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TECHNICAL REPORT - SPECDEVGEN 1257-1-1  
CBR TRAINING AID REQUIREMENTS, ARMY WIDE

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*Some of the*  
*enclosed comments are those which appeared*  
*in the*  
*file copy of Training Branch*  
*Book.*

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## FOREWORD

### PURPOSE

This project was established to determine the training aid requirements for increasing the effectiveness and combat efficiency of officer and enlisted personnel in Chemical, Biological and Radiological Warfare (CBR). The training areas selected for study are listed in order of priority:

Army Wide CBR Training

Chemical Corps Units Training

Chemical Corps School Training

### RESULTS

Requirements for training aids and devices were uncovered during the course of this study and are specified in the report. In order to achieve the goal of increased combat efficiency, certain steps in addition to the procurement of training aids and devices are recommended. The CBR Training Program is in need of:

More precise statements of training objectives in each subject matter area.

More effective methods of training which stress actual behaviour and "must know" information.

More realistic techniques for assessing the results of training.

Increased emphasis on student self-evaluation.

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IMPLICATIONS

Instructional aids yield the greatest payoff when the total training situation is properly structured. Thus, the recommended improvements in the training program should be undertaken concurrently with training aid development.

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BRIEF OF STUDY

Basic Individual CBR Training

Most of the objectives of basic individual training in CBR warfare are stated in such general terms that developing a training program to achieve them is difficult.

OCAFF  
Memo No 7  
states objectives

Objectives should be clearly stated in terms of proficiencies expected at the end of eight weeks.

COACAC course  
& will do.

A combined statement of stated and implied objectives in basic individual CBR training would be helpful to all training personnel, especially the new or unskilled instructor.

Every CBR skill that is supposed to be developed in eight weeks should be defined in measurable terms of speed, accuracy, sequence of steps, completeness of action, and similar observable responses.

COACAC  
COACAC

Some of the training outlined in Training Memorandum No. 7 is related only in a minor way to the objectives and is not necessary for survival and pursuit of mission.

UCAFF  
provide

Memo No. 7 should be redrafted to focus attention only upon basic training. Separate publications should be issued for advanced individual and unit training.

OK

Screening smokes and incendiaries should be eliminated from prescribed content since they are not related to objectives of the 10-hour course.

NOX course  
reduce content

Some objectives are established which cannot be achieved in the specified time and with the present limitations on the use of live agents. There is no information or technique available to

the trainee which make field identification of war gases practical, or even possible at present.

Objectives should not be stated in such ideal terms that there is no possibility of achieving them.

Field identification of war gases with either the M9A2 kit or the "sniff" test should be eliminated from the CBR objectives of basic training.

*Amplified obsolete*

Memo No. 7 is not uniform in clarity. The level of readability is too high. The format and indentations are difficult to follow.

The revised manuscript for Memo No. 7 should be checked by a specialist in readability before publication. The outline and headings should follow a consistent form of indentation. Subheads should be expanded to give meaning to the information by clarifying the content.

Discrepancies between current doctrine and obsolete practices emphasize the need for centrally-prepared lesson plans.

If the local preparation of lesson plans is continued, they should be prepared by the instructors who use them.

Practical learning exercises having local applications should be added to the content of the outline of Memo No. 7.

The CBR information given to recruits is too technical and complex, and is not understood by many. Self aid, first aid, and protective actions are given too little emphasis and practice. An overwhelming amount of unnecessarily difficult words and phrases is used in instruction based on Memo No. 7

The theoretical and technical portions of Memo No. 7 should be simplified. The use of some of the language, illustrations, and charts in FM 21-41 would be helpful.

*Amplified*

Information on nerve, blister, and choking gases should be condensed.

There is no systematic effort to find out what men have failed to learn in time to re-train and practice before the end of basic training.

Training centers should be given guidance in testing the results of training.

Knowledge of progress should be used as a stimulus to learning. A self-scoring technique should permit each trainee to check his own proficiency.

Interest of the trainee is at its lowest point during the second 2-hour period.

Special attention should be given to maintaining interest in the protective action to take under spray and gas attack.

*This is full-  
blown exercise  
which is later said to be  
one of the best training  
exercises.*

Training aids should involve the trainees in participation in the proper sequence of actions and measures.

The timing and spacing of discipline and physical toughening activities from verbal learning are poorly scheduled.

Greater attention should be given to the physical condition of trainees if they are to remember verbal CBR instruction.

Training policy is inconsistent regarding the grouping of men for instruction, and the attitude of instructors is negative. Illiterates are grouped separately for CBR testing but not for CBR instruction.

Experimental research should be conducted to determine the effectiveness of grouping basic trainees for CBR instruction on the bases of intelligence, educational background, and training methods.

COPIES

Recognize - in  
BWR-RW course  
must know the  
cause to minimize  
the effects

Too much nonessential information is crowded into the one-hour period on BW. Much of the content of the RW lectures observed is not related to protective action. The demonstration of smokes and incendiaries makes no observable contribution to CBR skill during basic training.

COPIES will  
reduce course for  
BWR

Safeguards should be established to limit formal instruction in the 10-hour course to essentials of action and performance.

NICE TO KNOW information should be made available to recruits, but only upon their own time, initiative, interest, and request.

COPIES  
will do

Complete lesson manuscripts of what shall be said in lectures should be prepared for the 10-hour course.

Instructors differ widely in the importance they attach to CBR proficiencies. They also indicate confusion about what trainees should be able to do at the end of the 10-hour course.

There should be a clear controlling statement of what should be taught, how to teach it simply, what skills should be demonstrated, and what level of skill should be shown by performance.

Action tests of CBR proficiency should be given before the end of basic training. Remedial training should be scheduled as extra duty.

The objective of "familiarization" on page 40 of Memo No.7 calls for a demonstration of decontamination materiel, whereas skill requires practice in the performance of decontamination.

Memo No. 7 should give more attention to the integration of CBR training with other basic training. Specific suggestions should encourage officers to have men fire a weapon, march, take cover, and the like while masked.

only limited  
integration  
is possible

CBR basic training procedures should require active participation in learning identification, self aid, and decontamination--just as participation is gained in mask drill and gas chamber exercise.

A workable field identification technique should be sought for the individual soldier. Memorization of colors, tastes, smells, chemical and physical properties, and persistencies should be deleted from basic training.

There is an amazing lack of central supervision of training practices in basic CBR training—a program that is carried on Army-wide to serve as pre-training for all arms and services.

COWARD  
does not  
have the  
people

Continuous experimental study and evaluation of basic CBR instruction should be provided. Instructors in the 10-hour course should receive direct benefit from the resources of a research, analysis, and curriculum section such as that operated at CmlC School.

#### Advanced Individual CBR Training

The second 8-weeks training policy is based on the assumption that men attain a definite minimum of skill during the first eight weeks. Yet deficiencies are not determined at the end of the first eight weeks or at the start of advanced training.

GOOD

A general classification CBR test should be developed for use at the beginning of advanced individual training. It should be applied at the next duty station following the 10-hour course.

Stated objectives have not been found to identify the improvement in CBR skills that is expected in advanced individual training.

what are  
these  
objectives

Every ATP should define the minimum standards of performance expected for each objective established.

ATP's and POI's in the "3" series identify neither the objectives of the courses nor the standards of performance required. Courses

for officers and men vary widely in content and yet overlap considerably. Apparently CBR training objectives are the same for officers as for enlisted men.

Proficiency standards should be stated in detailed specifications, clearly related to objectives, program content, time allotment, and performance tests.

Except for masking in fifteen seconds, no guides are provided for judging proficiency in terms of time, accuracy, efficiency of motion, sequency of steps. economical use of supplies, and similar measures.

There must be positive means of identifying "fundamentals," "basic skills," and "initial proficiencies" for each trainee before "training will be progressive." Such means should be imposed Army-wide upon all phases of advanced individual training.

Essential CBR proficiencies for all personnel fit into one or more of six abilities, and six additional CBR proficiencies for officers and noncoms are identifiable in the literature. Moreover, a level of competence higher than the Army-wide requirements is indicated but is never defined.

CBR instructors in the Chemical Corps believe there are differences in the level of CBR skill that should be required for different MOS ratings, grades and ranks. However, there is no agreement as to which group should possess which level of skill or knowledge, and training policy identifies no differences.

If there are different levels of CBR knowledge and understanding needed by different grades and ranks, training programs should identify the levels in their objectives, courses, and ATT's.

What are  
these

If MOS's vary in the CER field proficiencies required, ATP's should define them.

If there are no differences in levels of skill or understanding beyond a minimum standard, variations now outlined in courses and programs for various MOS's, officers, and men should be restricted.

The published standards of individual CER proficiency are applicable only at the end of individual training, and are stated only as minimums. The assumption that advanced individual CER training is based upon basic individual CER training and progresses beyond the basic training level is unwarranted.

The period of advanced individual training should be for the development of a high level of skill obtained through actual field exercises with CER agents or simulants. Most of the time should be spent in integrated training. The 10-hour course should not be repeated.

OK  
Problem is  
integrated  
training

Cadre personnel show no consistent attempt to determine an individual's attainment of CER proficiency upon his assignment to the unit. The quality of training provided by a cadre is sometimes lower than that provided in the 10-hour course. Quality varies with training competence in the cadre and also with the unit commander's attitude toward CER training.

But  
people may

The scope of the program should be carefully outlined to prevent the present wide interpretations now made of the broad general statements in ATP's.

A separate publication resembling Memo No. 7 is needed for advanced individual CER training. The vagaries of unit commanders and cadres make uniform attainment of proficiency standards impossible.

Dept of Army 21-48  
meets the requirements  
it may require rewording

Directives should be in detail so as to leave no doubts as to specific objectives, increases in level of proficiency, measures of satisfactory progress, and desirable integrated practice.

Lectures should be almost eliminated from the program. The 10-hour course should not be duplicated. Emphasis should be placed on direct firsthand experience and practice.

Guidance is needed in designing and requiring CBR practice exercises.

Short films should be developed to expose the individual to various CBR situations. Then, decontamination should be learned by decontaminating, taking cover by taking cover, blotting off a probable blister agent by blotting it off in the field.

The responsibility for conducting CBR training and determining CBR competence is vested in the same commander. Estimates of CBR training success are based on "training inspections." Such self-supervision is unsound training policy.

Central supervision should be established to coordinate and upgrade the program and quality of training during this second phase of CBR training, which is the most crucial for individual proficiency.

*Develop this  
related base army  
principles they have  
misunderstood the  
situation*

#### Chemical Corps Unit CBR Training

The aims of CBR training in Chemical Corps units are not related to specific CBR proficiency.

More detailed statements of training objectives should describe CBR actions which characterize the efficient unit and criteria to guide the judgment of unit officers.

Most CmlC ATP's review and/or teach again the elementary information on CER warfare. Detection is omitted in the ATP's for maintenance and processing companies. Self aid and first aid are omitted in the smoke generating company ATP. Generally, ATP's make no mention of alarms, standard marking signs, or methods of delivering CER agents.

ATP's 3-201, 3-203, and 3-205 should include organized practice in identification, since CER attack on rear areas is possible.

ATP 3-201 should develop particularly effective teams in identification and skill in self aid/first aid, since smoke companies especially will operate in areas subject to CER attack.

Unit CER training is the first phase in which the protective mask is not specifically singled out for emphasis. It is evidently assumed that every soldier has developed proficiency in masking.

Mask drill in the field and practice in maintaining items of individual and unit protection should be specified.

Training in the exploitation of CER situations is generally omitted from CmlC ATP's.

Considerable attention should be given to exploitation, including: avoiding contaminated areas, crossing or operating in contaminated areas, individual and unit SOP upon alarm, reporting attacks to adjacent units and higher authority, and making adjustments in operations as required to accomplish the mission under CER conditions.

OK

The great majority of time in unit training is allotted to field training; but considerable training activity is devoted to the maintenance of basic combat skills, supply and logistics information,

and similar concerns. Too much of unit CBR training requires no trainee activity.

As quickly as possible field training should be removed from the simple but necessary practice variety to actual field operations, sometimes under adverse conditions.

*Believe they have considered CBR training as synonymous with CBR unit training*

Field exercises should not comprise only an occasional sporadic part of unit training but should be scheduled as a major part of it.

Critiques on individual and unit performance in these exercises should provide most of the instruction in all aspects of CBR training.

Training of the individual in unit operations is accomplished by on-the-job training. A progress chart to show the stage of training or rate of progress of a trainee was not found. Nor was there found a job sheet giving a breakdown of the component steps in a specific skill or job.

*OK*

Unit training officers and noncoms should be given guidance in the preparation and use of job analyses, job sheets, check-off lists, and performance standards for each skill. A progress chart should be maintained for each individual.

Training tests that accompany the ATP's are designed to get verbal reactions to a field situation, also described verbally.

The skills expected in unit training should be defined in measurable units: size of folds, waste of solutions, breakage of eyepieces, estimates of wear or deterioration of face pieces, manipulative dexterity, and the like.

Special minimum standards of proficiency should be defined for each type of unit.

Numerous interruptions of training schedules, personnel review against the unit, the policy of individual rather than unit

rotation of duty, and the shortness of time between specialized training and discharge affect CBR training adversely.

At least in their earlier stages of training, men in CmlC units should be as carefully protected from interruptions in their training schedules as are students in CmlC School. Large blocks of time should be scheduled during which no interference with training schedule or activity will be permitted.

*Agreed*

Men in CmlC units report that the most difficult CBR topics to learn are RW, identification and the M9A2 kit, and names and symbols. Instructors say that BW and RW constitute 44 per cent of the most difficult topics to teach, and that identification constitutes 15 per cent. Unit training contains nonessential information and content that have no possible value in the field and are useless obstacles to the trainee. ?

There is little justification for the difficulty uneducated men are having in understanding only those CW, BW, and RW skills they need in the field.

As soon as detailed standards of proficiency can be specified for each type of unit assignment, CmlC ATP's should be revised to eliminate NICE TO KNOW information from scheduled training.

Enlisted trainees say that they need more practical experiences (live agents) and more time on difficult topics. Instructors say that more field work and more live agents are needed. These responses indicate that both groups recognize the need for a more realistic kind of training experience in CBR warfare.

The assistance of the Medical Corps should be earnestly solicited in identifying anatomical charts, models, pictures, and films that can be adapted to teaching the effects of those agents

units are not allowed to experience.

Urgently needed are CBR training agents which should hurt men when they commit errors without injuring them permanently. The severity of the physical or psychological penalty should increase with the level of CBR training.

*Critique & now part of simulant may not be feasible CW & CWO are now available*

The problems of unit CBR training point up the need for unit instructors who can and will make CBR warfare understandable to uneducated men. Current problems clearly refute the Army's assumption that any noncom or officer can successfully teach his men anything they need to know.

An organized, scheduled, and mandatory program for upgrading the training skill of cadre personnel should be undertaken.

*How*

Courses in the Chemical Corps School

The stated objectives of School courses do not identify CBR goals. A great deal of duplication exists between courses. There is no common understanding of what is to be accomplished in the allotted time.

Specific CBR objectives for each course should be stated in terms of duties, actions, and levels of competence which individuals must assume in CBR warfare. Courses should then be revised to eliminate unnecessary content and to add practice in field requirements.

Every course outline assumes that the learners are ignorant about CBR warfare and starts all over with "introductions to," "definitions of," and "classifications used."

*a known problem*

Pre-testing to identify what students already

know should be standard procedure. Course content and training procedures should be varied according to the backgrounds of individuals comprising the groups.

CER training outlined in POI's is mostly verbal, interspersed with occasional films and demonstrations. Only a minor portion of School course time is devoted to field training.

Many more opportunities for men to demonstrate proficiencies in the field are needed. Each man should have practical experience in performing his training drill in the field after the necessary basic skills have been learned.

Courses preparing personnel for different duties should reflect these differences in the experiences provided. The presence of troop units near the School and of officers and men as School students provide all the resources needed for superior exercises.

Officers in training should be given command and staff duties in field exercises involving CER warfare.

Men in training should practice under adverse conditions of weather, terrain, supply inadequacies, loss of leadership, loss of sleep, retrograde movements, and the like.

An excessive amount of basic science and nonessential content is found in CmlC School courses. Much of the material in RW and BW is more theoretical than needed for field proficiency. Exploitation is slighted. ?

Much more careful development and coordination of courses should be sought. The recommended curriculum department, staffed with qualified specialists who have had field experience, should be responsible for developing courses with unity and sequence and which make sense to the learners.

Little is included in any of the officers's courses on: hygiene and sanitation, maintenance and care of equipment, decontamination (especially of equipment), and operating in contaminated areas. Course 3-0-7 considers recognition only in RW. Courses 3-0-14 and 3-0-8 are the only two which consider the tactical use of agents.

The training programs in officers' courses should include all essential CER content. Even in the specialized concerns of RW, attention should be given to the possible use of BW and CW under RW conditions.

There is excessive subject specialization among instructor assignments in the School. Course 3-0-8, lasting two weeks or 88 hours, was taught by 35 instructors, 22 of whom met the class only once.

*Problem of  
insufficient  
experience*

Experimentation should be conducted in using large blocks of time with one instructor, who in turn should have extensive field experience upon which to draw.

A great discrepancy exists between the ranks of officers assigned to the CmlC School staff. The selection of instructor personnel seems to be a major problem—the turnover is high; the quality of teaching is only fair; and field experience is limited.

*True*

Continuous efforts should be maintained to improve the instructional skill of the school staff. A uniformly high quality of teaching competence should be expected on a permanent service school faculty.

The variety of training aids available at the School is excellent, and their administration is efficient.

School instructors should be given further training in the proper selection and use of training aids, especially in the use of training films.

Considerable time in the nine-months' advanced course for chemical officers is unnecessarily repetitious for many and too skimpy for others.

More time should be spent in training students in how they should conduct training when they return to their posts.

If considered desirable, a single course should be designated to provide the nonessential but broadening knowledge now included in every course examined. Then, differentiated programs based upon varied experience backgrounds should be developed.

While classes are visited and test results are evaluated, there is little evidence of training research or experimental studies designed to improve CER training.

A permanent Curriculum Department should be established to absorb the Research and Analysis Division and the Publications Department. Qualifications for the directing staff should be rigidly drawn to require a high level of professional training and experience combined with a comparable level of military training and field experience.

The CmlC School provides no on-the-job service for chemical officers conducting CER training at basic training centers and maintains no contact with them.

The recommended Curriculum Department should be charged with three principal functions:

- a. To conduct a continuous program of evaluation in CmlC courses and instruction.
- b. To engage in experimental studies designed to improve instruction and training in terms of field requirements.
- c. To serve as a resource center, available

True

but difference  
POI is wider

Reflection  
Diverse for  
delay in Curriculum

to every CER instructor in the Army, for the dissemination of new CER training information and help in solving local CER training problems.

### Preparation for Overseas Replacement Training

The scope and outline of POR training include all important CER topics, but stated objectives have the same general vagueness that characterizes other CER training. The implied goals cannot be achieved in the two hours. Content gives too little attention to improvised expedients. Verbal review is not a satisfactory procedure for POR training.

POR  
OCAR

A sequence of practical drill exercises should be specified. These should require the same degree of trainee activity in identification, protection, self aid and first aid, decontamination and exploitation as the gas chamber provides. A CER obstacle course should be provided.

Emphasis on CER changes and developments in sound but the effectiveness in POR training is questionable.

Up-to-date information should be gathered and forwarded to all CER training activities more promptly and efficiently than at present if this POR objective is to be attained.

POR training appears to be conducted apathetically.

Research should be conducted to determine: (a) if any increase in CER proficiency results from POR training under present practices, and (b) time required in POR training to really accomplish its objectives.

CBR Training Aid Problems

Many of the training aids listed in Memo No. 7 are not being used in the 10-hour course.

*besides a utilization survey in 20 years*

A kit or case should be fitted with a standard list of CBR training aids designed for the 10-hour course but available also to any T/O&E unit.

No visual projection was seen in outdoor training anywhere in the Army; yet most CBR training is conducted outdoors.

*a general problem are there any outdoor projects available?*

Encouragement should be given to the development of outdoor visual projection during basic and advanced individual CBR training.

No foxhole was observed at the scene of CBR training at any Army establishment, although it is a fundamental means of protection.

*Handled by OCAF.*

A permanent foxhole, well designed for protection against RW, should be constructed in the CBR training area at each basic training center. At some time during basic training every trainee should be required to take cover in it and to know the important features of the design.

The GTA's listed in Memo No. 7 are available in platoon-size charts for basic training centers where company-size classes are conducted outdoors. Company-size charts are used in CmlC School which conducts platoon-size classes indoors.

*Handled by TAG*

This situation should be reversed. Basic training centers should have weather-resistant charts clearly visible and readable at 60 feet.

CBR posters are conspicuously absent throughout the Army.

A series of colorful, forceful posters should be prepared for Army-wide distribution. They should portray CBR situations and emphasize field proficiencies.

Filmstrips designed for teach-test-reteach-retest sequence are needed. Everywhere in CER training there is almost complete neglect of the use of filmstrips, whose strong points complement the weaknesses of current CER training films.

A series of CER filmstrips should be prepared in color, portraying CER field situations, and providing for critiques and self-testing exercises.

At CmlC School training films frequently are too long, receive too little advance briefing and get almost no follow-up or discussion. OK

A series of short 3-8 minute CER training films should be developed especially for unit and School CER training. The series should present a wide variety of CER field situations requiring individual and unit action. Each film should include the essential preview and follow-up narration.

The gas mask and the gas chamber are the two most effective aids to learning in the 10-hour course.

Means should be provided for trainees to time themselves during gas mask drill. Masks should be issued as items of personal equipment to be maintained during basic and advanced individual training.

In ATP's the greatest need for training aids appears to be in making practice situations realistic. Trainees need less simulation and make-believe, and more field experience with genuine penalties for faulty performance. OK

Real items of training aids should be in the hands of trainees while the instructor uses large models or charts. The integrated situations for CER practice during unit training should include contact with live agents of a disagreeable but nonlethal nature.

At every center visited, Field Identification and Self Aid in proper

sequence were the two MUST skills that appeared to be the least known, the least understood, and the least mastered.

*Self aid is  
unimportant  
Identification w/  
destruction rate  
and equipment  
may not be  
adequate*

More practice with training aids in field situations should take the place of the excessive verbalization, the unnecessarily difficult vocabulary, and the theoretical aspects of MUST knowledge that now burden trainees.

Channels for the exchange of ideas and successful innovations in CER training do not flow between CBR instructors at the different training centers.

A CER training aid "clearinghouse" to help instructors should be operated on a positive, aggressive basis. A periodical newsletter with participation from all arms and services would be worthwhile.

The development of "graphic arts" aids appears to monopolize most of the CmlC School training aids program. An excessive amount of NICE TO KNOW material is incorporated. In spite of its good training aid doctrine, the Army's CBR training film program is poorly developed as a substitute for real experience.

A defensible and adequate procedure, based on study and research, should be established for determining the need and justification for CER aids and publications.

The lag between principle and practice is as wide in the use of CER training aids as it is in training procedures generally. A wide variety of good and poor practices was found at CmlC School, where practices may influence the way students will later instruct.

Instructor skill in the use of training aids should be improved. Specific training and practice should be emphasized in every program that qualifies Army instructors for any phase

of CBR training--basic, advanced individual, unit, and school training.

The training aids listed for POR training indicate that Army-wide individual CBR training is not aimed above the level of skill developed in basic training.

For maintaining familiarization with CBR SOP, a series of combat pictures showing CBR situations should be developed for automatic self-raters, if these devices are available to Army establishments.

It is the firm judgment of all members of the project staff that lack of good training aids is not the real cause of any significant lack of training success in CBR warfare.

#### CBR Problems of General Interest

Two major refinements in CBR training directives are urgently needed: (a) specific objectives for each phase of CBR training stated clearly as measurable evidence of field proficiency; and (b) measures of the minimum standards for each phase of CBR training developed as an integral part of every training program.

Measures of proficiency should meet the technical criteria of validity, reliability, objectivity, and practicality.

Trainees should be provided with self-testing measures.

Instructors should be provided with measures specifically designed for: pre-training analysis, diagnosis of learning difficulties, attainment of daily lesson objectives, and attainment of course or ATP objectives.

A CBR proficiency test has validity to the extent that the skills

measured by the test are similar to the skills to be exercised in combat.

Tests should require action rather than verbal responses. Such tests should be used at every level of CBR training for every skill involved in a standard of proficiency.

The quality of a test response is of utmost significance; the promptness as well as correctness of decision, the proper sequence of correct actions, the efficiency of effort, and the proper exploitation of the SOP.

Minimum standards of proficiency should be defined in these detailed terms.

Reliability is gained by controlling the conditions under which testing is conducted, by proper sampling of individuals, and by standardizing instructions and procedures.

CBR instructors should be given on-the-job training in the preparation and use of performance tests as training procedures.

Objectivity or freedom from bias requires that judgment or scoring follow uniform standards.

Instructors and umpires should receive extensive training and practice in applying standards if they are to be objective in their testing.

The 1954 Army-wide individual CBR proficiency test was one of the most effective training exercises observed during this study.

Performance exercises recommended for regular CBR training operations should conform to test criteria to the same high degree as the 1954 OCAFF test.

The validity of the 1954 individual CBR test is assumed to be

acceptable. Reliability is good in some respects, poor in others. Excessive bias in scoring is evident. Practicality is excellent.

OCAFF should continue the administration of Army-wide testing of CBR proficiency. This task should not be delegated to commanders responsible for the conduct of training. Improved means of judging CBR competence in maneuvers and joint operations (Flashburn) should be sought.

The validity and reliability of a sample ATT (3-2) appear to be reasonably adequate; practicality is good; but objectivity and freedom from bias is poor.

The CBR portions of CMC ATT's should be revised as soon as specifications for the proficiency standards are defined.

Good testing of CBR training success is virtually nonexistent at stages when retraining would be possible.

The Army should be using the invaluable techniques of performance testing as training procedure, for assignment of trainees to sections, for program planning and curriculum development, and the like.

Grouping for instruction at all levels of training is needed.

Much more opportunity should be provided for men of superior and inferior abilities to have training geared to their capacities.

There is no more important, or in the long range crucial, task in the Army than training; yet training duty appears to be shunned by some experienced soldiers whose combat backgrounds are necessary for good training.

Army instructors should be rigorously screened for the training task, and rewarded with recognition comparable to that accorded the soldier who

all  
Army wide  
possible

performs brilliantly in a military skill.

The first contact that basic trainees have with CBR instruction secures their interest and focuses their attention upon personal survival.

(See Arthur interview + his reference to a spectacular)

At each successive level of training, activities to develop comparable readiness and interest should be conceived and developed.

CBR training publications are soundly based on what is known about how learning takes place.

Training operations should give more attention to: relaxing the pace of the training program; improving the training environment; limiting the presentation of new material to a maximum of four hours daily; scheduling of units or class sections for needed post duties to avoid individual absences from instruction; minimizing the interruptions of training schedules; and stimulating the interest of unit commanders in upgrading the training techniques of cadre personnel.

Training frequently violates promulgated training doctrine and reduces training efficiency. Of twelve basic principles endorsed by FM 21-5, FM 21-6, and TM 21-250, violations of every principle are readily observable in each phase of CBR training.

The Army should inaugurate a program of supervising CBR training operations with the aim of improving the quality of CBR instruction. The task should be assigned at a level high enough to work simultaneously in the following ways:

- a. To coordinate CBR training activities between different Army areas.
- b. To work directly with CBR instructors on an Army-wide basis and also at specific training centers.
- c. To muster the resources of CBR science, combat

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experience, and training competence.

- d. To work directly with the sources of supply of CBR instructors and training personnel.

OCAFF has effectively made CBR training success a responsibility of commanders. It has not developed an adequate policy of evaluating the performance of this delegated duty. Commanders are left almost free to judge for themselves how well they are doing the job.

Persons should always be held accountable for their stewardship of any delegated responsibility. Supervision should be exercised by the delegating authority. Excessive bias now characterizing sporadic judgments should be corrected by continuous supervision of CBR training. Proof of training success should be required short of the ultimate test in CBR combat.