular Trans-
portation Sector, Science Applications, Inc., Nov 25, 1975

FRWD-CA-76-7

**SELF-PACING INSTRUCTION FOR
FIELD COMMUNICATIONS ELECTRONIC EQUIPMENT REPAIRMAN
(31B/E)**

**Report of Site Visit to
US Army Signal School**

**25-26 March 1976
(Project SITES)**

**Prepared for TRADOC/TMI
Ad Hoc Group on Self-Pacing
Under Contract No. DAAJ02-76-C-0014**

April 1976

**HUMAN RESOURCES RESEARCH ORGANIZATION
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PURPOSE OF SITE VISIT

Under the provisions of Contract No. DAAJ02-76-C-0014, issued under Basic Agreement No. DAAJ02-76-A-0004, a three-member team from Western Division, HumRRO, made a two-day site visit to the US Army Signal School to provide technical assistance to a TRADOC/TMI ad hoc group to determine the readiness of TRADOC's proposed wire communications course for conversion to self-pacing. This course is to combine three current courses: Field Wireman (36K), Lineman (36C), and Switchboard Operator (72C). Inasmuch as a recent decision had been made to not self-pace the proposed course at the same time it was to go into an OSUT status, Signal School representatives had chosen their Radio Mechanic (31B) course, which is to become Field Communications Electronic Equipment Repairman (31E), for conversion to self-pacing. Accordingly, the HumRRO team took the 31B/31E course under study during the site visit. The two days were spent in group discussion with representatives from the Signal School Directorate of Training Development who have interest in this course. These individuals had gathered the required information from training managers at Fort Sill, where the course is now conducted. Documents made available during the visit were reviewed. An appendix to this report lists conference attendees and the documents reviewed. Inasmuch as the course is not conducted at Fort Gordon, there was no opportunity to observe classes or to survey course facilities.

The team determined: the present status of the course, the

anticipated impact of EPMS, the best courses of action to be pursued in self-pacing the course, and HumRRO/service school responsibilities in accomplishing course conversion. Close attention was given to the extent to which (1) the course had been developed following the principles of instructional systems development, and (2) the course had already incorporated the procedures of performance-oriented training and criterion-referenced testing. The team also effected information exchanges and coordination among all participants (ad hoc group, proponent school, and HumRRO) in order to expedite the initiation of course conversion.

FINDINGS

Course Content. The conversion of the 31B20 Course to 31E, Skill Level 1, has not as yet been approved under EPMS. The information provided by the Signal School, however, anticipated such approval. The 31E is an organizational maintenance radio mechanic. The course was systems-engineered as of January 76 at Fort Sill, but SIGS is re-doing the task list to incorporate the implications of the EPMS.

The course is currently 10 weeks. Instruction is aimed at installation, operation and troubleshooting of radios and radio-related electronic equipment for infantry, armor, and artillery units. Major course subdivisions are: ESC and TAMMS, tactical and FM radio sets, radio teletypewriter sets, control and inter-comm sets, and security equipment.

A Soldier's Manual for 31E, SL-1 was reported to be near completion.

Methods. The MOI are: conference, demonstration, TV, PE (heavy concentration) peer instruction and testing. Although 270 hours are reportedly PE, SIGS personnel have not seen the course operation and could not describe the nature or conduct of the PEs. Integration of troubleshooting with the use of TMs is emphasized.

It is the belief of SIGS that tests are largely performance and based on the completion of appropriate forms. In order to complete the forms, the trainee must follow the correct procedures and use the correct TM. The test criterion is believed to be go/no-go.

Resources. The course, conducted at Fort Sill, has 17 lab-type classrooms furnished with DC and test equipment. Space and facilities are reported to be modern and quite adequate. External support is not required for 3LE. Forms are the only significant expendables in the course. Training materials were not available for review, but system-valid field equipment (not obsolete) was reported to be in more than adequate supply. Adequate time is reportedly allotted to the course.

The post provides training and housing facilities. The brigade plays a strictly "housekeeping" role and has no involvement in the conduct of training. The AG people require approximately 2 weeks lead-time for processing graduates. There are a few snowbirds reported and about 10% blackbirds for approximately 1-2 weeks.

There are 112 instructors assigned (30 civilian; 82 military), including 7 supervisors (3 officers, 3EM, 1 civilian). Instructor/student ratio is approximately 1:5. There is an ITC, but the content/

approach was not known to SIGS representatives. Instructor turnover rate is low (civilians are stable; military assignment is 2-3 years). It is believed that because of this low turnover rate, the instructors have adequate content knowledge. The average instructor workload is 25-30 hours per week. Instructors conduct testing and there are no independent quality control teams.

Operation and Management. The course has an input of 50-60 per week, with an average student load of 450-500 at any given time spread over some 10 classes. Quality of input is improving (more high school graduates), but is not as good as they would like. Entry requirements are: an EL of 90; not color blind; 10 months or more remaining in service time. To exit the course, the trainees must have a Secret or Interim Clearance.

Student academic progress is monitored by close supervision, short feedback loops and frequent testing. Records are maintained on standard DA forms. Fort Sill has a computer capability for student record keeping, and they are giving thought to its use under self-pacing. Academic remediation is continuous within the course.

There is no pressure to push trainees through just to meet schedules. There is a genuine interest in quality of output. As a result, there is some recycling (up to 2 weeks).

Student housing is close to the training sites so movement and control are reported as no problems.

The course is 100% group lock-step at present.

Course Effectiveness. Course managers are in contact with field users of graduates and reports from the field indicate that graduates are able to do their jobs. Graduates are asked to send back questionnaires after being on the job, but the rate of return is low.

Students are also requested to submit critiques at the end of each module and at the end of the course.

Deviations from the Ideal. There are "the usual" administrative interferences—e.g., payday, PT, NG physicals, details—but training proceeds with makeups handled within the course.

No commo equipment used in training is installed in situ in the appropriate combat vehicles. All training is in the lab rather than in the "real world" context.

CONCLUSIONS AND RECOMMENDATIONS

Because the team could not examine course materials or interact with course managers and instructors first hand, the following conclusions are tentative. The course appears to reflect: (1) the results of recent job and task analysis performed under TRADOC Regulation 350-100-1 (content is largely job-task relevant); (2) a largely performance-oriented approach to training and the assessment of training progress (heavy emphasis on "hands-on" equipment and go/no-go performance tests); and (3) a 100% group lock-step management model.

The main activities to be accomplished in self-pacing the course appear to be: refinement of course content to ensure EPMS compatibility,

the performance orientation of the few instructional materials and techniques that are not already so oriented, the development of criterion-referenced testing to replace the few pencil and paper exams remaining, and the design and fitting of a self-paced management system to the course.

POST-SITE VISIT STATUS

Subsequent to the site visit a decision was made by the TRADOC/TMI ad hoc group to delay conversion of the 31B/E course to a self-paced mode pending the outcome of other decisions figuring in the disposition/location of the course. Inasmuch as all required information exchanges and coordinations have occurred among ad hoc group, proponent school, and HumRRO representatives, HumRRO is prepared, upon request, to submit a proposal to expeditiously convert the course to self-pacing.

APPENDIX

MOS 31B/E SITE VISIT CONFERENCE PARTICIPANTS

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DOCUMENTS REVIEWED

1. Job Identification and Task Inventory and Job Task Data Cards for MOS 31E Radio Repairman, US Army Signal School, Fort Gordon, Georgia. Approved 20 February 1976.
2. Operator and Organizational Maintenance Manual Including Repair Parts and Special Tool Lists, Radio Teletypewriter Sets, AN/GRC-142, AN/GRC-142A, AN/GRC-142B, AN/GRC-122, AN/GRC-122A, and AN/GRC-122B, Technical Manual 11-5815-334-12, Headquarters, Department of the Army, May 1970.
3. Operator and Organizational Maintenance Manual, Radio Sets AN/GRC-106 and AN/GRC-106A, Technical Manual 11-5820-520-12, Headquarters, Department of the Army, February 1971.
4. Equipment Serviceability Criteria for Generator Set, Electric, Portable, DED, Truck MTD, 45 KW, 120/208, 240/416VAC, 3 Phase, 60 HZ, Convertible to 37.5 KW, 50 HZ, PU-408/M, Technical Manual 11-6115-231-ESC, Headquarters, Department of the Army, 27 May 1969.
5. Operator's and Organizational Maintenance Manual Including Repair Parts and Special Tools Lists, Radio Sets AN/VRC-53, AN/VRC-64, AN/GRC-125 and AN/GRC-160 and Amplifier Power-Supply Groups OA-3633/GRC and OA-3633A/GRC, Technical Manual 11-5820-498-12, Headquarters, Department of the Army, May 1967.
6. Operation of Manual Telephone Switchboard SB-86/P. Part 1, Line-to-Line and Recalls. US Army Signal School, Fort Gordon, Georgia, TEC Lesson No. 580-113-6610-A

7RWD-CA-76-8

SELF-PACING MOS INSTRUCTION FOR
MILITARY POLICEMAN (95B) AND
CORRECTIONS SPECIALIST (95C)

Report of Site Visit
to USAMPS

16-19 March 1976
(Project SITES)

Prepared for TRADOC/TMI
Ad Hoc Group on Self-Pacing
Under Contract No. DAAJ02-76-C-0014

April 1976

HUMAN RESOURCES RESEARCH ORGANIZATION
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PURPOSE OF SITE VISIT

Under the provisions of Contract No. DAAJ02-76-C-0014, issued under Basic Agreement No. DAAJ02-76-A-0004, a three-member team from Western Division, HumRRO, made a two-day site visit to the US Army Military Police School to provide technical assistance to a TRADOC/TMI ad hoc group to determine the readiness of the 95B and 95C courses for conversion to self-pacing.

The two days were spent in large-group discussion with representatives from a variety of MP School agencies who have interest in the 95B and 95C courses. Major sources of information were the administrative and instructional personnel from the Department of Basic Law Enforcement Training. Documents made available during the visit were reviewed. An appendix to this report lists conference attendees and the documents reviewed. Inasmuch as training for both MOS is conducted at Fort McClellan, there was ample opportunity to observe classes in operation and to survey course facilities.

The team determined: the present status of each course, the anticipated impact of EPMS, the best courses of action to be pursued in self-pacing each course, and HumRRO/service school responsibilities in accomplishing course conversion. Close attention was given to the extent to which (1) the courses had been developed following the principles of instructional systems development, and (2) the courses had already incorporated the procedures of performance-oriented training and criterion-referenced testing. The team also effected

information exchanges and coordination among all participants (ad hoc group, proponent school, course personnel, and HumRRO) in order to expedite the initiation of course conversion.

MILITARY POLICEMAN, MOS 95B - FINDINGS

Course Content. The Basic Law Enforcement Course (BLEC) is divided into two main sections. The first is composed of the Common Base subjects which are shared with the 95C students. There are five main subjects in Common Base: (1) Law, (2) Identify Drugs and Drug Offenders, (3) Unarmed Self Defense, (4) Familiarize and Qualify with Individual Weapons, and (5) Investigate an Incident. All but the last two are currently group paced. "Investigate an Incident" is completely performance-oriented and has been partially self-paced.

The second section of BLEC consists of five advanced MP subjects: (1) Operate a Law Enforcement Vehicle, (2) Conduct Patrol Operations, (3) Security, (4) Traffic Accident Investigations, and (5) MP Operations in a Combat Environment. This section of the course, as well as the Common Base was systems-engineered on the basis of a world wide survey of entry level job incumbents and first-line supervisors. Because all of the tasks included in the systems-engineered POI corresponded to the survey data, it was assumed that the course was completely relevant to the requirements of entry level MPs. This assumption later proved to be incorrect because the subtasks had not been field-validated during the systems-engineering, but had been drawn up by course committees in conference.

Methods. The primary methods of instruction can be characterized as: performance-oriented, open access, criterion-referenced, quality controlled, and (most recently) self-paced. Students move through the course as individuals, progressing from one module or training site to the next as they finish each instructional segment and pass the associated performance test. The course design under HumRRO's ATC-PERFORM included a field-simulated performance test at the end of each task to ensure that each student could combine the separate skills acquired in each subtask under conditions that approximate those of the first duty assignment. This form of evaluation has not been fully adopted because of the shortage of qualified evaluators.

Extensive use is being made of TVR, slide/tape systems as an integral part of the training. Practical exercises coupled with peer instruction and performance testing complete the training cycle. Students have a measure of freedom within each module to move from one element to another to suit their particular training needs.

Resources. The course, which is conducted at Fort McClellan, employs a variety of "hands-on" specialized training sites and relatively few classrooms of the traditional type. The module "Investigate an Incident," for example, consists of a series of subtask training sites which have TV viewing areas, small cubicles for practical exercises and "hands-on" testing in such subtasks as Collect and Process Evidence, Apprehend and Search Subjects. Most of the space in use has been adapted from some former use and in several instances the amount of space available is not sufficient for the

number of students. Because of the continuous flow nature of the course, "tight spots" where space and equipment are limited produce bottlenecks and waiting lines. This slows down student progress and has an adverse effect on morale. A new academic building for BLEC is under construction. It was specifically designed for the course as it is presently operating and should eliminate all space problems.

All required special equipment is available; this includes individual weapons (.45, .38, and shotguns); jeeps, sedans, TVR cassette players, slide/tape systems, tactical radio equipment, miscellaneous equipment and materials for simulated crime scenes and blank MP forms.

The training staff is generally at full strength, although there is a shortage of qualified evaluators in certain areas. Peer instruction supplements the regular instructional staff, but PIs are not used for testing or quality control.

Operations and Management. The course has an input of approximately 200 per week with an overall load of about 1600 students. Student academic progress is monitored by the Department of Basic Law Enforcement Training and by the student's company Drill Sergeant in the training brigade. A monitoring system has been developed and is presently in operation to maintain control of student flow through the course to minimize gaps or bottlenecks. The problem of individual student movement between training sites, which are in some cases more than a mile apart, was solved with the installation of regular bus service.

Course Effectiveness. The results of a field validation survey conducted by the Evaluations Branch of USAMPS in conjunction with HumRRO's Project AMPLE revealed that recent BLEC graduates regard themselves as well prepared for their first duty assignments. These ratings are also reflected by their first-line supervisors. Exit interviews with graduating students also indicate that students are, in general, satisfied with the training they receive. Managerial problems seem to cause the most difficulty. These are most inherent in the delays resulting from the requirement to serve as peer instructors and from other bottlenecks which frustrate students who feel they could complete the course more quickly.

Deviations from the Ideal. The question as to whether the course content is wholly appropriate for the job of basic MP is not fully answered. Certain elements of training need to be reexamined to determine whether they are really necessary for the entry level MP, and whether some of the course content might best be taught through OJT.

Certain of the instructional materials are unclear, incorrect, or boring. A review of all materials would establish their accuracy and instructional value. The course orientation is too long and contains a lot of unnecessary material presented in dull lecture fashion. A more concise pictorial presentation of the course as a whole and the learning methods to be used may be much more effective. The open-access concept is not really operating as designed. Within-module sequencing is too linear with students tending to go from

tape/slides, to TVRs, to PEs.

A shortage of qualified evaluators makes it currently impossible to test performance at both the subtask and task levels. Task level testing should be reintroduced in all modules.

Drill sergeants are not sufficiently trained to act as "assistant instructors" and participate in the operation of the course to act as much as is desirable.

CONCLUSIONS AND RECOMMENDATIONS

This course now reflects: (1) the results of the job and task analysis performed in 1972 under TRADOC Regulation 350-100-1 (training content is largely job-task related); (2) the results of being performance-oriented (training techniques are largely directed at the development of job skills); and (3) the implementation of criterion-referenced testing (formative and summative assessments of learning progress employ go/no-go performance tests). The course is currently operating in a locally and hastily designed self-paced mode. As is to be expected with quickly executed training innovations of this magnitude, significant problems are being experienced in such areas as scheduling, student flow, system inflexibility, student and instructor misunderstandings of the system, equipment and materials limitations,... In addition field feedback indicates that there are some discrepancies between course content and entry-level job requirements.

The main activities to be accomplished in 95B are: refinement of course content, review and refinement of the instructional

techniques and materials supporting each instructional module, review and refinement of assessment instruments and procedures, and the retro fitting of a self-paced management system to the course to solve the problems currently being attributed to self-pacing.

HUMRRO is preparing a formal proposal, for submission under separate cover to the ad hoc group, which will specify: the detailed work to be conducted, the staffing and support required, and a milestone schedule for accomplishing the required course refinement and retro fitting of a self-paced management system.

CORRECTIONS SPECIALIST MOS 95C - FINDINGS

Course Content. The course content is divided into two main sections: (1) Common Base subjects which are shared with 95B students and (2) Corrections Specialist subjects. As it is presently taught, the course deviates from the formal Program of Instruction.

The course outline is as follows:

- I. Perform Correctional Administrative Procedures
 1. Conduct Admission Procedures
 2. Monitor Facility Rehabilitation Programs
- II. Maintain Custody and Control
 1. Conduct Prisoner Shakedowns and Searches
 2. Control Prisoners Outside Facility
 3. Control Prisoners Inside Facility
 4. Respond to Emergency situations

III. Confinement Facility Internship

1. Conduct Admission Procedures
2. Control Segregation Unit
3. Control Medium Domicile
4. Control Dining Facility
5. Monitor Visiting Room Procedures
6. Conduct External Control Procedures

The main differences between the above content and the performance-oriented instruction are (1) that a mock confinement facility is used for training and testing purposes, and (2) all human relations subjects have been dropped. The modified course has been in operation since USAMPS moved to Fort McClellan and the mock confinement facility was introduced into the curriculum.

Methods. The first two of the three course segments are taught by conventional platform lecture. The third is taught through the conduct of practical exercises in the mock facility. CSP staff and "prisoners" for the facility are provided by students playing the roles of these individuals. In this way students are exposed to each training situation several times, and in different capacities.

Paper and pencil tests are given at the end of each segment of instruction, and the collective results (60% criterion) determine whether a student passes or fails the course. The 44 hours of practical exercise in the confinement facility are not graded because performance checklists have not yet been developed. The exercises in the confinement facility do, however, represent the heart of the

course and provide a functional context for application of the training received in the first two content segments.

Resources. The present course is conducted using three 60-man classrooms and the mock confinement facility. As the instruction becomes more performance-oriented there may be requirements for additional space for performance training and testing, and transportation between training areas. Audio-visual production and support will be needed in the changeover to performance orientation.

With respect to the interactions with the AG, the course input is predictable and there do not appear to be any problems with snowbirds, blackbirds, or unscheduled events. Additional staff, however, are not available during periods of peak training activity.

The role of the training brigade is minimal. It primarily serves a housekeeping function. Physical training is its only involvement in training activity.

The average instructor workload is 20 platform hours per week. In general the instructors are considered to be very good with respect to content knowledge and experience, but there is some problem with terminology differences between Army and Marine personnel. All instructors are required to complete the Instructor Training Course which is currently oriented toward platform instruction rather than performance-oriented training.

The only consumable supplies required in the course are forms, records, and related paper. Other support requirements for the course are ETV, slide projectors, and Vugraphs which are selected

by the individual instructors to support the classroom lectures. The only item of field equipment required in the course is the protective mask. The overall amount of time allocated for the course is considered to be more than adequate, and it appears that many of the classroom hours could be utilized better by increasing the time spent in the mock facility.

Operations and Management. The total number of students in the course at any one time is approximately 160 with 40 to 60 new students entering each week. The quality of the student input is judged to be very good, and it generally consists of half Army and half Marine with a few Army Reserve and National Guard and about 10 to 12 females per month. The type and amount of student input is fairly constant and all students undergo the same training schedule.

Student academic progress is monitored very closely through a faculty advisor program. The brigade drill instructors are responsible for monitoring each individual. If a student misses over eight hours of instruction, he is recycled through that module. If fewer than eight hours are missed, the student meets with the instructor for make-up discussions. Paper and pencil tests are administered following instructional modules of approximately 20 hours. Each student is given two opportunities to pass the exams. Following the first failure, he is counseled by the instructor and the second failure may result in his being dropped from the course.

Course Effectiveness. In general, the quality of the course output appears to be quite satisfactory. Supervisors in correctional

facilities in the field have been contacted by telephone regarding the quality of the course output, and the only consistent deficiency indicated has been writing skills required for completing report forms. For the Marine graduates, however, additional content appears to be needed since they are all currently required to go through a three-week OJT after they return to their stations. As indicated by internal student evaluations, all are extremely favorable toward the practical exercises in the mock confinement facility.

Deviations from the Ideal. Two local factors which affect the job relevance and the effectiveness of the course were identified: (1) the small size of the mock confinement facility, and (2) the limited number of instructors. Weather, terrain, and the physical location on post did not appear to cause any restrictions or modifications in the training program.

When events such as holidays, post support activities, and details require time from instructors or student, such time is subtracted from the time allocated to the practical exercises in the mock confinement facility.

CONCLUSIONS AND RECOMMENDATIONS

This course now reflects: (1) the results of the job and task analysis performed in 1972 under TRADOC Regulation 350-100-1 as well as the traditional influences that determine course content (content is predominantly job-task relevant but not completely so); (2) a largely platform/lecture approach to instruction and the assessment of learning progress (little performance-oriented training and few

go/no-go performance tests); and (3) a lock-step and group-paced model.

The main activities to be accomplished in 95C are: refinement of job and task analysis to fix course content, the performance-orienting of all instructional materials and techniques which are currently platform/lecture oriented, the development of criterion-referenced tests, and the design and fitting of a self-paced management system to the course.

The formal proposal referred to in the 95B section above will also specify the activities, staff, and milestone schedule for accomplishing the required refinements and conversion of the course to a self-paced model.

APPENDIX

MOS 95B AND 95C SITE VISIT CONFERENCE PARTICIPANTS

<u>NAME</u>	<u>ORGANIZATION</u>
LTC Ken Cary	CATB
LTC James Hallihan	USAMPS
CPT William Eakin	USAMPS
CPT Kevin McKeon	USAMPS
MAJ David Prim	USAMPS
Dr. William Allison	USAMPS
Dr. Jay Jones	USAMPS
Dr. J. A. Vanderford	USAMPS
MAJ Dennis Schaeffer	USAMPS
MAJ W. D. Ray	USAMPS
LT J. B. Hopkins	USAMPS
SGT Baxter	USAMPS
SGT Brown	USAMPS
CPT Carl Sutherland	USAMPS
MAJ James Duncan	USAMPS
MAJ Poinier	USAMPS
Mr. Michael McCluskey	HumRRO, COLUMBUS, GA.
Dr. John Taylor	HumRRO, PRESIDIO
Dr. J. Richard Suchman	OF MONTEREY, CA.

DOCUMENTS REVIEWED

END OF COURSE SURVEY, Administered 11 March 1976, Summary Data.

CORRECTIONS SPECIALIST COURSE (95C), Current Task List.

STUDENT COURSE EVALUATION SURVEY, Administered 16 March 1976. All response forms administered.

Current course development milestone chart for CSP Course as proposed by course administrator.

Performance-Oriented Training for 95C Course as of 6 March 1975.

SUBJECT: Letter of Instruction - Maximum Authorized Training Time, 17 February 1976.

FACT SHEET, SUBJECT: USAMPS Training to Support EPMS, 15 March 1976.

MEMORANDUM FOR: ASSISTANT COMMANDANT, USAMPS: SUBJECT: Self-Discipline in Self-Paced Instruction, 15 March 1976.

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