report of the Board for DYNAMIC TRAINING

VOL I - EXECUTIVE SUMMARY

17 December 1971
1. The Board for Dynamic Training has been well supported by the Army training establishment. Nonetheless, the Board was an ad hoc investigative body, severely limited by time for study and deliberation. Its Final Report, transmitted herewith, cannot be regarded as a definitive inquiry into training in combat arms units. However, the Board found no comparable survey in the Army's recent past and, in that light, submits its Final Report as a useful start-point for action to improve unit training.

2. Let me hasten to add that the Board discovered no managerial "quick-fix," nor magic gadgetry that will swiftly and surely lead to such improvement. The Army's best asset is the widespread interest among its young leaders in bettering the training of their soldiers and units. But no discussion of improvements should proceed without consciousness that mere talk of change will raise expectations. In a matter so close to the heart of its professionalism, the Army must take particular pains to avoid rhetoric unmatched by action. The Board calls attention to the fact that its recommendations, even if fully accepted, would impact on unit training only after many months -- conceivably years -- of concerted effort at all echelons of the Army.

3. Finally, full responsibility for this document rests with the undersigned, for the method of operation of the Board precluded its members' reviewing this report.

[Signature]

PAUL F. GORMAN
Brigadier General, USA
President
I. GENERAL

A. Purpose. The Executive Summary is a synopsis of the highlights, key findings and recommendations presented in volumes II through VI of the Board for Dynamic Training Final Report. In the interest of brevity, detailed material contained in subsequent volumes has not been included in the Executive Summary. All volumes are UNCLASSIFIED.

B. Active Army and Reserve Component integration. To provide a coherent basis of comparison throughout the report, it was considered desirable to integrate discussion of Reserve Components with that of the Active Army.

C. Organization of the Final Report.

VOLUME I - EXECUTIVE SUMMARY
VOLUME II - FINAL REPORT

Guidance and Assumptions
Estimating the Training Situation
Toward Better Support of Training
Recommendations

VOLUME III - ANNEX A: Basis of the Board
- ANNEX B: Board Methodology
- ANNEX C: Board Organization
- ANNEX D: Finance
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VOLUME IV - ANNEX F: Training Management Survey and HumRRO Analysis
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II. BOARD ACTIVITIES

A. Milestones. By direction of Chief of Staff Army, the Board for Dynamic Training was established, sited at Fort Benning, chartered for less than 120 days, and tasked to accomplish the following:

1) Estimate state of training in units of the combat arms*, worldwide, Vietnam exclusive.

2) Forge new links among combat arms service schools** and tactical units.

3) Recommend how to make training in units more exciting and meaningful.

Key undertakings were:

1) Field visits by Board teams to 103 Active Army units and 35 Reserve Component units.

2) Board Conference among 99 officers from 58 units, worldwide, which included both Active and Reserve Component Representatives.

3) Dissemination and evaluation of a HumRRO-designed training management survey, based on 2084 validated Active Army and 587 Reserve Component responses.

Note: * The combat arms, for report purposes, are Infantry, Armor, Field Artillery and Divisional Air Defense Artillery only.

** Combat Arms Schools are USAIS, USAARMS, USAFAS, and USAADS. The board proceedings for the period 1 September 1971 to 17 December 1971 are shown in figure 1.
4) Consultations with 16 foreign military establishments and with 9 distinguished retired consultants shown below:

- GEN PAUL D. ADAMS
- GEN BRUCE C. CLARKE
- GEN PAUL F. FREEMAN, JR.
- GEN HAMILTON H. HOWZE
- GEN JAMES H. POLK
- GEN I. D. WHITE
- LTG GARRISON DAVIDSON
- LTG JAMES M. GAVIN
- BG S. L. A. MARSHALL

5) A review of other studies which provided background material on training-related matters.
6) Briefings of the Board's observations and recommendations to CSA and DA staff; CORC and CNGB; CG, CONARC and staf; and to the Army Commanders' Conference.

III. KEY FINDINGS

A. Army-wide, training is regarded only seldom as "dynamic," as CSA uses the term:

-- Commander tailors to unit needs.
-- Overcomes constraints.
-- For the trainer: Imaginative, innovative, and professionally stretching.
-- For trainee: Stimulating learning experience, leading to job satisfaction.

B. Army-wide, training is regarded as only marginally adequate. Individual training is evaluated lowest in combat arms units of the Active Army; mission training lowest in Reserve Component units.

C. "Adventure Training" is less well publicized, and there is more company officer interest in such training than some senior officers seem to realize.

D. Commanders, especially company commanders, feel they could make training more dynamic if they could devote greater personal attention to its planning and execution, but conflicting administrative and support requirements take priority.

E. There exists a "Crisis of Confidence" within the professional NCO corps especially among junior sergeants. NCOs in units are resentful of the centralized "system" that administers tests annually to see if they should be promoted, retained or eliminated from the Army, yet offers no substantive help to them in preparing for the all-important MOS test.

F. Major obstacles to achieving dynamic training in units of combat arms of the Active Army are believed to be:

1) Personnel turbulence.
2) Manning levels.
3) Inadequate budget.

4) Lack of qualification among NCOs (E5-E6).

G. Major obstacles to achieving dynamic training in units of combat arms of the Reserve Components are believed to be:

1) Rigid training system.

2) Discipline.

3) Inadequate budget.

4) Lack of qualifications among NCOs (E5-E6).

A further analysis revealed that:

--There is no perceived problem in the motivation, tactical qualification, or dedication of junior company grade officers of the Active Army; however, the Reserve Components see problems in officer and NCO motivation and soldier discipline.

--There is growing awareness within the Reserve Components that they will soon face many current Active Army problems in the area of recruitment, retention, and personnel turbulence, as a result of the decreasing draft pressure.

--Conservatism or lack of experience among the trainers, seniors as well as juniors, is not believed to be an obstacle to dynamic training.

--While the Pentagon believes problems in training stem from company-level inexperience, company-level sentiment attributes training ills to the Pentagon.

H. Significant numbers of personnel do not understand the totality of the company commanders training job. There is a tendency to overlook the vital requirement for individual training in units, which is the responsibility of the commander to conduct or coordinate. Figure 2 and 3 below are Board Visualizations of the job of company commander.
I. Support requested by combat arms Active Army trainers:

1) Personnel stability.

2) NCO proficiency.

3) Trainer's purse (funds to spend for training incentives or to obtain locally, needed training materials).

4) Help from the combat arms school.

Significantly Active Army trainers do not want:

5) More guidance on how to do their training job, but rather instructions on the role played by higher headquarters in support of unit training.

6) Large scale FTX's, since these afford little training value at the platoon, squad, and individual level.

J. Support requested by combat arms Reserve Component trainers:

1) Formal association with the Active Army---e.g., in the nature of mutual support and roundout programs.

2) A Reserve Component tailored training program which meets their needs instead of the mobilization training program which exists now.

3) NCO proficiency.

4) Expanded budget.

5) Help from the combat arms schools.

6) Inducements to enhance recruitment and retention.

Reserve Component trainers do not want:

7) Bn level FTX's, since they strongly believe that they can best devote their time to company or lower level training prior to mobilization.

8) Special troop tests which attempt to validate unrealistic readiness requirements.

K. A major effort is needed to relearn, innovate, and improve upon combat arms training techniques. Areas of immediate concern are:

1) Marksmanship training.

2) Simplified and believable battle drill,
I. Tacts.

4) Tactical exercises without troops (TEWT).

5) Anti-Armor.

6) Combat in cities.

Much of the existing formal training literature is outdated and does not meet the requirements of the trainer in the field.

L. Training Devices. Current training devices lag available technology significantly, and fail to meet the needs for communicating with today's audio-visually sophisticated soldiers. Immediate requirements exist for:

1) Moving target screens for indoor weaponry training.

2) Tracked vehicle driving simulators.

3) Indirect and direct fire simulators.

4) Hologram 3-D terrain visualizations.

5) PEMA substitute vehicles.

Advanced training devices, when incorporated with sound techniques, could revitalize Reserve Component training, as well as upgrading that within the Active Army.

M. Training Management.

1) Department of the Army level action is needed to assist subordinate commanders in managing personnel turbulence and manning levels within the Active Army.

2) Commanders above battalion level must participate in management of decentralized training by cutting competing requirements, providing support, and reconciling readiness requirements with actual personnel and equipment resources, unit training and other missions.

3) FM 21-5 (Military Training Management) fails to address the real problems of management, the historic training squeeze, for either the Active Army or Reserve Components.

4) Decentralized management of training is thoroughly consistent with requirements for training leaders for the battlefield. The policy of
decentralization is widely accepted as a needed change, although it is expected to work only after the "system" adjusts—a period of months.

N. Combat units are not TOE structured to conduct or adequately support peacetime training.

O. There exists no training advocate to promote the transition from wartime, institutional training, targeted on Southeast Asia, toward a peacetime establishment organized to support training in combat arms units. There exists a bifurcation of training responsibility throughout all strata of the Army above company level. ODCSPER, OACSFOR, OCORC, OCRD, and intermediary levels have established vertical lines of communication for their parochial piece of the training pie. With the great complexity of the training task, it is necessary to insure that all is done to streamline procedures and establish lateral as well as vertical lines of communication in order to expedite and revitalize support for decentralized training.

IV. KEY RECOMMENDATIONS

A. Restore NCO/Specialist confidence through actions to enhance professional competence.

1) Manage exceptionally key combat arms MOSs for the E4 striker and junior leader E5 and E6.
   a) Infantry: 11B40, 11C40.
   c) Artillery: 13B40, 13E40.

2) Revise present key combat arms MOS tests which are poorly written, evaluating only reading ability. New tests should:
   a) Be practical,
   b) Have a hands-on portion,
   c) Merit a distinctive badge, analogous to a branch related "EIB."
d) Have a Reserve Component option to qualify annually for the award of proficiency pay.

3) Provide MOS-related unit training extension courses (UTEC), employing multi-media material applicable for both individual and small group study, and improved correspondence courses (ICC), from the combat arms schools for unit use.

4) Assure on-duty MOS proficiency study time on a regular basis, integrated with NCO general educational development.

B. Training Techniques. A major effort to improve training techniques should be initiated by the combat arms schools to:

1) Teach how to teach team training in units.
2) Include technique on training in units in future FM revisions.
3) Develop a quick-tap service of packaged instructional material for units.
4) Establish a two-way communications link with units to include the dissemination of informal training literature.
5) Contribute to revision of FM 21-6 (Techniques of Military Instruction) unit-relevant methods of instruction.
6) Immediate pay-off areas are:
   a) Marksmanship, to include musketry at reduced ranges.
   b) Battle drill with understrength units.
   c) Tactics, to include use of sand tables.
   d) Terrain walks or tactical exercises without troops (TEWTs).
   e) Anti-Armor.
   f) Combat in cities.

C. Training Devices. Initiate development of the following immediately.

1) An indoor moving target screen.
2) Tracked vehicle driving simulator.
3) Indirect and direct fire simulators.
4) Hologram 3-D terrain visualizations.
5) PEMA-substitute vehicles for jeeper exercises and adventurous training.

D. Training Management,

1) Match training missions to manning levels. Illustrative examples are depicted in figure 4 below.

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<th>MATCH TRAINING MSN TO MANNING LEVELS</th>
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<td>BN FULLY TRAINED TO PERFORM TOE COMBAT MSN</td>
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fig. 4

2) Adopt a policy of block leave for units.
3) Establish prime unit training time.
5) When necessary, zero out units to keep others near ALO 1 for missions call for rapid deployment/employment.
6) Seek labor saving devices.
7) Adopt a total force training management system tailored to the needs of the Army as well as Reserve Components which would update
the present MTP, add an RCTP (Reserve Component Training Program) and an ORTP (Operational Readiness Training Program).

7) Provide a trainer's purse for incentives, local materials, additional paid drill preparation time and commercial transportation to weekend training sites (WETS) for Reserve Components -- illustrative examples for "purse" expenditures.

E. Structure Recommendations.

1) Provide a training NCO and assistant in combat arms company level units.

2) Provide a small signal maintenance augmentation at brigade level for special UTEC educational equipment when issued.

3) Provide Active Army captains as training advisors to company level Reserve Component units.

F. Reserve Component innovational incentives:

1) Proficiency pay MOS test option.
2) Access to UTEC and ICC.
3) Additional CGSC and combat arms school quotas.
4) Special adventure and environmental FTXs.
5) VRB.
6) Guarantee active duty for Rep-63 personnel within sixty days after enlistment.
7) Bootstrap/vocational training (one year civilian schooling for each 6 year enlistment).
8) Full PX and commissary privileges.
9) Full hazardous duty pay on par with Active Army.
10) Retirement benefits at age 55.
11) Full survivors benefits after completion of twenty qualifying years.

G. Disestablish the Board of Dynamic Training.
H. Establish a US Army Combat Arms Training Board tasked to:

1) Assist in the generation of exciting, meaningful, and professionally stimulating training in combat arms units, worldwide.

2) Coordinate and expedite the development of an effective, two-way interface between the combat arms schools and other sources of assistance and the training managers of combat arms units, both Active and Reserve Component.

3) Monitor the development of meaningful MOS tests for key combat arms MOSs to include promulgation of appropriate materials to permit better preparation for the texts.

4) Monitor the development by combat arms schools and related packaged material to provide training assistance to combat arms units.

5) Expedite and monitor the development, prototype procurement and field evaluation of modern training devices.

6) Monitor, and act as sponsor when appropriate, research and studies designed to promote improved training in units.

7) Coordinate the promulgation of informal training literature concerning techniques, devices, and management.

8) Act as a proponent for the revision of FM 21-5 (Training Management) and FM 21-6 (Techniques of Military Instruction).

9) Transfer catalyzing functions back to the Army training establishment and resolve the USACATB by the close of FY 1975.

I. Establish as the Training Advocate, a Deputy CG, CONARC (Training). It is envisaged that a Deputy CG, CONARC, will monitor and communicate training matters at basically three levels: the DA staff, the training support level, and directly at the unit level through the CATB:

1) At the DA staff level, Deputy CG, CONARC, will act as an interface on matters affecting unit training with DCSPER, ACSFOR, CORC, CRD, DCSLOG, and other principals.
2) At the training support level, he will shepherd training actions among CDC, AMC, EEC, etc. In addition, through CATB he will optimize training support provided by the service schools for units.

3) At the unit level, Active as well as Reserve Components, through CATB, he will listen to the trainer's problems and search the training establishment for feasible solutions. A real-time communications link will be maintained through:

a) Informal training literature.

b) Answering questions from the field.

c) Visits by CATB training assistance teams.
**APPENDIX 1**  
**EXECUTIVE SUMMARY**  
**DISTRIBUTION LIST - FINAL REPORT**

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**NOTE:** Number of copies distributed to each headquarters is shown in parentheses.
U.S. Army Military History Institute

Report

United States. Dept. of the Army. Board of

Dynamic Training

of the Board for

DYNAMIC TRAINING

VOL II - FINAL REPORT

17 December 1971

PROPERTY OF US ARMY
# VOLUME II
BOARD FOR DYNAMIC TRAINING
FINAL REPORT

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I. GUIDANCE AND ASSUMPTIONS

A. CSA GUIDANCE

In late August 1971, the Chief of Staff of the Army directed the Commanding General of Continental Army Command to bring together a board of officers to consider ways of supporting unit commanders in conducting meaningful and exciting training. In his guidance to the President-designate of the Board, General Westmoreland indicated that he had been prompted to act by his own observations, and by Army Staff reports of training seen on field trips. Lackluster training, he believed, stemmed from what he termed "the Vietnam strait jacket." The present generation of company officers, probably many battalion staff officers, and possibly some battalion commanders are unprepared by schooling or experience for service in a peacetime Army. The Army's trainers needed an infusion of fresh ideas. The Chief of Staff set up the Board to link trainers with sources of concept and technique for dynamic training: the service schools, great trainers of the past, and innovative contemporaries. The Board was to model its study and operations after the Emerson Board on Leadership, which the Chief of Staff considered was making a significant contribution to the Army.

The Chief of Staff fixed the date of the Army Commanders' Conference at the end of November for a "progress report" from the Board, and indicated that he hoped implementing action could begin soon thereafter. The Board was to consider sending briefing teams throughout the Army, similar to those of the Leadership Board. The entire Army, Active and Reserve Component less units in Southeast Asia, was to be studied; but General Westmoreland desired that the Board limit its scope to the combat arms units: Infantry, Armor, Cavalry, Field Artillery, and Divisional Air Defense. He commented that the Board's findings could eventually be more broadly applied. He further emphasized that the focus should be on training in units at battalion and lower level, with particular attention to the squad -- the tactical "building block." The training of individual soldiers, in Basic Combat Training,
Advanced Individual Training, or in schools outside of units, was excluded from the Board's purview. By way of pointing the Board in the direction he hoped the Army could move, General Westmoreland called attention to an article he had published in 1960 entitled "Dynamic Training," which described unit training techniques successfully employed in the 101st Airborne Division.

The CSA's initial directive to Army commanders concerning the Board for Dynamic Training, other fundamental documents pertaining to the Board, its charter, and its operations, are reproduced in Annex A. The basic message, a "Westmoreland sends" dated 7 September, is entitled "Support for Dynamic Training." The message sketches a plan of action for the Board which includes a "training manager survey," a 4-6 week training conference of Army-wide representatives at Fort Benning beginning in mid-October, and publication of training literature by the Board (Specifically the CSA mentioned, "a catalog of idea-stimulating, adventurous training, and how to conduct training on tactics and weapons despite limitations on training areas or conditions of understrength"). The Commanding General, CONARC, "acting on the recommendations of the Board will provide for appropriate modifications of school curricula, field manuals, and other training literature, and will otherwise ensure that the Board's actions have enduring impact."

B. OTHER GUIDANCE

Since the Chief of Staff of the Army had referred to Army Staff reports of poor training, the Board sought out authors of such reports. In most cases, units based in Europe were the subject of criticism. At issue usually was routine training conducted in base station (kaserne), as opposed to field training at one of USAREUR's major training areas (troop exercise reserves). For example, a report to CSA of a visit to Europe in July stated in part ".... I think the Army has forgotten how to train Infantry and Armor units without going to a major training area for tactical exercises. What is missing is training in technique. I asked many officers about the kinds of training they conduct. The few who were doing any training at all complained about techn..."
about the absence of space and terrain. None had ever heard of training in techniques such as squad or platoon battle drill. None of them had run any courses for individual soldiers with respect to the use of cover and concealment, nor did any seem to have any interest in the intricacies of defensive positions. In short, at the small unit level the command is not professional. It may take several years to reinstitute such training, but we had better hurry while there are a few officers left who understand it. I wonder whether the Infantry and Armor Schools are helping or whether they are part of the problem." (This particular report led to CONARC's being directed to produce a field manual on "close-in training").

Other criticism of units in Europe included invidious comparison of American with German or British units training in like circumstances. Three specific charges against American trainers were noted for Board study:

--Commanders do not differentiate between technique and tactic.
This lapse is particularly evident in superficial training at squad level, because platoon cadre erroneously assume that they can conduct meaningful training for a squad only when they have (a) all members present, (b) all the squad's equipment, and (c) maneuver room for full tactical deployment. They did not understand that there are techniques through which the organizing and controlling of a squad can be effectively taught when neither (a), (b), nor (c) prevail. They are severely handicapped by U.S. Army doctrine for the squad, which does not include such technique, and is overly complex. They are ignorant of techniques for training in the school of the soldier -- crawling, moving under fire, selecting and occupying position, and camouflage.

--Commanders are overawed by the Army's training system, and hence wedded to stereotyped approaches to training. What they need is a circular or other document which gives them examples
of wholly new and different techniques, "exciting, fun-type training." Commanders need to be reassured that it's O.K. to innovate, to depart from the field manual, to go for adventure, for challenge.

--Training in the field artillery and air defense artillery is in the worst shape of all the branches, because it is weapon-centered, and uninteresting when firing is not possible.

CG, CONARC directed the Board to consider a special field manual on training techniques applicable to garrison or kaserne "close-in" training, which might redress some or all of these deficiencies. Shortly after the Board convened, it received an advance copy of a DA publication, of which this passage was most pertinent:

EXTRACT FROM THE ARMY'S MASTER PROGRAM FOR THE MODERN VOLUNTEER ARMY - A PROGRAM FOR PROFESSIONALS

A. PROFESSIONALISM

2. EXCITING/MEANINGFUL TRAINING

OBJECTIVE

Army Training which:

* is decentralized in approach, with responsibility for management and execution placed in the hands of the unit commanders
* challenges the soldier to demonstrate his ability against high standards
* is measured by testing actual performance
* is enriched by the use of imaginative, challenging exercises which involve the individual soldier in their planning and execution
* includes Adventure Training projects which place the soldier in a relatively unstructured environment and require him to employ his own initiative to accomplish a given task.

APPROACH

Freeing soldiers to devote their energies to their professional duties is only part of what is required to build strong positive incentives to military service. What soldiers actually do on their jobs is the critical ingredient.
Of central importance is the character and content of training. When training is dull and unchallenging, the soldier simply counts the hours until the day ends. He also counts the days until he can get out of the Army. But when training poses a challenge, is interesting, permits personal growth and a chance for recognition, the Army develops real competence in its soldiers, and it will have good men wanting to reenlist for Army careers.

Training is challenging and interesting when Army leaders at the unit level use their imagination to find innovative and resourceful ways to develop the professional skills of their soldiers and bond their small units together into well-practiced teams. Higher echelons must encourage and permit unit leaders to do this.

A certain level of resources -- people, time, and training funds -- is prerequisite to a rich training program. Far more critical, however, is sound judgment and professionalism in the officer corps and soldierly competence among NCOs. Mechanized units, as an example, may be forced to adapt their training to emphasize "fighting on foot"; but by enthusiasm and resourcefulness Army leaders can produce the higher levels of mission performance required in the Army today.

C. FOCUS ON THE COMBAT ARMS

The Board assumed that in concentrating on combat arms training it addressed an urgent problem. As General Westmoreland's message put it, "no objective we have set for the Modern Army can be attained unless its training is well managed, doctrinally sound, and personally stimulating or rewarding for the soldier-participant. Dynamic training is particularly essential to our success in units of the combat arms, for training is their principal peacetime activity, and training realism and relevance especially hard for them to create under peacetime constraints." Further, the Board notes, by way of underscoring the validity of its assumption, that:

--Civilian sociologists contrast the evident future of the combat arms with that of support and service branches.*

--Recruiting and retention in combat arms of the Active Army is faring poorly.

National Guard strength in combat arms units threatens to fall precipitously in the next few years, and there is already speculation that a form of draft legislation for the Guard may be necessitated.

D. POLICY OF DECENTRALIZATION

On 30 June 1971, in a message (Annex A) pivotal to Army Training management, General Westmoreland directed discontinuance of the practice of headquarters specifying certain training subjects as mandatory. CSA cited the wording of the US Army officer's commission, reposing special trust and confidence in the recipient. The message stated that he wanted to lend substance to those words by decentralizing the management and conduct of training. Commanders above battalion were, therefore, no longer to regard unit training records as official documents, subject to inspection or audit, but training guidance was thenceforth to be provided in the form of mission-type instructions rather than by detailed directives. That message constituted new Department of the Army policy on all individual and unit training other than BCT, AIT, and service school courses. The Board for Dynamic Training organization and methodology were structured to be compatible with, and lend support to, the policy of decentralization. The thrust of the Board's recommendations is designed to make that policy work better.
II. ESTIMATING THE TRAINING SITUATION

A. METHOD

Whatever its other claims to breaking free of confining orthodoxy might be, the Board for Dynamic Training (BFDT) was organized and did function in unusual fashion, its membership fluctuating, its internal organization shifting. Annexes B, C, and D detail the activities and management of the Board. Following is a graphic calendar showing the time frame within which the BFDT operated. Annotations at the left margin flag the six principal undertakings of the Board, each of which will be discussed in turn on the following page:

1) Field Trips
2) Conference
3) Survey
4) Consultation
5) Other Studies
6) Briefings of Results

1. Field Trips

Line A of the calendar denotes the activities of the Administrative Committee, BFDT, consisting of some 20 to 40 officers, all Active Army, from all four combat arms branches, most of whom joined the Board in September and stayed through its disestablishment in December. These officers provided the administrative infrastructure and management of BFDT, formed its teams for field trips around the world, and led committees during the Board Conference. These officers provided key input to the Board (Annex G, Reports of Visits). Among them were representatives of the Field Artillery, Air Defense, Armor, and Infantry Center teams, who provided access to the expertise at their respective service schools, AMC board, and CDC agency. During field trips, teams visited 103 Active Army units, battalion size or larger, in CONUS, Alaska, Korea, and Hawaii. The teams
## Proceedings of the Board for Dynamic Training 1971

### September

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<td>CG, CONARC - 16 Dec</td>
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<tr>
<td>20 Dec</td>
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collected documents pertinent to the Board's study, examples of imaginative training, and registered training problems cited by commanders and staff officers. Teams also contacted 35 Reserve Component units, including 8 divisions, 23 brigades, 2 Special Forces groups, and 2 corps artillery. Trip reports reproduced in Annex G, summarize much of what they found afield, but the chief value of the trips was to prepare the Administrative Committee to chair discussions with unit representatives during the Board Conference phase.

2. Conference

Line B of the calendar indicates the Conference phase of the Board, the assembly of all its membership, which took place at Fort Benning from 18 October through 12 November (Reserve Component members remained in session an additional week). A total of 99 officers from 58 units worldwide participated. Represented at this unique meeting were 22 Active Army divisions or brigade-level commanders from all over the world, the Chief of the National Guard Bureau, and the Reserve Component commanders in 8 states. The majority of conferees were captains or majors and most had recent first hand experience managing small unit training as a commander or staff officer.

UNITS AND HQ REPRESENTED ON BFDT

<table>
<thead>
<tr>
<th>CONARC</th>
<th>1ST DIV</th>
<th>1ST CAV DIV</th>
<th>38TH ARTY BDE</th>
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<td>32D AADCOM</td>
<td>56TH ARTY BDE</td>
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<td>USAARMS</td>
<td>3D DIV</td>
<td>BERLIN BDE</td>
<td>4TH MSL CMD</td>
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<tr>
<td>USAFAS</td>
<td>4TH DIV</td>
<td>171ST INF BDE</td>
<td>2D ACR</td>
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<td>USAADS</td>
<td>8TH DIV</td>
<td>172D INF BDE</td>
<td>3D ACR</td>
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<td>USAAVNS</td>
<td>25TH DIV</td>
<td>173D ABN BDE</td>
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<td>V CORPS ARTY</td>
<td>82D ABN DIV</td>
<td>193D INF BDE</td>
<td>1ST SF GP</td>
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<td>1ST ARM DIV</td>
<td>197TH INF BDE</td>
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<td>ARTY</td>
<td>3D ARM DIV</td>
<td>30TH ARTY BDE</td>
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National Guard Bureau, Washington, D.C. 30th Inf Div, North Carolina
USAR School, Atlanta, Georgia 33d Inf Bde, Illinois
124th ARCOM, Washington 40th Arm Bde, California
XI Corps Arty, Utah 104th ACR, Pennsylvania
26th Div, Massachusetts 81st Inf Bde, Washington
At one time or another, 99 officers, 13 noncommissioned officers and soldiers, and 11 civilians served as members of the Board or its staff. Additionally, the views of 2882 military professionals who responded to a questionnaire distributed worldwide by the Board are included, as are 100 other submissions to the Board from individuals via letter or telephone call. Among the latter were more than a dozen US officers serving with foreign armies. The Board conferees were able, then, to examine a broad range of viewpoints from various perspectives.

The BFDT Conference phase had several general sessions in which conferees met with the Board President or with distinguished consultants; however most of the spade work of the Conference took place in committee (usually 10-20 officers). Committees were formed initially on a geographical basis, then by branch and component. The usual approach was to see if a consensus could be reached on problem areas affecting dynamic training, and then to endorse one or more feasible solutions. The committee reports on problems presented to the Board, reproduced in Annex J, summarize the discussions, some of which, as might be expected, generated more heat than light. Minority reports recording dissent were encouraged. The conferees were able to meet and talk with senior retired officers of the Army visiting the Board for consultation; to use and comment on preliminary analyses of the Training Management Survey from HumRRO; and to exploit the facilities of the Infantry Center in support of their work. The conferees served as a sounding board for ideas and constituted the touchstone for the Board findings and recommendations. There was, however, no direct parliamentary connection between the individual Board member and this report. The Board's President told the conferees at their final plenary session that each individual could take full credit for anything the Board produced, but that the President would shoulder the responsibility for whatever facet they wished to disown.

3. Training Managers Survey
Line C of the calendar depicts the survey of training conducted via questionnaire by the Board Army-wide. At the outset BFDT inquiries at DA and CONARC indicated that there had been no recent general study of unit training which might serve as its point of departure. Indeed, it seemed evident that such pertinent studies as existed were few and were too narrow for the Board's purposes. Among the latter were, for example, several studies conducted under the auspices of the Comptroller of the Army in which training was examined as one of several CONUS unit activities competing for resources or time with concern focused on the amount rather than the quality of training. Another example was the study of training undertaken by the 5th Infantry Division (Mechanized) in 1969-1970, which offered valuable insights on training management. The study dealt with the particular training situation at Fort Carson at the time, and understandably was not altogether useful for the 4th Infantry Division (Mechanized) at Fort Carson in 1971. In the absence of any other point of departure, and mindful that the policy of decentralization had been in effect over 60 days; the Board decided to go direct to battalion level by questionnaire to elicit the views of the men now charged with the Army's training job. With the approval of Office of Chief of Research and Development, DA, and the Human Resources Research Organization; the Director, HumRRO Division No. 4, and the Chief of the US Army Infantry Human Research Unit drafted a questionnaire, which, after a few modifications by BFDT, was printed for distribution. The form sent to the field was diffuse. In some respects, questions might have been better structured. Given the time constraints under which BFDT was operating, the Board President elected to forego any time-consuming revisions and reevaluations in the interest of assuring the Board Conferees some sampling of field opinion for discussion in late October and early November. The results, as analyzed by HumRRO, are reported in Annex F. HumRRO considered the survey statistically significant, and internally consistent. BFDT viewed the survey and HumRRO analysis as a very useful point of departure for its own estimate and
analysis as shall be demonstrated in subsequent sections of this report. Moreover, the Board observed that, armed with its experience, a much more meaningful survey of training management can now be devised.

As the calendar indicates, the survey went to the field beginning 20 September. It was administered to students at the Command and General Staff College who had been involved in tactical unit training within the previous year, and to similar students in the Advanced Courses at the Field Artillery, Air Defense, Armor, and Infantry Schools. Copies were mailed to the Active Army commanders of divisions, separate brigades/regiments and corps artillery who would be represented at the forthcoming conference. Others were sent to Reserve Component commanders. These tactical unit commanders were asked to pass the survey to battalion level for administration, with the request that trainers and training managers respond. As an added dimension, 211 cadets at West Point who had served as "third lieutenants" conducting training in tactical units during summer training were also surveyed. Altogether over 3000 forms were sent out and returned. From the returns only those respondents who reported a last duty assignment in a TOE unit outside of Vietnam, in a command/leader position or an S3/G3 staff position, were selected for analysis. Nearly 2900 were eventually analyzed. By mid-October, the first returns were available to the Board. ADP printouts updated survey results, enabling the Board to identify problems for which they could seek solutions in discussion and to reinforce their own convictions. Thus, the Board and the survey analysis interacted, each functioning as a check on the other.

Members of the Board took no significant exception with the survey or the analysis. What tended to surprise members of BFDT about the survey was the universality of the major training problems: many had come believing that his unit or area was uniquely disadvantaged or ill-favored only to discover that his difficulties and attitudes were widely shared by others throughout the Army. In fact, the HumRRO analysis demonstrates that the differences among
the several geographic environments in which training takes place are less important than the differences among the branches or ranks of respondents. Predictably, Reserve Component responses were at variance with those of Active Army. The USMA group (211) and Reserve Component samples were analyzed separately from the other Active Army responses (2295).

4. Consultation

Line D of the calendar refers to consultation, through which the Board sought the opinion and advice of other services, other armies, and available senior officers of the Army who were renowned as great trainers. The Board also solicited correspondence from trainers afield. Annex E describes these inputs.

The Board contacted liaison officers stationed at Fort Benning, representing the following:

- US Marine Corps
- US Air Force
- French Army
- German Army
- British Army
- Canadian Army
- Australian Army

In each case, following an explanation of the general mission of the Board, specific areas of Board interest appropriate for each liaison officer were identified, and each was asked to provide information which might point the Board toward solutions to problems confronting US Army trainers. Additionally, the President of the Board wrote officers serving on US MAAGs and Missions throughout the world, soliciting information on training techniques or devices in use by host countries which might similarly enlighten the Board. Full advantage was taken of foreign visitors and students at Fort Benning during the period in which the Board was in session. In one way or another,
the Board had the benefit of advice or opinion concerning training from the following countries:

- France
- Federal Republic of Germany
- United Kingdom
- Canada
- Australia
- Brazil
- Republic of China
- Greece
- India
- Korea
- Italy
- Spain
- Philippines
- Saudi Arabia
- Argentina
- Iran
- Ethiopia
- Turkey

The senior retired consultants to the Board visited at the invitation of Chief of Staff of the Army or the Commanding General, CONARC. When feasible, before or after visiting Fort Benning, the consultant was afforded an opportunity to update himself on conditions in the Army by a trip to a major tactical unit in training. At Fort Benning the consultant was briefed on the Board mission and presented tentative findings and recommendations and time permitting, visited the 197th Infantry Brigade since that unit's training situation is inherently interesting. The Brigade is a VOLAR experimental unit, deep into "unit of choice" recruiting in Georgia and surrounding states and about to receive the first of its own "train and retain" soldiers for Advanced Individual Training wholly within the Brigade. The consultants' advice for the Board was provided in whatever form he found most convenient: oral, written, or videotaped interview. The video tapes broadened the exposure of the consultant among members of the Board, and will enhance improved courses in training management within the service schools. These senior retired officers were among the consultants (asterisk indicates video-taped interview):

* General Paul D. Adams
* General Bruce C. Clarke
* General Paul L. Freeman, Jr.
* General Hamilton H. Howze
* General James H. Polk
* General I. D. White
* Lieutenant General Garrison H. Davidson
* Brigadier General S. L. A. Marshall
5. Other Studies

Line E of the calendar refers to the search for, and the culling of, other studies of training in tactical units. There is, of course, extensive literature on training devices and training techniques (the Board's bibliography is included as Annex I). As mentioned previously, however, the Board could find only a few recent studies of training management; none purporting to be so comprehensive as the Board's mission.

6. Briefings of Results

Line F of the calendar portrays the briefings in which the Board has already reported to CG, CONARC, the Chief of Staff of the Army, and other Army leaders the preliminary findings and recommendations to support dynamic training.

It should be noted that while F is patently an output process, B was also such. Board conferees returned to their units with a briefing of initial Board results, plus the training techniques they considered relevant to their unit needs from the wide-ranging discussions in which they had participated. The Board Conference was designed to facilitate sharing innovative approaches to dynamic training; in that respect the Board's product is already being disseminated.

B. START POINT: IS THERE A PROBLEM?

1. Basic Questions

The establishment of the Board stemmed from dissatisfaction with training at the highest echelon of the Army the Board felt, however, in view of the policy of decentralization, that it was important to determine how widely that opinion was shared throughout the rank and file. The BFDT questionnaire posed more than forty questions for respondents, but the entire range of inquiry may be reduced to three fundamental issues:
-- Is there a problem with Army Training?

If so:

-- Is it because training is in the hands of leaders inexperienced in training techniques, disadvantaged by the Army’s preoccupation with operations in Southeast Asia over the past six years? (Hypothesis 1: Vietnam Stratum)

or, rather:

-- Is it that training is a low-priority, under-resourced activity, in tactical units and of quality reflecting the command support it receives? (Hypothesis 2: Mismanagement)

The questionnaire was designed to inquire into these issues from a number of different perspectives; and, so structured as to avoid leading the respondent toward any particular range of responses.

2. Dynamic Training: Definition

The BFDT survey establishes wide agreement with the Chief of Staff and his principal advisors throughout the Army that training in combat arms units seldom approximates what General Westmoreland terms "dynamic."

The respondents were furnished this definition:

Dynamic Training is --

-- Training tailored to need from the commander's appraisal of his unit and his soldiers.

-- Training which meets need despite constraints. Unit constantly trains towards commander’s training objectives even if hampered by reduced strength, limited training facilities, or other scarce resources.

-- Training in which input by the trainer (instructor) is imaginative, innovative, professionally stretching.

-- Training in which the output for the trainee (student) is job-satisfaction -- a zestful, stimulating, rewarding learning experience.
3. Dynamic Training: Frequency

Respondents were then asked how often their unit trained dynamically. To answer, respondents picked one of the four descriptive phrases on the left in the following table. For example, these choices were assigned a numerical value of 1 through 4. The average for each part of the sample is reported below.

TO WHAT EXTENT WOULD YOU CHARACTERIZE THE TRAINING IN YOUR UNIT AS "DYNAMIC" AS WE USE THE TERM

- a. Almost always ... ... ... ... ... ... ... ... 1
- b. Frequently ... ... ... ... ... ... ... ... ... ... 2
- c. A few times ... ... ... ... ... ... ... ... ... ... 3
- d. Rarely, if ever ... ... ... ... ... ... ... ... ... ... 4

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Active Army

- 2.8 2.8 2.8 2.4 2.7 2.7 2.9 --- 2.8 2.8 2.9 2.9 2.8
- 2.8 --- --- --- 2.7 2.8 2.9 --- 2.9 2.8 2.8 2.7 2.9
- 3.0 3.0 2.8 --- --- --- --- 3.0 --- 2.9 3.1 3.2 2.9

* 05 with more than three years in grade and/or Battalion Command experience.

** 05 with less than three years in grade.

# All geographic locations other than CONUS, Europe and Southeast Asia; principally Alaska, Korea, Panama, and Hawaii.
4. Status of Training

In a different set of questions, Active Army respondents reported training marginally adequate. Opinion was polled in two questions which required each respondent to characterize the current state of training in his unit in five subject areas (tactics, weapons, support, maintenance, and communication), and three general areas (operational readiness training, unit training, and individual training). The respondent was given a choice among only three descriptors—"Excellent," "Adequate," "Inadequate." Yet few were willing to describe training in any of the eight areas as "excellent." Many used the term "Inadequate" with regularity. When analyzed in gross, using a 21 point numerical value (1.0 to 3.0), the average values fell below "adequate" in virtually all areas. Air Defense and Field Artillery respondents held a consistently higher opinion of their training than Infantry or Armor respondents; Armor branch respondents were uniformly the most critical. The following table shows the profile of response for each branch and for battalion commanders:

IN YOUR UNIT, WHAT IS THE CURRENT STATE OF TRAINING...?

| Active Army |
|---|---|---|---|---|---|---|---|
| Tactics | Wpns | Maint | Comm | ORT | Unit Tng | Indiv Tng |
| EXCELLENT | | | | | | |
| F | F | | | | |
| D | D | | | | |

| ADEQUATE | | | | | | |
| DF | I* | I* | DF | I* | DF |
| I* | A | A | | I* | |

| INADEQUATE | | | | | | |
| KEY |
| D: Air Defense Artillery |
| F: Field Artillery |
| I: Infantry |
| A: Armor |
| ≥: LTCs, Bn Cmdrs of 3 years in grade or more |
Respondents to the survey, thus, did not share the opinion held in Washington that Artillery and Air Defense training is generically worse than that of other branches. At least in their own eyes, the gunners train a cut better than the troopers and the tankers.

Active Army respondents were significantly less satisfied with the state of individual training in their units than they were of either their unit (team) training, or of their operational readiness (mission) training as indicated below:

**IN YOUR UNIT, WHAT IS THE CURRENT STATE OF TRAINING IN THE FOLLOWING GENERAL AREAS:**

<table>
<thead>
<tr>
<th></th>
<th>CONUS</th>
<th>EUROPE</th>
<th>OTHER</th>
<th>IN</th>
<th>AR</th>
<th>ADA</th>
<th>FA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operational</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Readiness Training</td>
<td>1.9</td>
<td>2.2</td>
<td>2.1</td>
<td>2.0</td>
<td>1.8</td>
<td>2.2</td>
<td>2.1</td>
</tr>
<tr>
<td>Unit Tng</td>
<td>1.9</td>
<td>2.0</td>
<td>2.0</td>
<td>1.9</td>
<td>1.7</td>
<td>2.0</td>
<td>2.0</td>
</tr>
<tr>
<td>Individual Training</td>
<td>1.8</td>
<td>1.8</td>
<td>2.0</td>
<td>1.9</td>
<td>1.8</td>
<td>1.9</td>
<td>1.9</td>
</tr>
</tbody>
</table>
In the Reserve Components, opinion of the state of training ran generally higher than that for the Active Army; individual training being the highest, the inverse of the Active Army opinion. A comparison of Active and Reserve Components by grade plus cadets is shown below:

<table>
<thead>
<tr>
<th></th>
<th>AA RC</th>
<th>AA RC</th>
<th>AA RC</th>
<th>AA RC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operational</td>
<td>05*</td>
<td>05#</td>
<td>01-03</td>
<td>Cadets</td>
</tr>
<tr>
<td>Readiness</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Training</td>
<td>1.9</td>
<td>2.2</td>
<td>2.0</td>
<td>2.1</td>
</tr>
<tr>
<td>Unit Tng</td>
<td>1.9</td>
<td>2.2</td>
<td>1.9</td>
<td>2.1</td>
</tr>
<tr>
<td>Individual</td>
<td>1.9</td>
<td>2.3</td>
<td>2.0</td>
<td>2.1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AA: Active Army</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RC: Reserve Components</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>05*: LTC, Battalion Commander of more than three years service in grade</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>05#: LTC with neither battalion command nor three years service in grade</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

5. Interest in Change

When survey respondents were asked whether the CSA directive decentralizing training management would lead to more dynamic training in their units, uniformly throughout the Army, respondents agreed that the policy would "help significantly," although most felt that the system would need more than three months to adjust to the new order. Respondents in Europe indicated that beneficial change was already quite evident there. It is important to note that the questionnaire's range of answers on four items addressing "decentralization" afforded respondents ample opportunity to express disagreement with the policy. One item invited the dissenting respondent to write in a brief description of a different policy for the Chief of Staff; few did. The Board views the responses to these questions both as a solid endorsement from the field of the Chief of Staff's policy and another indication that the rank and file, as well as the high command, desire definite improvement in Army training.
A strong sensing of discontent with the state of training affairs also emerges from questions framed to probe ways of promoting dynamic training. Respondents across the Army agreed that training could be improved "to a major degree" were the commander present to lend his energy and enthusiasm to both the planning and the conducting of training. But the responses also indicated that commanders, especially company commanders, were often foreclosed by other responsibilities from taking part in training, even though more senior officers agree that the company commander's presence materially helps training. Responsibilities conflicting with training occurred more frequently with Armor branch respondents than in any other group. The Board construes this as lack of agreement within the chain of command on what is important. So basic a failure to see eye-to-eye on priorities points up the possibility that command emphasis on training, unaccompanied by command action to reorder priorities or to ease competing responsibilities, will simply increase the frustration of the company commanders. The latter seem to know that they should figure prominently in training. They seem to be confident of their ability to contribute, but they cannot see their way clear of "other responsibilities" which prohibits their leading training.

6. Communication Problems

Differing perspectives along the chain of command on the importance of training also emerged from a question which asked each respondent to rate eight unit activities (drug control, community relations, race relations, small unit training, command inspections, operational missions, vehicular maintenance, and administration) in terms of (a) the relative importance he thought his seniors attached to the activities; (b) the relative importance he attached to these same activities; and (c) the relative time each required of him. The rankings are revealing:
<table>
<thead>
<tr>
<th>Activities</th>
<th>Importance to Seniors</th>
<th>Importance to Self</th>
<th>Time Required of Self</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operational Missions</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Small Unit Training</td>
<td>5</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Vehicular Maintenance</td>
<td>1</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Race Relations</td>
<td>3</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>Drug Control</td>
<td>4</td>
<td>5</td>
<td>7</td>
</tr>
<tr>
<td>Administration</td>
<td>6</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>Command Inspections</td>
<td>7</td>
<td>7</td>
<td>5</td>
</tr>
<tr>
<td>Community Relations</td>
<td>8</td>
<td>8</td>
<td>8</td>
</tr>
</tbody>
</table>

The table identifies "Administration" as significant among the "other responsibilities" which draw commanders away from training. More importantly, it highlights broad senior-junior disagreement on command priorities. (A breakout by grade and location is shown in Annex F.) The noted disagreement holds uniformly throughout the Army above the line; below the line there is some significant reordering. What is important for this study is that, across the Active Army, regardless of rank or location of unit, juniors in combat arms battalions believe that their seniors attach much less importance to unit training than they do. A number of senior officers, to whom this point has been briefed, have countered with the assertion that such responses were to be expected from a training survey; had it been a survey on administration, they believe, the results would be quite different. However, the Board and HumRRO found no reason to discount the responses. All the various inputs to the Board lead its members to credit the existence of a "communication gap" along the chain of command on the subject of training. The survey responses codify what the Board observed in a variety of ways.
Interestingly, no comparable "communication gap" is evident in the analysis of Reserve Component returns.

<table>
<thead>
<tr>
<th>RESERVE COMPONENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average Response</td>
</tr>
<tr>
<td>Activities in Rank Order</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Importance to Seniors</th>
<th>Importance to Self</th>
<th>Time Required of Self</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operational Missions</td>
<td>3-4</td>
<td>2-3</td>
<td>2-3</td>
</tr>
<tr>
<td>Small Unit Training</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Vehicular Maintenance</td>
<td>2</td>
<td>2-3</td>
<td>4</td>
</tr>
<tr>
<td>Race Relations</td>
<td>7</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Drug Control</td>
<td>8</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>Administration</td>
<td>3-4</td>
<td>4</td>
<td>2-3</td>
</tr>
<tr>
<td>Command Inspections</td>
<td>5</td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td>Community Relations</td>
<td>6</td>
<td>5</td>
<td>6</td>
</tr>
</tbody>
</table>

7. Adventure Training

Inability to communicate effectively on the subject of training along the chain of command is likewise evident from responses to three questions on "Adventure Training." Before the formation of the Board, and coincident with promotion of the policy of decentralization, Department of the Army had given publicity to a fun-and-challenge type of unit training of that title. It was heralded as integral to the Army's Master Program for MVA. Respondents to the Board survey were asked whether they were familiar with this type of training. In the Active Army, there were sharp geographic differences: while a high of 82% of European respondents were familiar with Adventure Training, a low of only 61% of CONUS respondents were aware of it. While there was general agreement that all types of units could conduct Adventure Training, Infantry respondents led all others in
indicating that their units were both interested and capable of undertaking such training. There was significantly less awareness and interest in the Reserve Components than in the Active Army. The most important comparisons among respondents, however, are those related to rank:

PERCENT AFFIRMATIVE RESPONSE

<table>
<thead>
<tr>
<th></th>
<th>05#</th>
<th>05*-04</th>
<th>01-03</th>
<th>E9-E7</th>
</tr>
</thead>
<tbody>
<tr>
<td>AA</td>
<td>89</td>
<td>75</td>
<td>68</td>
<td>59</td>
</tr>
<tr>
<td>RC</td>
<td>31</td>
<td>32</td>
<td>29</td>
<td>20</td>
</tr>
</tbody>
</table>

Some units in the Army conduct small unit training that is called "adventure training." Are you familiar with this type of training . . . ?

Recently a Special Forces team reenacted the Lewis and Clark Expedition by marching and boating across the western portion of the United States. Do you think your unit would be interested in this type of training project . . . ?

KEY

AA: Active Army
RC: Reserve Components
05#: LTC, Battalion Commander of more than three years service in grade
05#: LTC with neither battalion command nor three years service in grade

The table illustrates that there is not much enthusiasm on the part of NCOs of any component for Adventure Training. It also portrays:

-- Greater initial awareness and less interest overall among senior officers.
-- Less initial awareness, but high interest among company grade officers. 24
HumRRO considers this "a clear indication of a lack of knowledge at the most
senior levels of some of the kinds of interests that exist at the lower levels." The Board simply notes that, on this one example of training for combat arms
units which the Army had consciously promoted through command information
channels, a significant communication problem remains.

8. An Army Dissatisfied With Its Training

The Board adduces all the foregoing evidence from its survey to demonstrate that throughout combat arms units there is dissatisfaction with training:

-- Training is only seldom "dynamic."
-- Training is regarded as only marginally adequate. Held
  in lowest regard in the Active Army are armor unit
  training generally, and individual training in units of all
  arms.
-- There is more company officer interest in "Adventure
  Training" than more senior officers seem to realize.
-- The policy of decentralization is widely accepted as a
  needed change, although it is expected to work only after
  the "system" adjusts--a period of months.
-- Commanders, especially company commanders, feel they
  could make training more dynamic if they could devote
  more personal attention to planning and conducting training.
  They are kept from doing so by "other responsibilities."
-- Respondents at all levels of the Active Army attach more
   importance to training than they believe their seniors do.

In brief, there is, throughout the Army, both acceptance of the fact that
training is a problem and a thirst for solutions.
C. THE NATURE OF THE PROBLEM

1. The Survey Hypotheses

The survey was designed to shed light on whether the Army's training suffered from low-level inexperience, "the Vietnam stratum," (Hypothesis 1), or high-level "mismanagement" (Hypothesis 2).

Concerning the former, the Board knew that, in Washington and elsewhere, senior officers of the Army tend to attribute the lack of dynamic unit training to the inexperience of the young officers principally responsible for conducting training, the majority of whom were commissioned during the Vietnam war, and whose total service has been conditioned by its exigencies. It is probably true that most of the Army's trainers have never before served in a tactical unit whose primary mission is unit training. They are, no doubt, inexperienced with garrison life, peacetime administration, and the techniques of staging exciting and meaningful training in a garrison atmosphere. Hence, although individually trained and experienced in combat in Southeast Asia, they may know little about preparing troops for battle in other than a low intensity conflict.

Beyond inexperience, there was some opinion that the problem runs deeper, at least in part, to societal deficiencies: the Army's trainers of today are a product of more permissive, more sedentary upbringing than those of earlier years. Hence, they may have difficulty staging training which demands a high order of ingenuity and resourcefulness. The Board gave some consideration to probing this thesis in a systematic way, but the idea was discarded in the interests of time and simplicity of analysis. (HumRRO considers, nonetheless, that some inferences on this issue may be drawn from its survey.)

Hypothesis 2 argues, contrary to both the foregoing, that the Army has marginally adequate training not because of inadequate trainers but because of systemic difficulty in assigning and articulating training objectives for its trainers and providing them requisite resources.
Obviously, to the degree Hypothesis 1 is true, the Army confronts a massive educational program: it must train its trainers how to train. To the degree Hypothesis 2 is true, the Army's chain of command and its high level staffs must be reoriented. For if training of units of the combat arms is to become, in fact, the primary undertaking of the Army, then bold and innovative -- some might say dynamic -- changes are in order.

2. Obstacles to Dynamic Training

The Board's survey respondents were not asked to vote on whether the one hypothesis or the other were true. Indeed, the hypotheses were never identified or mentioned. Instead, the respondent was asked to evaluate a number of "obstacles to dynamic training," or to rank-order a number of "problem areas," among which were items corresponding to one hypothesis or another.

The survey showed wide agreement among Active Army respondents that the foremost reason why tactical units do not have dynamic training relates to Hypothesis 2 as opposed to Hypothesis 1. Respondents were provided the following list, randomly arranged, of eleven plausible reasons why there is not more dynamic training:

**OBSTACLES TO MORE DYNAMIC TRAINING**

(Hypothesis 1)

A. Lack of interest in change by immediate seniors
B. Lack of interest in change by subordinates
C. Lack of imagination among junior personnel
D. Inadequate motivation among junior personnel
E. Inadequate qualification of junior personnel
F. Lack of knowledge about what changes to make

(Hypothesis 2)

V. Insufficient priority set by higher headquarters
W. Inability to change because of the rigidly prescribed Army training system
X. Personnel turbulence
Y. Lack of adequate budget
Z. Inadequate manning levels
Respondents were then asked to analyze this list in two fashions. First, they were asked to assign a value to each item on the list corresponding to a more serious scale of seriousness: Results are shown below.

**TO WHAT EXTENT IS THE ABOVE (list) A REASON WHY THERE IS NOT MORE DYNAMIC training FOR SMALL UNITS?**

<table>
<thead>
<tr>
<th>Response</th>
<th>RANK</th>
<th>BRANCH</th>
<th>LOCATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scale</td>
<td>05*</td>
<td>05*-04</td>
<td>03-01</td>
</tr>
<tr>
<td>A Major Cause</td>
<td>4.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A Serious Cause</td>
<td>3.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A Minor Cause</td>
<td>2.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not a Factor</td>
<td>1.0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*A LTC, Bn Cmdr of more than three years service in grade
#LTC, less than three years service in grade.*
TO WHAT EXTENT IS THE ABOVE (list) A REASON WHY THERE IS NOT MORE DYNAMIC TRAINING FOR SMALL UNITS?

RESERVE COMPONENTS

<table>
<thead>
<tr>
<th>Response</th>
<th>Scale</th>
<th>RANK</th>
<th>BRANCH</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>05</td>
<td>04</td>
</tr>
<tr>
<td>A Major</td>
<td>Cause 4.0</td>
<td>9</td>
<td>8</td>
</tr>
<tr>
<td>A Serious</td>
<td>Cause 3.0</td>
<td>W</td>
<td>Y</td>
</tr>
<tr>
<td></td>
<td></td>
<td>9</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td></td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1</td>
<td>VA</td>
</tr>
<tr>
<td>A Minor</td>
<td>Cause 2.0</td>
<td>A</td>
<td>B</td>
</tr>
<tr>
<td>B</td>
<td></td>
<td>9</td>
<td>B</td>
</tr>
<tr>
<td></td>
<td></td>
<td>8</td>
<td>Z</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

Not a Factor
As can be seen, there were variations among the groups concerning scalar value - e.g., senior officers tended to feel more strongly about their choices in both directions than junior officers or NCOs. But among the top four items on every group's list were X, Y, Z and V:

X - Personnel turbulence
Y - Lack of adequate budget
Z - Inadequate manning levels
V - Insufficient priority set by higher headquarters

In fact, the only aberration among any group's rating of the more difficult obstacles to dynamic training was the seriousness assigned by the E9-E7 group to E - "Inadequate qualification of junior personnel." All other groups analyzed, positioned the "qualification of junior personnel" around the middle of their scale -- a problem, but not among the really difficult obstacles.

Probing by the Board into the significance of the E9-E7 rating disclosed a widespread conviction among senior NCOs that their juniors, NCOs of grade E5 and E6, were professionally incompetent. (As will be shown below, the qualification of junior NCOs emerges as an important issue in other contexts.)

Instructive also were those items considered least serious, among the bottom three items on every group's list were A, B, and F:

A - Lack of interest in change by immediate seniors
B - Lack of interest in change by subordinates
F - Lack of knowledge about what changes to make

Item C - "Lack of imagination among junior personnel" - appeared among the bottom four in all samples except 05* and E9-E7, who rated it of middling seriousness. "Imagination" is cited as the least serious problem by company officers.

Item D - "Inadequate motivation among junior personnel" - appears among the bottom four in all samples except the E9-E7 group, who again apparently were aiming criticism at their E5-E6 subordinates. "Motivation" appears as the second least serious problem as rated by company officers.
Confirmation of this analysis is provided by a separate inquiry in which the respondents were furnished the same list but asked to single out the one most serious. The respondents were then asked: "WHICH OF THE FOLLOWING (see list above) IS THE SINGLE MOST SERIOUS REASON WHY THERE IS NOT MORE DYNAMIC TRAINING FOR ARMY SMALL UNITS?"

Active Army respondents had little difficulty in establishing a consensus: in almost all cases, within each area, rank or branch, the frequency of the item most often chosen for the most serious reason, together with the second and third most frequently mentioned, more than doubled the frequency with which choices were made of the other eight. Only four reasons appear among the three most frequently chosen by each sample analyzed; all four chosen correspond to Hypothesis 2. Area/Grade/Branch breakout is shown below.

"MOST SERIOUS REASON"
FIRST, SECOND, AND THIRD CHOICES
ACTIVE ARMY

<table>
<thead>
<tr>
<th></th>
<th>CONUS</th>
<th>EUROPE</th>
<th>OTHER</th>
<th>05*-04</th>
<th>01-03</th>
<th>E9-E7</th>
<th>IN</th>
<th>AR</th>
<th>ADA</th>
<th>FA</th>
</tr>
</thead>
<tbody>
<tr>
<td>X. Personnel turbulence</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Z. Inadequate manning levels</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>V. Insufficient priority set by higher headquarters</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>W. Inability to change because of rigidly prescribed Army training system</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Y. Inadequate budget</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In contrast a similar matrix for the Reserve Components, shown below, points toward preoccupation with rigidity in the Army training system and concern with motivation:

ESIS 1

...
"MOST SERIOUS REASON"
FIRST, SECOND, AND THIRD CHOICES
RESERVE COMPONENTS

W. Inability to change because of rigidly prescribed Army training system 1 1 1 1 1 1 1 1
Y. Inadequate budget 3 2 2 2 2 2 3 3
D. Inadequate motivation 2 3 3 3 3 3 2
X. Personnel turbulence 2
V. Insufficient priority set by higher headquarters 3

Among Reserve Component responses evaluating the entire list of eleven obstacles, (pages 29-30), two -- "W. Inability to change because of the rigidly prescribed Army training system," and D. Inadequate motivation among junior personnel" -- figured among the top three on every group's list (except ADA). Common to the top four (except ADA) were three "Hypothesis 1" items, and three "hypothesis 2" items, -- a mixed picture. The bottom three cited by all groups included:

A. Lack of interest in change by immediate seniors.
B. Lack of interest in change by subordinates
Z. Inadequate manning levels.
The contrast between the Active and Reserve perspectives can be highlighted by noting that most Reservists include in their top four items the following "obstacles" which do not appear in any comparable Active list (except NCOs):

W. Inability to change because of the rigidly prescribed Army training system.
C. Lack of imagination among junior personnel.
D. Inadequate motivation among junior personnel.
E. Inadequate qualification of junior personnel.
F. Lack of knowledge about what changes to make.

Therefore, Hypothesis 1 appears to apply to the Reserve Components far more widely than to the Active Army.

Overall, the analysis of "obstacles" shows that, in the eyes of the respondents to the survey:

--- The Active Army's training is mismanaged.
--- The Reserve Components are plagued with problems of motivation, education, discipline.
--- Conservatism among the trainers, seniors or juniors, is not a problem, although the "Army training system" is broadly perceived as inflexible, constricting, and a major obstacle to dynamic training.
--- The qualification of junior NCOs is considered a serious problem throughout the Army.
3. Problems in Unit Training

Evidence reinforcing the foregoing was obtained from a different section of the questionnaire in which respondents were required to evaluate thirteen frequently complained-about problems in unit training. For reporting purposes, they are grouped by "Vietnam Stratum" and "mismanagement" as follows:

<table>
<thead>
<tr>
<th>Vietnam Stratum (Hypothesis 1)</th>
<th>Mismanagement (Hypothesis 2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of motivated junior officers willing to adequately perform their duties.</td>
<td>Complete turnover of personnel every 7 or 8 months and the impact on training.</td>
</tr>
<tr>
<td>Learning how to adjust to a permissive society of free-thinking young lieutenants.</td>
<td>The training load made difficult by changing priorities of higher headquarters.</td>
</tr>
<tr>
<td>The officers and NCOs are called to perform duties well beyond the normal experience level -- for example -- line companies commanded by lieutenants with less than 2 years service.</td>
<td>Training Time. Too many nontactical requirements imposed on the unit.</td>
</tr>
<tr>
<td>Shortage of qualified NCOs. Have excess E-5 personnel but only a few are E-6 and above. E-5 and E-6 types have knowledge and experience that E-3 or E-4's had a few years ago.</td>
<td>Insuring day-to-day training as conducted.</td>
</tr>
<tr>
<td>Discipline. The need for stronger discipline in the new changing Army.</td>
<td>Lack of experienced administrative personnel in the hard skill areas capable of keeping abreast of the daily administrative requirements.</td>
</tr>
<tr>
<td>&quot;Short-timer&quot; attitude of Vietnam returnees.</td>
<td>Taking a trained rifleman (MOS11B) just out of Vietnam: with an average of 6 months retainability, and retraining him in a different MOS so that he can go through required unit qualification programs.</td>
</tr>
<tr>
<td>A morale problem caused by the fact that our draftee soldiers are serving in an unpopular war and that they are well aware of it.</td>
<td></td>
</tr>
</tbody>
</table>
### ACTIVE ARMY RESULTS

<table>
<thead>
<tr>
<th>Location</th>
<th>Rank</th>
<th>Branch</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONUS EUR OTHER</td>
<td>05# 05#-04 03-01 E9-E7</td>
<td>AR ADA FA</td>
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<tr>
<th>Action of the</th>
<th>Response Scale</th>
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<th>Major 3.0</th>
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<td>K O</td>
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<td>2.8</td>
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<td>1.0</td>
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*Note: The table provides a ranking system for different actions and their impact, with grades ranging from 1.0 to 4.0.*
The top three ratings of problems assigned by every Active Army group included these as depicted in the following results table.

J. Shortage of qualified NCOs. Have excess E-5 personnel but only a few are E-6 and above. E-5 and E-6 types have knowledge and experience that E-3s and E-4s had a few years ago.

O. Complete turnover of personnel every 7 or 8 months and the impact on training.

Q. Training time. Too many nontactical requirements imposed on unit.

One other item was also prominent: "K. Discipline. The need for stronger discipline in the new changing Army." "K" was listed first by NCOs, and among the top three problems by "Europe," "Other," "Infantry," "Armor," and "ADA" respondents.

The bottom three Active Army ratings were assigned by every group to:

G. Lack of motivated junior officers willing to adequately perform their duties.

H. Learning how to adjust to a permissive society of free-thinking young lieutenants.

I. The officers and NCOs are called to perform duties well beyond the normal experience level -- for example -- line companies commanded by lieutenants with less than 2 years service.

The Reserve Component differed in placing "G" significantly higher on the scale; Reserve NCOs, for example, cited it as the second most serious problem in training. The lowest rated problems for the Reservists were, expectedly, those pertaining to the Vietnam returnees -- "T" and "L" -- Disregarding these, the three lowest rated were "H" and "I", plus:

S. Lack of experienced administrative personnel in the hard skill areas capable of keeping abreast of the daily administrative requirements.

The problems rated among the top three in seriousness by Reserve Components included "J" (NCOs) and "K" (Discipline): in these the Reservists
shared opinion with the Active Army. But the Reservists saw "O" (Personnel turbulence) as a relatively less serious problem. The Reservists assigned significantly higher seriousness than the Active Army respondents to "M." A morale problem caused by the fact that our draftee soldiers are serving in an unpopular war and they are well aware of it, and to "P." The training load made difficult by changing priorities of higher headquarters.

A detailed breakout of problem areas by rank and branch for the reserve components is shown below.

**THE FOLLOWING STATEMENTS DESCRIBE VARIOUS PROBLEM AREAS...**

<table>
<thead>
<tr>
<th>Response Scale</th>
<th>Location</th>
<th>Rank</th>
<th>Branch</th>
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<tbody>
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<td>Grave</td>
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<td>AR</td>
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<td>05#-04</td>
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<td>E9-E7</td>
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<td>03-01</td>
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<td></td>
<td></td>
<td>E9-E7</td>
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</tbody>
</table>

Note: The table values are not clearly visible due to the resolution of the image.
4. Factors Reducing Innovation

The Board's Training Management Survey provides other clues into the nature and extent of training problems as they are seen by those doing the training job. For example, the Board was interested in determining whether there was any wide sentiment that innovation per se was regarded as risky or impossible. Accordingly, survey respondents were asked to rate "factors reducing innovation."

**Scale Value**

<table>
<thead>
<tr>
<th>A Major Limitation</th>
<th>A Serious Limitation</th>
<th>A Minor Limitation</th>
<th>Not A Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.0</td>
<td>3.0</td>
<td>2.0</td>
<td>1.0</td>
</tr>
</tbody>
</table>

**TO WHAT EXTENT DOES EACH OF THE FOLLOWING REDUCE INNOVATION IN ARMY SMALL-UNIT TRAINING?**

A. Inspectors from high levels of command will note deviation from their training guidance and react negatively...

B. So much subject matter must be presented in a limited amount of time that it is not possible to accomplish anything different from that which is prescribed...

C. Many NCO's and Junior Officers who present training are unused to thinking for themselves and thus they do not develop any innovative techniques on their own...

D. Many trainers and commanders are unaware that they are authorized to take new approaches and use "way-out" techniques in training.

What the Board considered most interesting about the above responses is the uniformly low position accorded to "D", the proposition that trainers and commanders were simply unaware that innovation is authorized. Company grade officers feel strongly that inspectors from higher headquarters are the most serious inhibition on training innovation; in this other respondents agree. But they disagree with when the latter evaluate "C", inability of trainers to think for themselves, as the least important factor.
5. Summary of Problems

For the purpose of this report, the foregoing exposition of the Board survey will suffice. What the survey responses seem to add up to is a very healthy conviction that, given proper support and management, those now charged with the Army's training job can do it, and do it well. At battalion level and below in the Active Army, there is substantial confidence in the motivation and the capabilities of trainers. However, that same degree of confidence does not exist in the Reserve Components. As the Army's trainers see it:

OBSTACLES TO DYNAMIC TRAINING

<table>
<thead>
<tr>
<th>Active Army</th>
<th>Reserve Components</th>
</tr>
</thead>
<tbody>
<tr>
<td>* Personnel Turbulence</td>
<td>* Training System Rigidity</td>
</tr>
<tr>
<td>* Inadequate Manning</td>
<td>* Motivation and Discipline</td>
</tr>
<tr>
<td>* Insufficient Money</td>
<td>* Insufficient Money</td>
</tr>
<tr>
<td>* Lack of Junior NCO Professionalism</td>
<td>* Lack of Junior NCO Professionalism</td>
</tr>
</tbody>
</table>

* LTC, Bn Cmdr of more than three years service in grade  
# LTC, less than three years service in grade
The Board regards the state of Active Army opinion on training as wholly compatible with the policy of decentralization. There is no general support for the notion that junior leaders and commanders are basically lacking in ability, although there is feeling at the lower levels that training in how to train, the techniques of training, might be improved—an encouraging receptivity to improvements. The Reserve Component situation seems to be less favorable for management through decentralization.

However, across the ranks in the Reserve Components communication on training seems to be better than in the Active Army: Active Army seniors and juniors do not see eye to eye on key aspects of training especially on its importance relative other requirements.

Throughout the Army there were substantial indications of over-commitment and under-resourcing to the detriment of training. Company commanders in particular seem to be over-committed. Traditional supports for small unit training—training literature, facilities, devices—were characterized as less than fully satisfactory. No one geographic area seems to differ markedly from any other, although understandably CONUS units tend to be more afflicted with personnel turbulence and Vietnam generated morale problems, and these are the more urgent in their requests for relief. Among the branches, Armor seems to have the lowest opinion of its training, and expresses the greatest interest in innovative support.
D. SUPPORT OF COMBAT ARMS TRAINING.

1. Company Commander: THE BUCK STOPS HERE

The results of the survey suggest a number of ways to ameliorate training -- for instance, action on junior NCO professionalism. But the Board found that the Army's training problem is more complex and broader than the survey indicates. As Board members debated how to provide better support for the Army's trainers, they found it useful to argue in terms of the company commander's training job. There can be little doubt that his is the crucial position in the Army's training system. At the company commander, the training "buck" stops. Put in an institutional way, the company commander is the managerial focal point for several multi-million dollar training/educational programs. In his person, and in no other one man, they come together, and their ultimate productiveness depends on his linking program and soldier. It is he who must interweave the product of the institutional individual training system (training centers, service schools) with the soldier's individual and team training at the unit: unit schools, unit on-the-job training, on-and-off duty GED, and all the other formal and informal learning experiences to which he is exposed within the unit. The commander is responsible for all his unit does or fails to do, and his role in preparing each soldier in his unit for accomplishing the tactical mission through teamwork is paramount. But beyond that, it is to the company commander to whom the Enlisted Evaluation Center (EEC) writes to report the results of MOS Proficiency Tests on each unit's NCOs; it is to him that the Army looks for remedial action when the EEC "report card" shows poor performance. The Army holds the company commander responsible for and expects him to manage each soldier's MOS development, as well as his General Educational Development. As the Modern Volunteer Army drives toward higher standards for reenlistment, with higher premiums on training and educational achievement; and as the MVA drives toward higher unit reenlistment rates; the company commander, keenly and personally, feels countervailing pressures.
2. Visualizing the Training Job.

Accordingly, the Board attempted to depict graphically the company commander's view on training. The following diagrams proved useful:
RESERVE COMPONENTS
CO'S JOB - SMALL UNIT TRAINING

UNIT

ARMY TRAINING TEST
COMMUNITY RELATIONS
ADVENTURE

BASIC UNIT TRAINING
ADVANCED UNIT TRAINING
CPX'S/FTX'S

INDIVIDUAL

• RECRUITING
• COMMUNITY RELATIONS
• RIGHTS AND RESPONSIBILITIES
• MOS PROFICIENCY - OFFICER, NCO
• WEAPONS PROFICIENCY
• QIT
• PT
• ADVENTURE

MISSION

• CONTINGENCY
• CIVIL DISTURBANCE
• M-DAY
• ENVIRONMENTAL
• THREAT
The Active Army company commander, beset with acute problems of personnel turbulence and under-trained cadre, sees the area labeled "Individual Training" as the focal point of most of his training problems. Therein lie the kinds of training he finds toughest to plan, to manage, or to influence personally. This is the training he finds most difficult to make "dynamic."

There too, is a major source of the communication difficulty between the company commander and senior officers on the subject of training: when colonels and generals talk training, they usually refer to unit or mission training, whereas captains talk individual training. Hence, there is a widespread conviction among company commanders that senior officers have little appreciation of the magnitude and complexity of the individual training task they confront daily.

The Reserve Component company commander, conversely, sees most of his difficulties in terms of unit training. Relative to the Active Army his company cadre is stable. The RC company commander views motivation as the major pay-off from dynamic training, and believes that sound and exciting unit training provides the best possible inducement to individual and collective effort, as well as the surest guarantee of effective recruiting and retention. He prizes "unit image" in his community, which often reduces to the word-of-mouth reputation his unit acquires from soldier descriptions of what the unit does at drill sessions. If his unit is one of those which seek relief from Armory boredom by running its hackneyed training films backward, he knows he faces deep difficulty in selling his outfit outside the Armory, particularly in view of the decreasing draft pressure which in the past had personnel waiting to join reserve component units.
3. Training Support.

The Board also found it helpful to remind its members of the main elements of the Army's present system for supporting the company commander, and the apparent attitude of commanders toward each. The following table highlights the mechanisms presently available for providing support to unit training.

THE ARMY SYSTEM OF TRAINING SUPPORT
As Viewed from the Field

<table>
<thead>
<tr>
<th>Source of Support for Unit Training</th>
<th>Should Provide</th>
<th>Actually Provides</th>
</tr>
</thead>
<tbody>
<tr>
<td>Army Training Literature</td>
<td>- Planning guidance</td>
<td>- Irrelevant guidance</td>
</tr>
<tr>
<td>- Field Manuals</td>
<td>- Doctrine (what to teach)</td>
<td>- Out-of-date, incomplete doctrine</td>
</tr>
<tr>
<td>- ATP, Subject Schedules</td>
<td>- Techniques of Tng (how to teach)</td>
<td>- Little or no technique</td>
</tr>
<tr>
<td>- DA Circulars, Pamphlets</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Service Schools</td>
<td>- Trained trainers</td>
<td>- Ill-prepared trainers</td>
</tr>
<tr>
<td>- Correspondence Courses</td>
<td>- Little or no technique</td>
<td></td>
</tr>
<tr>
<td>- Technique of Tng</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Training Aids Center Audio-Viz.</td>
<td>- Devices</td>
<td>- Outmoded in medium and message</td>
</tr>
<tr>
<td>Higher commander</td>
<td>- Audio-visual support</td>
<td></td>
</tr>
<tr>
<td>- Missions</td>
<td>- Distractions from tng</td>
<td></td>
</tr>
<tr>
<td>- Goals</td>
<td>- Constraints on tng</td>
<td></td>
</tr>
<tr>
<td>- Priorities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Resources</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Men, money, equipment, facilities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Ammo, ranges, etc.</td>
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</tr>
</tbody>
</table>

In order to address improvements of this system, the Board structured its deliberations and briefings around three topical areas calculated to embrace both problems and potential solutions:

- Training Techniques
- Training Devices
- Training Management
4. Training Techniques

The Board's review of training techniques, reported in part in Annexes F, G, and J, substantiates that units of the combat arms receive imperfect support from training technique sources. The U.S. Army seldom dictates a technique of unit training. Field manuals rarely address the question of "how to train" is a given doctrine; newer manuals in particular are vague. Such technique as exists is embodied in manuals directed almost exclusively to institutional training -- training in the genre of a service school of a Training Center, instead of being relevant to a tactical unit. For example, FM 21-6, TECHNIQUES OF MILITARY INSTRUCTION, clearly envisages, as the basic format for training in units to be a documented, formal class, with an exam-motivated, instructor-student relationship, as the extract on the next page illustrates. Few combat arms units find this "podium-pointer-poop" manual germane to their training, and properly so. Combat arms units should use training methods which match their mission life style. They operate under leaders, in teams, and so should they train. They move, shoot, and communicate to fight; which to be effective must be their training basis. Their training should be close enough to combat that battle comes as a relief; and battle when it comes should be familiar enough that training can continue. Every day of training should add up to progress in combat; every day in combat should add up to progress in training.

Similarly, Army Training Programs (ATP) and Subject Schedules (ASUBJSCHED), written for mobilization training, seem inapplicable to both the Active Army and Reserve Component units alike, and offer little guidance on training technique.

The Board, in trying to assess the reasons why Army training literature is not better with respect to guidance on training technique, identified four major deficiencies:
3. The Instructor's Role in Training

The combat success of the Army depends on the effectiveness of the instruction that individuals and units receive during training. The success of any plan for training will depend upon the soldier-instructors who present subjects to soldier-students. First-class instruction

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Figure 1. The training arch.
Each of these are discussed below.

a) Emphasis on Institutional Training

The "Vietnam Strait Jacket" binds the training establishment of the Army more surely through particularized training technique than through leader inexperience. For the better part of a decade, the Army base has functioned as a vast replacement training depot for U. S. Army Vietnam. Most training funds, command emphasis, and training research, has been directed toward greater institutional efficiency in producing highly trained individual replacements for units in Southeast Asia. As a result, innovations in training techniques have been largely focused on those applicable in the training centers and schools. The Army's institutional training has progressed well beyond "podium-pointer-poop" methods. For example, service schools now develop and use multi-media individual learning techniques employing programmed texts, and self-paced study. Self-paced instruction, interspersed with performance-based criterion testing, now permit individualized training and the use of peer-instructors in training centers. None of these techniques have been made available to units, although plainly they could assist the Active Army company commander in solving his greatest training problem -- individual training conducted in the unit. Perhaps more compellingly, the Army has already begun to conduct Advanced Individual Training, and even Basic Combat Training in tactical units, to encourage and to aid recruiting and retention. Yet the advanced institutional training techniques in question are nowhere described for tactical commanders in a field manual, and aside from a few general articles in service journals they are virtually unknown outside the schools or centers.
But the lack of communication to tactical units on individualized, self-paced instruction may be defensible in that these techniques might legitimately still be termed "experimental." No such label can be applied to U. S. Army marksmanship training. If there is one training subject which the Army traditionally emphasizes, and on which it expects high training proficiency in units, it is shooting. Yet here, too, "replacement training" tunnel-vision is the norm. A young officer setting out today to conduct a "dynamic" range session for his unit is confronted with a tough job which is analogous to a maze. The M-16 rifle is the subject of one manual (FM 23-9), while marksmanship is treated in another (FM 23-71). The latter is written around the M-14 rifle and the Trainfire Range. If he can count on a Trainfire Range, and his only objective is to fire his men through that individual training course, all well and good. But if he wants to conduct meaningful fire team shooting, he will find little in the manuals on appropriate training technique options. For the simple fact is that in recent years the Army concentrated on Trainfire to the exclusion of virtually all other approaches of weaponry employment. A Trainfire Range is a mass-production training facility -- a fixed learning experience (target array) through which the trainer processes large numbers of individual firers. But combat related training in a unit calls for almost the exact opposite: the commander has a fixed body of firers, for whom he should provide a large number of learning experiences (target arrays). Moreover, he must train not only individuals, but also teams. He needs an old-fashioned exposition on the technique of training in musketry. Even an old field manual with a description of the exercises with 1000 inch panoramic targets would be a step in the right direction.

There is also a fixation on individual preparation, a personal performance orientation, which is fostered by the service schools. Resident courses equip the student only to make use of, not to pass on through teaching, the instructional material. School curricula are crammed to the Nth hour with "must learn" subjects generated by the Vietnam experience; there are
precious few "must teach" hours available. The Nth hour itself has been geared mainly to overseas replacement requirements, not by consideration of what ought to be taught or the time needed to teach it. Assuredly the time has come to redirect the service school curricula; if training is to be the combat arms' number one mission. School courses must aim directly at equipping the graduate to conduct and to manage training, and should address often, and demonstrate frequently, training techniques transferable to actual unit training environments.

For example, "realism" was once accepted as a hallmark of sound training. School curricula, structured entirely around learning experiences conducted inside comfortable air-conditioned rooms, can not convey much of the realities of battle to the student. Colonel Robert Riggs employs the term "realism" to refer to techniques for recreating the sights, sounds, and smells of battle -- the ruins, the stomach-pounding explosions, the reek of decaying flesh. General James Gavin, when he uses the term, means techniques for simulating the physical and mental stresses of combat, especially those bearing on leaders. General Hamilton Howze uses the term, as does General Gavin, and regards fire and maneuver exercises as the best training vehicle in which the commander, in the interests of realism, stretches safety regulations to the maximum. The training techniques advocated by Riggs entail elaborately built and carefully maintained "battle courses"; while both Gavin and Howze favor unstructured exercises in which a series of tactical surprises or rapid changes in orders are experienced under physical conditions which test mental agility, tactical expertise, and physical stamina. Advance course students today, rarely observe or participate in either sort of training, and have little opportunity, therefore, to develop their own approaches to realism in training.

The foregoing observations apply as well to correspondence courses of the service schools. Nonresident instruction, no less than resident, should accept as an objective for every course the equipping of the student and training beyond the battlefield. Examinations and drills in which only manuals use an extreme scarcity of instruction, so that general training ties and beyond lack of manuals make training beyond the battlefield an extreme scarcer than ever. The future training should be as realistic as possible.
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student to perform as a trainer, by describing appropriate training techniques, and through exercises designed to build skill and confidence in managing training.

In the same vein, all field manuals designed for use in combat battalions should have a section devoted to training techniques. The Board examined, with admiration, several foreign manuals which were so structured. For instance, the latest German Army manual for the mechanized rifle squad is written around the curriculum to be followed by the squad in learning and relearning its equipment and duties to include descriptions and illustrations of drills, exercises, and other training techniques. Finally, training research and experimentation should focus on how to improve unit training -- by transfer of institutionally relevant techniques, or by inventing techniques specially designed for training in units.

b) Stress on the Ideal

Possibly as a corollary to the preoccupation with institutional training, Army training techniques have come to depend upon elaborate facilities and near-ideal personnel circumstances, which are more often than not beyond the reach of tactical units. To cite again the example of marksmanship, lack of a Trainfire Range is crippling for many trainers. Gone from Army manuals of the late Vietnam era are descriptions of substitute training techniques. The rifle manual once contained instructions on how to build and use an indoor-type, cellar or tunnel range; such potentially useful information is now absent. Information on small-bore substitutes for field firing is extremely difficult to locate. Yet the facts are that Trainfire Ranges are scarce and expensive to build and maintain. Only 19 of the 50 states have Trainfire Ranges, hardly enough for the Active Army and Reserve Components. As the Army budget drops it follows that new ranges will be a rare item indeed. In Europe, urban sprawl is cutting into range safety fans, and adequate facilities of just a few years ago are now partially or wholly closed. In addition,
time at USAREUR's major range training areas has become increasingly hard to schedule. Trainers, Army-wide, express need for training techniques which will compensate for the lack of ranges during most of the year, and which will maximize the training benefit from full-scale ranges when they are available.

Plush doctrine, no less than elaborate facilities, also makes training a rich-man's game, out of the unit league. Trainers in tactical units need simple doctrine, amenable to simple training techniques which are workable in view of the constraints imposed by personnel turbulence, chronic understrength, and poorly trained individuals. For example, the basic infantry field manual is written and illustrated for the optimum, full-strength squad; yet it is a rare commander in today's Army who can turn out a full-strength squad for training. More importantly, the field manual was written and illustrated for a full-strength squad composed of men with exceptional memories and a positive genius for spatial relationships; only such a squad could master the intricacies of the battle drill depicted in the field manual.

How to train in battle drill is not discussed. The emphasis is not on the "drill"; the squad leader is, evidently, expected to improvise appropriate training techniques. Even at the level of the squad, the basic tactical building block, the Army needs to rethink both what is to be taught (doctrine) and how to teach it (training technique), tailoring both to the austere, real-world, personnel situation found in infantry units.

But trainers must be alert to invent, to find, and to use relevant training techniques. Time and again the Board encountered trainers who believed that the only acceptable techniques for unit training involved the use of all TOE personnel and equipment, together with full facilities for moving, shooting, and communicating realistically. That techniques exist for training without support which can yield well-trained units is widely disbelieved throughout the Army. There is even less credence that such techniques could produce exciting, as well as meaningful, training. As always in its past, the Army needs questioning, innovative leadership to meet its training problems.
c) Forgotten Techniques

The Army let slip into the historical dust-bin much it once knew of training technique: it neglected to teach current trainers, and dropped training technique from its schools and manuals. As an illustrative example, techniques for teaching target designation, fire discipline, fire distribution, and fire control on a 25 meter (1000 inch) range, on a small bore range, or on a field range, once familiar, are now gone; these need to be revived. Service schools need to use, and thus promote among graduates, the use of unit-available basic training aids, like the sand table -- even though such primitive techniques may be ill-suited to large-group, assembly line, education. General Hamilton Howze aroused much interest in Board members when he described his requiring members of units of the 2d Armored Division to carry little, home-made, wood-block models of armored vehicles, so that leaders could illustrate orders and critiques, or stage impromptu instruction in formations, battle drill, and tactics at a moments notice, anywhere.

Perhaps the most crippling loss over the years has been the disappearance of the "tactical walk" or ride, the jeep-exercise, or whatever it might have been called, in which more experienced senior leaders led their juniors to the field for discussions of terrain, weapons, and tactics. At the Infantry School, once famous for its tactical walks under tutors like Omar Bradley, not so much as a vestige remains in instruction for students of the Advanced Course. In other armies, notably the British and Canadian, the Tactical Exercise Without Troops (TEWT) remains a well-accepted, possibly indispensable, training technique. The tactical walk or TEWT seems especially appropriate today for unit cadre training, for unit training under resource constraints, and for encouraging senior - junior exchanges on training -- all problems surfaced in the survey.

There have been other such losses from the schools, with the consequent eventual loss in units. Fighting in built-up areas has been dropped
over the years, although it once was well-recognized as a discipline requiring special training techniques and facilities. Urban sprawl is growing at 10-15 percent per year in Germany; therefore it is impossible to contemplate tactical deployments to Europe, and Germany in particular, without coping with built-up areas. Despite recent fighting in Saigon, Hue, and other cities of Vietnam; despite civil disturbance deployments in CONUS; and despite the examples of urban guerrilla warfare underway abroad; the practical art of fighting in built-up areas is not taught by Army service schools. The prime Army doctrinal principle remains "avoid towns." Fort Benning no longer has even a mock village or a set of buildings for use in such tactical training. The technique of training small units how to handle themselves inside and around a built-up area needs to be revived, improved, and re-disseminated throughout the Army.

A comparable problem existed with techniques for training in anti-armor warfare. Up until just before the Board was formed, the Infantry School had little practical work in how to attack tanks, except for instruction centered around some particular weapon. How to train battalion or company leaders in "putting it all together" against enemy armor, or in developing small-unit confidence in combating tanks, was left to an obsolete field manual and the ingenuity of the trainer. Recently, however, the Infantry School has been devoting significant effort to developing a comprehensive up-to-date doctrine and associated training technique in anti-armor warfare, which could be packaged for world-wide distribution.

d) Localism

In the broadest sense, the Army's troubles with training technique are difficulties of communication. For transmittal of ideas on how to train, the Army relies upon three media: the field manual, the training job, and the service school graduate. All are demonstratably deficient; all tend to be out-of-date. The Reserve Component trainer is particularly disadvantaged, because Army trainers are approxi-
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because he is more dependent on the system of training support than his Active Army counterpart. Inspectors of reserve training apparently demand that it approximate institutional training of the FM 21-6 mold. The reservist trainer, serving fewer service school graduates, more reliant on field manuals, required to produce written lesson plans and other institutional paraphenalia, and having to use out-of-date manuals and films; understandably condemns the whole system as stultifying and rigid. Many Reservists told the Board that they would like to draw more on the service schools for assistance, especially in obtaining prepared lessons on basic subjects; so that, as one Californian put it, they would not have to "re-invent the wheel, week-in and week-out." The Artillery School provides reservists, on demand and in a responsive reaction time, a number of lessons ready for presentation complete with Vu-graph transparencies; however, the other combat arms schools are not similarly helpful.

The addition to field manuals of a section on unit oriented, meaningful training techniques, suggested above, would eventually help. But the revision of field manuals is an involved and stately process which requires eighteen months in the normal course of events. Experts feel that some revisions could be expedited and gotten out in as little as ten months, but they point out that personnel and facilities preclude selecting more than a few revisions for such "expedited handling."

Occasionally trainers obtain training technique ideas from informal training literature. The Board published selected samples to illustrate what might be done in this respect: a pamphlet by General Hamilton Howze on the techniques he used in training tactical units, and a reprint of General Westmoreland's article on the training techniques he employed with the 101st Airborne Division in 1960. Trainers have found these pamphlets interesting and useful.

The Board observed that existing service journals provide no satisfactory source of information on training technique. Editors simply do
not receive or print much on the subject. Moreover, branch-oriented journals tend to reach restricted audiences, whereas some techniques are applicable across the combat arms. Perhaps most importantly, article format often restricts the amount of space and illustration which can be devoted to any one technique. Editors contacted by the Board seemed receptive to printing more of training technique, but were understandably leery about committing themselves beyond that statement. In any event, the journals do not appear to offer reliable and flexible means for conveying the best and most complete thought on training technique to tactical units.

Moreover, localism cuts two ways: a unit commander is deprived of information on good training techniques while schools and other units are often equally ignorant of brilliant training techniques the commander may be employing. The Board found numerous examples of techniques being employed in one unit which, properly described, attracted the interest of other like units training elsewhere. Members of the Board shared among themselves many such techniques, and hopefully their units are already profiting from this interaction.

Indeed, as the Board considered training technique, how to pass the word loomed as a more difficult problem than discovering sound technique. For instance, the Board readily agreed with one senior consultant's solution to battle drill for the rifle squad. But even with a description of a vastly improved drill in hand, getting that accepted as a training technique posed difficulty. FM 7-10, the field manual in question, is a CDC manual; changing it would take approximately 18 months. A training film might be made, but this too seemed to be a lengthy process. Mobile training teams might be formed to visit units, world-wide, but this seemed both inefficient and awkward for the commanders concerned. Moreover, any changes to so basic a topic required detailed coordination with NCO MOS proficiency tests to insure compatibility between training techniques and the test.
c) Summary

The foregoing led to some tentative conclusions regarding the status of training techniques in the U.S. Army:

** The Board detects, notwithstanding the confidence of the Army's trainers in their own ability to train, a need for a major effort to improve training techniques in the combat arms.

** That effort should begin with, and be centered on, the Infantry, Armor, Field Artillery, and Air Defense Schools. The focus should be directed toward the techniques for training in tactical units as opposed to institutional training, and toward the team training options instead of individual training.

** Training technique research should be initiated to transfer state-of-the-art institutional techniques for application to training in units, and to devise new techniques to meet special needs of unit trainers.

** Future revisions of all field manuals for use by the combat arms should include a section on appropriate techniques for training in units.

** Schools should develop, as a quick-tap service for tactical units, exportable "vault files," to include projection slides, of basic military subjects. School packages for unit use should exploit multi-media supported, self-paced, individualized instruction, and peer-instruction techniques.

** Schools should seek to revive, and, if appropriate, up-date old training techniques which meet the current needs of tactical units. Again, exportable descriptive packages should be assembled in "vault-file" or pamphlet form.

** Schools should seek to develop two-way communications with tactical units on training techniques, and to act as a clearing house for passing sound ideas on training techniques throughout the Army. Some form or forms of communication more responsive than the training film or field manual is
needed for school communication to the field, and for unit communication to
the school.

**FM 21-6, TECHNIQUES OF MILITARY INSTRUCTION,**
should be revised to incorporate models of unit training more conducive to
exciting and meaningful training, better adapted to the exigencies of unit life,
and more closely related to combat conditions.
5. Training Devices

The foregoing observations concerning training technique apply in spades to training devices--items of equipment used primarily in support of training. In fact, because training devices are "things," easier to talk about and more amenable to dollar-time management, discussions of the modernity of training often erroneously turn on devices rather than technique. Actually, of course, devices should be seen as subordinate to technique. The Board holds that any device should be regarded by the trainer as support within a training technique, a tool for multiplying his ability to teach knowledge or skill. Given money and time for development and production, the Army could relatively easily obtain new training devices. But new technique, for using those devices to full advantage, would be as essential.

a) Current Devices

Training devices in the Army today are, for the most part, those which supported the mobilization training of World War II and the Korean War. They are usually referred to as "training aids." For the purpose of discussion here, devices and aids will be divided into two broad categories: communicative devices and simulative devices. The former include chalkboards, graphic training aids (printed flip charts), "venetian blinds," movie projectors and screens, and the like--tools for conveying ideas. With the exception of overhead projectors, now generally available, this sort of training equipment in tactical units differs little from that of twenty or thirty years ago. There are still warehousing operations, usually called "Training Aid Centers," located around the Army from which units may obtain wooden models of the lensatic compass, or weapons. As may be imagined, "Center" stockage of obsolescent models and graphics tends to be a problem, as does availability and transport of current devices. "Audio-Visual Centers" function in a like manner.
Simulative devices attempt to subject the trainee to an experience, the mastering of which requires him to acquire skills and knowledge transferable to his job. The "night vision room," the 34-foot jump-tower, the pneumatic artillery simulator and the puff-board are all examples of simulative devices familiar to trainees of the past two generations.

As the Board assessed the situation, the current "Center"-provided training devices are not highly regarded as ways of promoting dynamic training. In fact, the Board's sensing was that these devices often figure in humdrum training, and that reliance on outmoded devices often causes it. There seems little doubt that the trainee of today is more audio-visually sophisticated than was his father. He has seen more movies of his father's era than his father saw, in addition to today's offerings; the average eighteen year old has viewed 20,000 hours of television. His pre-service education is likely to have included a varied fare of audio-visual support and free-form instruction. The authoritarian teacher, class supported by a blackboard and a ready ruler, is as passe as regimented students. Hence, unit trainers often encounter difficulty in getting and keeping trainee attention using devices and the teaching methods outlined in FM 21-6, TECHNIQUES OF INSTRUCTION. Moreover, the current device-system, based on "centers," is hardly compatible with decentralized training management.

The Board asserts that new devices, adaptable for unit (decentralized) issue, would be easy to produce. The fields of communication and simulation are both experiencing an explosion of technology. Civilian expertise is readily available and "state of the art," commercially available devices readily adaptable for military training. As an example of communications devices, small battery operated TV recorders and video cassettes are now available. Such gadgets seem to open a whole new range of training techniques based around instant playback which would permit the individual in training to see himself performing the given task, thereby more readily acquiring ability for self-critique and enhancing his motivation (as does a champion figure skater who uses TV recording as an integral part of his training).
In the field of simulation, pilots of the huge 747 jets "fly" 94% of their training on a simulator, which reproduces with impressive fidelity all the visual and aural stimuli the trainees would experience in flying a mission from start to finish.

The Board examined in detail several possible applications of both types of devices to military training. The results of its inquiry are cast below in a description of a potential family of devices for support of training in an imaginary cavalry troop. Each is a solution to a problem cited to the Board by cavalry commanders. The hypothetical troop is stationed where ranges and maneuver areas are severely restrictive and, because of the high cost of maneuver damage, parts, and gasoline, its tracked vehicles may not be used for training purposes. However, its training is dynamic, because its commander has the following available:

**Communicative Devices**
- Color-slide Photo System
- Audio Cassette Recorders
- Video Recorders
- Video Cassette Players

**Simulative Devices**
- PEMA Substitute Vehicles (PSV)
- Driving Simulators
- Laser Weapon Simulators
- Moving Target Screen
- Video Indirect Fire Simulator

Training within the troop can progress daily, both for individuals and crews (teams), in moving, shooting, and communicating.

**b) Cavalry Troop Training: Moving**

Cavalrymen must think thirty-miles an hour, two hundred miles a day. They must have a fine sense of distance and terrain, a keen eye, and well-developed skill with recognition at long range. Training preferably consists of exercises in which the troop is spread out on the ground operating on realistic frontage, in realistic depth. For each tracked vehicle in its Table of Organization, the troop has been issued a PSV—a small, six wheel, plastic body, commercial ATV (All Terrain Vehicle). Labeled PSV by the Army, (PEMA Substitute Vehicle) they were purchased to permit the troop's training of leaders to progress at much lower costs than would be
incurred operating its PEMA tanks and APCs. The troop can deploy each of its vehicle commanders in one of the PSV and operate just as it would in combat—including dispersed tactical formations cross-country. The PSV can go virtually anywhere a tracked vehicle can, but occasions no maneuver damage. The cost of an entire troop's worth of PSV is less than the cost of one APC; a whole troop worth of PSV's can operate all day for less than the cost of operating one APC. Most participants in PSV exercises (TEWT) have fun--dune-buggy, snowmobile--like excitement.

The tracked vehicle drivers are not altogether deprived of training by the PSV because the troop has access to driving simulators which can recreate, for each, all the experiences of being in the driver's compartment of a vehicle on the move across rough terrain. Actually, the trainee can learn more from an hour on the simulator than he can from several hours of actual driving because his instructor can create emergencies at will and constantly critique his performance in a way his vehicle commander would be unable to do. Moreover, the troop commander identifies weak and uncertain drivers before they are put in a position where they could burn out an engine or endanger a crew.

c) Cavalry Troop Training: Shooting

A cavalry troop has almost every kind of direct fire weapon in the Army's inventory and is expected to employ most of its indirect weapons. Therefore, issued for each direct fire weapon in the troop is a laser simulator. For example, each rifleman has a pen-light size, gallium-arsenide laser which can be attached to his weapon's barrel, powered by a battery pack within a magazine. These lasers permit eye-safe "shooting" adjacent to barracks or indoors and lend themselves to tactical exercises in which opposing forces can actually register "kills." Marksmanship and team shooting can, therefore, be practiced year round. Similar devices permit vehicle-versus-vehicle exercises, simulating tank guns or anti-tank missiles, with hit-kill indication.
Within doors, a Moving Target Screen is available. This device, used with the laser weapon simulators, presents firers with a projected picture of moving targets on a large screen. The screen itself is translucent, and behind it there is an array of detectors which is keyed so that as the target moves, only those detectors representing a correctly aimed shot are sensitized and responsive to laser stimulation. What the firers see is what they would see in combat, and the device lends itself to team shooting or musketry as readily as individual or weapon crew training. Light level can be controlled so that "night firing" exercises can be conducted (laser simulators need not fire visible light). As a matter of fact, the troop commander makes the device available in the evening as a recreational activity, and large quantities of beer have been wagered on contests between crews. Tank gunners readily learn burst-on-target adjustment with the Moving Target Screen and troop performance in the annual gunnery shoot is up significantly.

For training in Indirect Fire, the troop has a Video Simulator which can be linked with a mortar platoon or artillery battery to provide forward observers all the visual stimuli they required to "fire" the battery. At the guns, pneumatic devices permit simulation of the full fire and recoil sequence, and the FDC, survey section, and communicators can all participate just as they would in an actual fire mission. The troop thus "fires" from the motorpool into the dayroom, where the FOs observe the fall of the shot on a TV set.

Since both types of gunnery employ images, the troop trains on pictures of the sort of terrain its operational mission anticipates, and it shoots against targets representing the enemy it could expect to see there. The imagery has, then, a high value as intelligence training in recognition and reporting which is also essential.
d) Cavalry Troop Training: Communicating

The fact that troopers are seeing "enemy" while learning to move and shoot facilitates continuous, realistic communications training. Troop radio nets are open whenever training is in progress, and all trainees are required to report "engagements" and sightings as they occur, just as they would in combat. The PSV-based exercises, which spread radios over hill and dale, and move them constantly, teach troop leaders the capabilities and limitations of their FM sets, thereby honing their ability to render timely and concise reports. A tape recorder makes it possible for the troop commander to monitor closely the state of communications training, and gives him ready ammunition for "buck up" instruction.

Whenever there is training underway in which critique can play a useful part, a Video Recorder is used to catch the action. Rifle squads practice battle drill against the Video Recorder, which can present an "enemy" eyes view to the squad, so that the squad can see its dispersion and control. Mortarmen practice the gunner's test in front of the recorder, so that they can figure out where they are wasting time and motion. Using Video Recorder, TOW and Shillelagh, gunners "fire" at passing civilian traffic and view an instant playback of the whole tracking sequence. The Motor Sergeant records the pulling of a power pack because he knows he has three new mechanics coming in, and he wants them to be able to watch his trained mechanics do it right: his way. The Video Recorder is also used by the troop commander when he goes on reconnaissance so that later others can take advantage of his views of the terrain.

The troop makes extensive use of regular cameras. There is available a detachment which can provide quick service in developing and finishing color slides so that troop trainers can themselves make pictures to support training. Slide projectors and connected tape recorders permit their putting together slide-and-tape presentations. The same equipment allows the
use of service school produced video cassette slide-and-tape based instruction, with such adaptations to local terrain and SOP added as the troop commander desires.

e) The Question of Proponency

All the foregoing is hypothetical. Whether the imagined cavalry troop in question was stationed in Wasserpuhlmeinhausen, Germany, or Tub Rock, South Carolina, its training would be closer to its combat role, more exciting and meaningful with the devices than without. No doubt, the Reserve Components would gain more, relatively, from the devices. There is no technological reason why the training devices described could not be afield with combat arms units of the Army today. The main reason why they are not seems to be simply that no one has been charged with watching technology for possible applications to training in units. The service schools have been preoccupied with institutional training. The Army Materiel Command has been oriented on particular materiel programs or responsive to field-submitted Training Device Requirements approved after worldwide staffing (a one to two year process). Lacking a proponent knowledgeable of technology, training in units has not received the consideration it should have. Here too, seems to be a pressing case for prompt redirection of effort, so that future technology will be tapped for them in a timely fashion.

As an example of the latter, the Board cites holography, which seems to offer the prospect of a "twentieth century" sandtable way of representing terrain in three dimensions for the purpose of tactical training or simulation, without the sandtable's disadvantages of size, weight, maintenance and fidelity. Another example is Computer Assisted Instruction or Computer Managed Instruction. Service schools have found it difficult to establish cost-effectiveness of computer-based training, especially where high cost equipment and software must compete in analysis with ongoing manual methods. As far as unit training is concerned, however, cost-effectiveness analyses must relate unit training benefits mainly to software.
costs, because the computers will be in the units for other purposes: command and control (TOSS) or fire control (TACFIRE). Such large capacity, general purpose computers could be employed in a tutorial and managerial role for training; and training, a logical employment for the computers when not operationally active, would assist in optimizing their utilization. Possibly the greatest training benefit which could accrue from the use of computers would be a 20th Century kriegspiel: a realistic training or testing exercise for brigade or battalion commanders and staff which would enable them to interact with an "enemy" force and "maneuver" their own force and "employ their own firepower in real time."

f) Summary

**The present "Center" system of providing training devices is incongruous under a policy of decentralized training. Unit, "decentralized," issue of selected devices would be preferable.

**Current Army training devices lag available technology significantly, and fail to meet the needs of today's audio-visually sophisticated trainees.

**The state of the art can support immediate advances in devices for support of training in moving, shooting, and communicating.

**Unit training requires a more powerful advocate in Army research and development than it has evidently enjoyed in the past, so that future technology is brought to bear on training.

**Advanced training devices, incorporated into sound technique, could provide especially helpful support for Reserve Component training.
6. Training Management
   a) Decentralization

   The message from the Chief of Staff of the Army decentralizing
   management of training, dated 30 June 1971 (Annex A), reversed managerial
   policies which had been in effect at least since 9 March 1942, when the Army
   Ground Forces was established to serve as the Army's training command, responsible for managing the training of individuals and of units for overseas commands. The Army Ground Forces and its successors - Office, Chief of
   Army Field Forces (1948); Army Field Forces (1953); U. S. Continental Army
   Command (1955) created the system which enabled the United States Army
   to mobilize for World War II and the Korean War, and to accomplish its mission without mobilization in Vietnam. The success of American arms is one measure of the soundness of the training system. That system was plainly intended to be centralized: the following quotation is from paragraph 9, page 5, Field Manual 21-5, MILITARY TRAINING MANAGEMENT, entitled "Unit Training Responsibilities":

   ... A unit commander is responsible for training his unit to perform the mission for which it is organized, and other assigned missions. He plans, programs, directs, conducts, and supervises this training. Based on the directives and policies of higher headquarters, he specifies the training that is to be conducted and charges his subordinate commanders and staff with its accomplishment. ... As he is responsible for the performance of his unit, so is he also responsible to implement training in excess of required programs necessary to develop the unit to perform its mission.

   The net effect was that commanders at each level above company specified certain subjects as "mandatory," and stipulated the minimum number of hours of training to be conducted for each subject. In many units, "mandatory" training assigned above battalion came to exceed the number of hours available to the battalion for training, leaving the battalion commander very little flexibility indeed. Battalion and company faithfulness in fulfilling "mandatory" training requirements became a primary subject for inspection by higher headquarters, so that training schedules and training records assumed great
importance. In some instances, training became more documentation than teaching, more staff paper than soldier proficiency. Therefore, the Chief of Staff all but eliminated "mandatory" training requirements from above battalion, called for mission-type orders to battalion, and barred all inspections of training records.

General Westmoreland's message cites the wording of the officer's commission -- "special trust and confidence" -- in stating why commanders at battalion and lower level would be wholly entrusted with training management. But implied in decentralization are two other fundamental principles:

-- An Army should train as it will fight. On any future battlefield, as was the case in Vietnam, a high degree of dispersion and decentralization will characterize tactical command, and battalion and company commanders will manage their own battle. Hence, they should manage their training themselves, per a mission-type order.

-- The U.S. Army must be entirely honest with itself. Centralized training sometimes led to moral difficulty: falsification of records, or phony "training" to meet requirements, was repugnant to aware soldiers.

There are certain officers in Washington and elsewhere who believe that the CSA message freed unit commanders to do whatever they wished in training, and assuredly eliminated the "Training NCOs" who kept the records at company level. But the Board found that neither genre of change had occurred, and doubts that either should be expected. Whatever training and experience today's leaders have received in training management and technique took place under the old order. Virtually everyone's conception of "good training" is the "class" model of institutional training embedded in 21-6. Sound training management is still generally regarded to approximate the mobilization training model around which FM 21-5 is written. Records are still being kept by specially detailed NCOs at company level, although now the records are more likely to serve the company commander's legitimate need
needs, and no longer to present moral pitfalls. (They no longer annotate "mandatory" training taken, but rather the personal training status of each soldier -- records which most company commanders kept "informally" before 30 June.)

b) Contrary Managerial Trends

Training policy seems to be about the only area of unit activity in which decentralization is taking place. Logistics are increasingly computerized. The company pay table, which was once a fixture of Army life, has all but disappeared with JUMPS. Personnel policies -- promotion, retention, schooling, reassignment -- have steadily become more and more centralized. In the field of education and training for individuals, centralizing trends run contrary to the Chief of Staff's policy of decentralization of unit training. The present highly centralized management of NCO careers, based on commander's evaluation reports and the annual MOS proficiency test administered by the Enlisted Evaluation Center, is the most notable example. These tests count heavily in DA determination of whether the individual NCO is to be promoted, allowed to attend schools, receive proficiency pay, reenlist, or allowed to remain in service when reductions-in-force are underway. Yet the unit commander has no control over the content or timing of the test. Similarly, while the Board was in session, the press carried reports that DA was considering enlistment options which carried guarantees of on-duty time for civil schooling -- a measure which would cut into commander's control over his cadre. Other reports talked about raised GED standards for all grades, increasing pressures on commanders to make provisions for further education for their cadre. The Board points to these anomalies not to deplore them, but to underscore that they complicate the problem of training management for the unit commander, and that they necessitate more, rather than less, administrative work at company level.
c) Gap in Management Guidance: FM 21-5

The training managers of the Army have long been without a useful guide to training management. Even before the Chief of Staff's message, FM 21-5 furnished little assistance to trainers of either the Active Army or the Reserve Components. The former were, by and large, managing replacement training pools for Southeast Asia in which personnel turnover was the central problem. The latter were trying to piece together scraps of time from week to week, or month to month, into coherent preparation for the summer training test. Neither could match their circumstances with the tidy, progressively phased training process described in the manual. Like the manual, courses in training management at the service schools focus on time-subject management: the manager lists the subjects he wants to train in, assigns appropriate hours to each, and then schedules necessary unit-time. Managerial problems assigned students in the service schools invariably center on situations in which less time is available than desired, and call upon him to invent clever schedules to compensate. Neither the manual, nor training courses of the schools, address the issue of centralization versus decentralization as General Westmoreland did -- although that was a very live issue in USAREUR as long ago as 1960-1962 (cf., Lt. Gen. Garrison H. Davidson, "Decentralization -- A Key to Command Effectiveness," Army Information Digest, December 1961, reprinted as a Board pamphlet). ("Decentralization" as used in FM 21-5, pp. 24-25, refers to organization for training, e.g., whether to use battalion committees or not.)

d) Army Training Programs

The Army Training Program documents, written to guide training management for each type of TOE unit, seem vacuous to Active Army leaders and their Reserve Component counterparts alike. Each ATP provides "formal phases" of training for newly activated units receiving untrained fillers:
Basic Combat Training
Advanced Individual Training
Basic Unit Training
Advanced Unit Training
Field Exercise and Maneuver

A sixth category is recognized, Operational Readiness Training, "undertaken by units that have completed the formal phases of training and are responsible for maintaining the highest state of combat proficiency possible . . ." FM 21-5 states that:

Army training programs (ATP) are basically designed as a guide for the preparation of training programs and schedules during the various phases of Army training program training. They are used by both active Army units and reserve components. In addition, Army training programs assist commanders and staffs of units conducting operational readiness training in the planning for and preparation of their normal training activities throughout the training year.

The unhappy fact is that the Active Army training manager cannot locate his unit on the ATP schema. Conversely, the Reserve Component commander is forced to locate his unit at a specific point somewhere on the BCT-AIT-BUT-AUT continuum, and proceed, whether or not the program makes sense to him, in the light of what training he thinks the unit could or should be conducting. The one considers the ATP irrelevant, and the other regards it as the quintessence of the Army's rigid training system.

e) The Squeeze on Active Army Training

Training managers of the Active Army have to content with a large number of variable affecting the training of their units. So varied are the circumstances of each unit, each post, each theater, that the variety itself constitutes a strong argument for decentralized management of training. Certain generalizations hold true, however, throughout the world. The Board listed the following factors as those which universally act to depress the amount of training a unit can undertake, or make exciting and meaningful:
Time: The scarcest commodity, the managerial currency, is in greater demand year by year. Training time under VOLAR is less than formerly available.

Doctrine: What must be taught to soldiers and units has become increasingly complex over the years. Latest concepts -- e.g., the Arms Room Concept -- anticipate high levels of training for lowest ranking personnel.

MOS: The more MOSs per company, the more complicated the training task; MOS proliferation has been increasing over the past two decades.

Equipment Sophistication: The more complicated the equipment, the more difficult the training; front line units are now expected to handle complex electronic gear (sensors) routinely.

Equipment Density: The more different types of equipment, the more difficult the training job. Density has likewise been trending upward for years.

Maintenance: Time invested in maintenance is time which cannot be devoted to other unit undertakings. Equipment sophistication and density dictates a level of maintenance effort which the commander must sustain; in effect, those man-hours become sacrosanct. Training time can be attenuated without notice; maintenance shortfalls are usually evident on the materiel.

Personnel Turnover: In recent years, this factor has been steadily increasing, and presently dominates training in most units.

Manning Level: The Authorized Level of Organization fixed at DA bears directly on training; other considerations below DA often eventuate in lower manning than authorized. Training effectiveness is directly related to manning.

Headquarters Overstrength: The Board found no headquarters anywhere that was operating below strength. Commanders usually keep headquarters above authorized strength, usually to the disadvantage of subordinate unit manning.

Base Support: Reductions of troops for base support are invariably matched by an increased drain on tactical units to support the base in the fashion to which it has become accustomed.
**Diversionary Missions:** Tactical units cannot handle disparate missions well; when assigned non-training missions which receive command emphasis, training suffers. Varsity athletics, high pressure marksman-ship programs, VIP demonstrations, shows, and the like all take their toll of time and manpower from training.

A number of these factors will be discussed at length below, but it should first be noted that these generate communication problems at all levels. The very absence of attention to these in schools, or by the chain of command, contributes to the communications gap previously noted. For instance, the young training manager very quickly draws inferences about the importance his seniors place on unit training when he receives word from their over-strength headquarters that his sub-strength outfit is to defer its training program to host a major marksmanship competition.

**f) Time, Maintenance, Base Support**

One year ago, the Comptroller of the Army sponsored a time-utilization survey of CONUS units with combat readiness as a primary mission. The survey included an ARADCOM battalion, and some engineer and signal battalions, but the sample largely consisted of combat arms units: 72% of companies surveyed, 77% of battalions surveyed. Overall, the survey covered 20% of all active Army companies in CONUS, 46% of battalions, and 50% of brigades.

Based on figures and evaluations supplied by unit commanders, this COA survey established that there was a marked discrepancy between the unit plan and actual accomplishment in how time is spent. Commanders were asked to identify time they planned for their unit to spend on "primary tasks," as opposed to maintenance and administrative support. Plan compared with actual distribution of effort as follows:
### Commander's Usable Effort

<table>
<thead>
<tr>
<th></th>
<th>Primary Task</th>
<th>Admin. Support</th>
<th>Maintenance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Company, Plan</td>
<td>78</td>
<td>12</td>
<td>10</td>
</tr>
<tr>
<td>Company, Actual</td>
<td>36</td>
<td>47</td>
<td>17</td>
</tr>
<tr>
<td>Battalion, Plan</td>
<td>74</td>
<td>16</td>
<td>10</td>
</tr>
<tr>
<td>Battalion, Actual</td>
<td>30</td>
<td>53</td>
<td>17</td>
</tr>
<tr>
<td>Average, Co &amp; Bn, Actual</td>
<td>33</td>
<td>49</td>
<td>18</td>
</tr>
</tbody>
</table>

In short, if one equates "Primary Task" to training, and assumes the data holds for all combat arms (75% of the sample), one could generalize that trainers were spending less than half the time they planned for on training, and training received less than 1/3 of usable effort.

The picture is even more bleak when it accounts for the day-to-day effort expended on post and unit housekeeping details (base support); this effort was considered unavailable or not usable by the commander, and hence excluded from the above figures.

### Total Unit Effort

<table>
<thead>
<tr>
<th>Distribution</th>
<th>Primary Task</th>
<th>Admin. Support</th>
<th>Maintenance</th>
<th>Base Support</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planned</td>
<td>45</td>
<td>7</td>
<td>6</td>
<td>42</td>
</tr>
<tr>
<td>Actual</td>
<td>24</td>
<td>32</td>
<td>12</td>
<td>32</td>
</tr>
</tbody>
</table>

The Comptroller's study concluded that attempts by commanders to redress the disparity between effort allocated to primary and other activities, to manage unit resources better so that the actual expenditure of effort more closely matched what he wanted, made matters worse. To quote the script of a briefing of the Comptroller's study:
... Although effort devoted to maintenance of equipment certainly is related to readiness, it appears that much of the effort spent in this area is believed to be spent in preparation for inspections, probably confusing its relationship to primary mission accomplishment. The evidence supports a conclusion that unit members have lost the feeling that they are most involved in the primary mission they were trained to do, and their unit was organized to do; thus, a reduction in sense of worth, an increase of frustration, and an adverse impact on morale.

The Unit Commander, recognizing the dilemma of the imbalance in primary mission, attempts to reestablish balance. The area he can influence most is unit training that relates to primary mission. He attempts to find effort that is available for this training. Our review shows that about 40% of the usable, day to day, effort of the unit is spent on administrative and support functions. About 25% of the available effort goes to respond to inspections and reports. Although 33% of the effort spent on these controls does emphasize primary mission, he still looks to this area as fruitful for redistribution to training. He would like to accomplish their redistribution but he dares not, because about 1/2 of the inspections he undergoes are believed to be measures of his personal capabilities. Excellent performance in these is essential to his professional advancement. He is the victim of a paradox: (Maintain) Unit Readiness on the one hand, (on the other hand) make effort available to day-to-day activities and do well on the things most measured... the result "Crisis Management."

It is interesting to note that a study of combat readiness training in USAREUR ten years ago (reported in ARMY Magazine, January 1961) found that the average company in that environment could devote only 27% of its effort to training; this compares with the average 24% in the 1970 COA report.
g) Doctrine, Equipment, MOSs.

The Commanding General, Combat Developments Command, has called attention to long term trends in Tables of Organization and Equipment which establish that the company commander of today faces a significantly more difficult training task than his counterpart of twenty years ago. While division strength has remained relatively constant since World War II, the number of MOS codes (training fields) within the division has trebled, and the number of types of equipment has doubled. The following tables are illustrative:

**DIVISION STRENGTH FOR VARIOUS TOE'S**

*Source: CDC*
NUMBER OF MOS CODES
FOR VARIOUS TOE'S
SOURCE: CDC

TYPES OF EQUIPMENT
FOR VARIOUS TOE'S
SOURCE: CDC
While the Board was unable to obtain comparable data for type combat arms battalions, the inference is clear that the battalion picture would be similar. The Board observes that present trends in sensors and anti-armor weaponry all point toward new equipment and greater required skills at squad level.

h) Personnel Turnover.

The primary obstacle to dynamic training is personnel turnover -- so say most of the Active Army respondents to the Board survey. The latter years of the Vietnam War have occasioned severe turbulence in most units outside Southeast Asia. Nor did the withdrawal of units from combat there under "Vietnamization" bring relief. Congress fixed successively lower levels of authorized strength which, coupled with efforts to keep key units in Europe and elsewhere up to strength, caused the turnover to continue. The COA study referred to above noted average quarterly losses among CONUS units surveyed of 32%, 34% and 38% for three consecutive quarters. One CONUS division reported an average quarterly loss of 37% for Fiscal Year 1971. For the quarter ending September 1971, the same division reported losses of 38% of strength. The degree of turbulence, these figures show, amounts to over 100% turnover per annum and a monthly rate in excess of 12%. Combat readiness is surely attenuated. In June, 1968, the Office of the Assistant Chief of Staff for Force Development, Department of the Army, stated that:

"An overall turbulence factor of 8% per month is the maximum level of personnel turbulence that combat battalions of STRAF divisions can sustain and still remain in a combat deployable training status."

The training ramifications of this degree of turbulence can better be visualized in terms of the CONUS division mentioned which estimated over 50,000 job changes had taken place within its ranks during the year. The result of such a flux through unit jobs is a chaotic situation in individual training. The wide concern for that category of training in units, as expressed by respondents to the Board survey, indicates that, if the CONUS division
Board consultants were generally dismayed by the dimensions of the turnover problem, and chary of prescribing remedies for unit commanders. Most stressed that low proficiency at individual and team level compromised unit training at all levels, and agreed that whatever Department of the Army and other higher echelons could do to help, the unit commander had to concentrate on cyclic retraining of individuals. For example, General Paul D. Adams reiterated the timeliness of the following passage from his 1969 Training Notes:

...It is axiomatic that deterioration sets in when anything falls into disuse; and it is also axiomatic that a unit, a machine, or a team is only as good as its components. For a unit, this means that it is only as good as the individual skills of the personnel and teamwork among and between the crews, squads, sections, platoons, companies, etc., comprising the organization. The key to proficient crews, teams, and units lies in the quality of the individual and unit skills as possessed and practiced by the individuals, whether they are officers, noncommissioned officers, or other ranks; and the key to all successful training lies in raising the quality of individual skills.

Since all skills deteriorate when they are not refurbished or freshened up, and since lower skills must be raised to higher skills in order to give a unit strength in depth and to prepare individuals for advancement, fundamentals must be carefully retaught from time to time. This retraining is the only practicable method of attaining and maintaining a high state of training and operational readiness. ...

...Factors that cause deteriorations or loss of proficiency are:

1. Changes in personnel among officers and enlisted men where personnel with high skills are lost or depart and are replaced by personnel of lower skills.

2. Deteriorated skills that always result when extended periods of time elapse since individuals and small units were last trained in and demonstrated proficiency in fundamental military arts and techniques such as marksmanship, gunnery, communications, fire direction, maintenance,
discipline, technical handling of atomic weapons, first aid, marching and camping, field hygiene and sanitation, command, leadership, tactics, supply, and other subjects.

... In CHART 1 (below), the vertical bars represent the actual scores made in two successive Army Training Tests (ATT) by a battle group. If all individual and unit skills could be maintained throughout the year at the peak state of proficiency indicated by the AT scores, the readiness of the unit at anytime during the year would be reflected by the straight line joining the two ATT scores. However, it is impossible to maintain constantly this ideal high level of training and readiness due to losses of personnel; inadequacies in the training possessed by new arrivals; or the elapsed time since some skills were last demonstrated. Moreover, training requires time and all subjects cannot be brought back up to the desired standards simultaneously.

If no training or ineffective training takes place, deteriorations sets in rapidly. In this case, the high state of readiness attained in the first test diminishes rapidly as indicated schematically by the broken line on the chart. It is quite obvious if this were to happen, the unit would become unsatisfactory in a very short time and vigorous measures would be required to retrieve the situation.

CHART 1

PAUL D. ADAMS, Lt. Gen., USA
Training Notes, 1961, pp. 8-11
However, the soldier's job, whether on the battlefield or on the training field, is to create constructive order out of the means and circumstances that exist.

Going back to the curve then, the practical solution of the problem lies in retarding deteriorations by conducting a systematic and comprehensive retraining program during the period between the annual ATT's, stressing individual and small unit skills. . . .

i) Manning Levels.

The pay-off of Department of the Army personnel policy for the unit commander is the quality and quantity of men in his unit. High turnover rates make it difficult for him to train his unit, but if he is manned at full strength, he can at least proceed with some unit training. However, if his strength is low, he may find it difficult to train at all.

If he has both high turnover and low manning he probably will find training impossible. It should be noted that high turnover decreases "present for duty" manning disproportionately. A unit will normally experience a loss of training of about 10% for leave, and perhaps as much as 5% for turnover (inprocessing and outprocessing). If the turnover goes up to 10%, the total loss to training may rise to 25-30%, due to more men taking leave, and more men needed to handle personnel processing.

The relationship between manning level and ability to train has long been recognized by the Army Staff, and even quantified. To quote again an OACSFOR paper, this one of October 1967:

"Reduction in personnel strength directly affects the qualitative value of meaningful unit training. A battalion's ability to conduct meaningful unit training becomes critical at the 80% strength level and deteriorates rapidly below that level."
The Board found examples of divisions at Authorized Level of Organization 2 (strength supposed to be better than 90%) in which companies were operating at 60 to 70% of authorized strength. What is happening is simply that, by those iron laws which prescribe bloated headquarters, echelons above company level are sucking up manpower to maintain strengths above authorization, leaving the company in the lurch. But the company is the training Army. If leaders of such an understrength company are told that the unit is supposed to be "combat ready," or missioned to pass a training test in the near future, the result will be a "communications gap" on training, high frustration levels and low morale. No tank platoon leader who turns out for training day after day with less than two men per tank can accept a statement that his outfit is "ready." Nor can he conceive how he is to prepare his platoon for any sort of test or weapons competition. Yet the Board noted numerous units throughout the Army in which these or similar circumstances prevailed.

Studies have been made of the impact of low manning on training. The Board examined two, conducted ten years and a continent apart; one of an Armored Rifle Battalion in Germany, 1960; the other of a Mechanized Infantry Battalion in Fort Carson, 1970. Both studies assumed that the mission of the battalion remained combat readiness, and that therefore all equipment would be maintained. Both then examined strength figures over time to relate "present for duty" strength to the amount of meaningful unit training actually accomplished. Both found that when strength was at 60% or lower, all available manpower went to the maintenance, and no effective training took place. Above that point, training effectiveness increased proportionate to present for duty strength. The same studies provide insights into the vulnerabilities of training to squeeze, and conversely, the incompressibility of maintenance and administration. The 5th Mech Division study noted:

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Shortly after General Hamilton Howze retired, he published an article in ARMY Magazine ("35 Years, "January 1966) which, in part, commented on this problem:

"Despite all the reasoning which lies behind each published table of organization, and presumably for purposes of effecting economies without openly acknowledging reduction in strength, the device of reduced strength has been used extensively. The effect of this is often compounded by establishing even lower manning levels and then by making units count among their strength men who have not yet reported to it or have long since departed the area. The result is critical; it's hard to make an absent soldier shoot at a present enemy charging up a hill. Yet for some reason we don't squawk enough about it--perhaps because through dreary experience we've gotten conditioned to under-strength. In almost every division of the Army save those in Vietnam a platoon of 30 men looks big even though the proper TOE strength may be 46.

When present-for-duty strength falls below 95% of TOE, things go out of balance, for many--surprisingly many--jobs of a unit don't change whether its strength is at 50% or 100%; the whole staff, for example, and drivers and mechanics. And if an imbalance exists (and it always does) as respects skills among men who are present, battle effectiveness goes down still further.

The table which follows won't meet any scientific criteria; the fact that all the percentages come out in even tens proves that my statistics weren't run out on a computer. I can argue pretty vehemently, however, in behalf of its approximate accuracy. My reason for including the table is to make clear the point that as you reduce a unit's strength its effectiveness goes down much more than proportionately. That's another way of saying that the taxpayer's dollar is not producing, in this case, a dollar's worth of defense. Note that figures in **bold type** show battle effectiveness, on which (of course) the quantity and quality of equipment present will have further influence, not shown.

<table>
<thead>
<tr>
<th>Percent Present for Duty</th>
<th>Training</th>
<th>Maintenance</th>
<th>Admin</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td>37</td>
<td>31</td>
<td>32</td>
</tr>
<tr>
<td>76</td>
<td>16</td>
<td>41</td>
<td>43</td>
</tr>
</tbody>
</table>

83
By the foregoing I indicate my belief that an outfit of 80% strength present for duty, 100% trained, is only 60% effective. If it is only 70% trained (a far more likely state of affairs, for it is quite impossible to train an understrength unit properly because structure and manpower are out of kilter and there is inevitably a considerable imbalance in MOS skills), I would rate the unit only about 30% effective."

Extrapolating General Howze's table to find the percentage present-for-duty strength equivalent to zero percent effectiveness yields the following:

<table>
<thead>
<tr>
<th>Training Status of Those Present According to MOS</th>
<th>Present-for-Duty % at 0% Effectiveness</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td>50</td>
</tr>
<tr>
<td>90</td>
<td>55</td>
</tr>
<tr>
<td>80</td>
<td>60</td>
</tr>
<tr>
<td>70</td>
<td>65</td>
</tr>
</tbody>
</table>

The General's eye and intuition in 1966 were at least as good as the actual figures for Germany, 1950, and Colorado, 1970. Further, respondents to the Board survey were asked what percent of TOE "present-for-duty" was needed in order to conduct dynamic training. Survey responses reinforce the above data: Active Army respondents indicated a strength of better than 75%; Reserve Component respondents indicated something better than 80%. The Board was unable to analyze this issue further. Precise data on unit strength was not available, in any event, and disparity was likely to exist among training proficiency that training management or CO's training coordination involved.
different type of units. The Board notes that the relationship of manning to training effectiveness is worthy of further research. Suffice to say, on present evidence, units at 70% strength or below are unlikely to conduct exciting, meaningful training -- or indeed, to train at all.

j) Management of Decentralized Training.

The Board observed dynamic training under decentralized management in certain units. Some of these units were badly undermanned, and experiencing high turnover rates. In all cases, however, dynamic training required of commanders above battalion a very active role in the management process. For example, usually only at division level can the incompressibility of maintenance be redressed by recourse to Army Regulation 310-49 which recognizes that when a unit's operating strength falls below 90% of TOE, it cannot operate and maintain all of its equipment. Only at division level can steps be taken to cut inroads by administration or base support into numbers of personnel available for training, usually through some sort of "prime time for training" scheme rotated among brigades. Only at division level can diversionary missions be minimized.

The Board received a paper, written by a Brigade Commander in a low-strength, high turnover CONUS division, which offers views on training management. In these views the Board concurs:

"...Decentralized training has not obviated the need for training management above battalion. There is a confusion in the minds of some that simply because the Chief of Staff of the Army has given primary training authority to the battalion and separate company commander...that this means that there is no other requirement for training management. The conflicting requirements for other commitments, the need to provide for the presence of individuals in the units, the support of training required, the coordination of post facilities -- all require higher headquarters to become involved in the management of training. These must:

(1) Provide the general environment within which sound training...can take place: whether at the technical and tactical end, proficiency end, or at the esprit de corps-morale end. They must assure that training is a primary, meaningful, rewarding activity for all the members of the unit and in particular, for armored, mechanized infantry, and artillery units.
(2) Insure that competing requirements for unit-manpower, especially requirements that take away a substantial number of individuals, whether of leaders or of peculiar members of the unit, are so coordinated, block-timed, and measured that the unit in fact has the time and the personnel available when the unit commander wishes to conduct training.

(3) Provide support for training. Classically, this has been ranges, facilities, classrooms. In the modern context, he has got to provide tape recorders, television, reproduction, fast response on training literature, referral of the more inexperienced commanders or staff to that agency or activity in the U.S. or overseas which has tactical, technical knowledge, literature, package training, and other labor and energy saving devices.

(4) In the case of readiness standards that are relatively discernible, establish clearly the objective which must be achieved or maintained as the unifying goal for the unit's total effort. There is some controversy on this, because setting goals may be in conflict with the theory that the lower unit commander can "assess his own readiness." However, the higher commander is in a better position to answer the question: "Ready for what?" Since all energy of the unit cannot be devoted to training and readiness, there needs to be fairly clear and realistic standards of proficiency that when achieved, represent a reachable goal.

Time management is necessary, (specifically, costing-out total unit activities in terms of battalion-days, or company-days, is one common mathematical method for determining how much energy goes into the activity we call training, as compared with how much into other activities). Time management is the only way that I know for higher headquarters to provide a basis for DA, DCSOPS, ACSFOR, CONARC, Army, Post, Division, Brigade, or Battalion, to reject a requirement on the grounds that it will erode training;... post guard and detail, troop tests, time off, holidays, civil disturbance readiness, domestic action projects, must not squeeze out most of the unit-time available. Our G-3 finding that mech infantry battalions had 118 weeks of requirements for a 52-week year, ... was a revelation to all who saw it. ... Time management is also one of the only ways that I know that one can correlate personnel turnover to the necessity for recycling certain kinds of training, and thus increasing the amount of training proportionate to the rate of change of people in the unit, even though the unit stays at full strength.

Requirements from outside must be fended off. There may be some who believe that, consistent with decentralization, the coordination function can best be done at the lowest possible levels, where the commander, sufficiently backed, can simply make his decision to reject outside requirements imposed upon him, without recourse to management.
above his level. I seriously question whether that is possible. . . . However, I am sure that the policy we will end up with will be a very reasonable balance: that the greatest degree of autonomy, authority and decentralization will be permitted consistent with units actually having cohesive management of their own affairs -- and this will remain primarily a function of the unit commander's own set of priorities, organization ability, and imagination."
k) The Squeeze on Reserve Component Training

The Board found that management of Reserve Component training presented some unique problems, but that by and large, there were marked similarities. The Board's list of factors which depress unit training in the Reserve Components is as follows:

Time: The Reserve Components must fashion training from a patchwork of weekly, monthly, and annual training assemblies. "Carry-over" from one session to another, as well as the shortage of time, occasions lost training opportunity and management difficulty.

Doctrine: Having fewer service school graduates, and being more remote from other professional mainstreams, Reserve Component units lag doctrinally behind Active Army units. Otherwise, the problems are much the same. New, more complex doctrine is, however, more slowly assimilated.

MOSs: Here, too, lack of access to service schools causes problems, especially when the unit is reorganized under a different TOE, with different or higher level skills, and the same personnel are expected to fill the new slots.

Equipment Sophistication and Density: The introduction of new and more equipment into Reserve Component units poses acute problems of retraining. The more complex the equipment, the greater the problem. Again, reorganization with more complex gear imposes severe training burdens.

Maintenance: Reserve Component units rely on a system of full-time technicians to accomplish routine maintenance, so that in this respect they enjoy some advantage over Active Army counterparts. But the basic problem remains: it comes first.

Personnel Turnover: As shown by the survey results, this has not been the problem it has been for Active units. However, 1972 will see the departure of the first six-year "class" of the Vietnam War, and conceivably the problem will loom larger in the future.

Manning Level: Similarly, while most units have been well manned during the War, many are already sensing a pinched manpower situation, and there has been newspaper speculation that draft support may be required to maintain militia units at strength for training.
ATT Fixation: Many Reserve Component units evidently do nothing from one end of the year to the other except prepare for the training test (ATT) to be taken during the two week summer training period. This approach to training not only leads to dull drill sessions, but forecloses training in topics not tested.

WETS Portal-to-Portal Waste: For many Reserve Component soldiers, training consists mainly of riding in the back of a military truck for long hours enroute to and from a weekend training site (WETS). All such time comes out of paid drill periods, and its costs exceed the road time in that often the soldiers arrive too tired to move immediately into training.

Armory and Training Area Ennui: The Board found that the very familiarity of the Armory and training site attenuated training effectiveness in many Reserve Component units. Some units had been using the same training facilities since World War II; the leaders knew every nook and cranny to the point that maps were seldom used afield, and surprise virtually unknown.

Paid Preparation Time: Good training requires forethought and advance preparation. But the Reserve Component commander is authorized only a limited amount of paid preparation time, and usually has to award compensatory time to individuals who front-run a training exercise for him. Most Reserve Component commanders believe their training could be improved with better preparation, and feel constricted by present policy.

Escalation of Readiness Requirements: Reserve Component commanders note a trend, over the years, to raise the level of training they are expected to attain. The present CONARC regulation (CON Cir 350-7, para 5b) states that "units may not select a yearly training objective below the highest level of BUT achievement without the approval of the CONUSA commander concerned." The net effect has been to increase the propensity to train only for the ATT, and to otherwise sacrifice training realism for test proficiency.

1) Summary

**Combat arms units should use a training format compatible with the way in which they expect to operate in combat. Decentralized management of training is thoroughly consistent with requirements for training leaders for the battlefield.
It will take time for the policy of decentralization to improve the quality of unit training. Trainers, and those who inspect and supervise them, must look for innovations in training techniques and devices. Exciting and meaningful training for today's youth is more likely to flow from bold experimentation at unit level than from application of the Army's present predominantly institutional training methodology and management.

The elimination of inspection of training records does not eliminate the need for such records, especially at company level where the company commander confronts DA centralized individual education and training programs. Records now being kept to assist training management are constructive.

DA's centralized management of NCO careers, and in particular its centralized proficiency testing of NCOs, poses both problem and opportunity for the unit training manager, in that he must provide the means for his NCOs to keep abreast of contemporaries, but has, in the tests, new incentive toward professionalism.

Field Manual 21-5, Military Training Management, requires substantial revision. Guidance should be furnished to the training manager for coping with those factors which operate to reduce unit training effectiveness. Similarly, the Army Training Programs, now written for a mobilizing unit, should be rewritten to bring them into line with the training missions of Active Army and Reserve Component units. Reserve Component training managers require an Army Training Program especially written for the fragmented annual cycle of Reserve Component training. Active Army managers could use a coherent basis for planning operational readiness training. Research and experiment should probe training in units to find better ways of supporting both.
Department of the Army level action is needed to assist lower echelon commanders in managing personnel turbulence and manning levels in the Active Army.

Commanders above battalion level must participate in management of decentralized training by cutting competing requirements, providing support, and reconciling readiness requirements with the unit's training and other missions.

E. THE NCO: CENTRAL TO DECENTRALIZATION

The Army has long recognized that junior leaders should train their own units. In foreign armies, notably the British, French, and German Armies, most training is conducted by noncommissioned officers. If the U. S. Army could elicit exciting and meaningful training from the noncommissioned officers of its combat arms units, it would be well on its way toward preparedness for any future conflict. Moreover, in conducting dynamic training, the noncommissioned officer-trainer would receive new job satisfaction. Yet, the Board observed that most combat arms units, far from being able to place training responsibilities on junior noncommissioned officers for dynamic training, regard their junior sergeants as part of the reason why training is in poor shape.

One of the visitors to Fort Benning while the Board was in session was General Dunbar, Chief of British Infantry. In a general discussion of difficulties the U. S. Army may expect to encounter in moving away from a draft-supported force, General Dunbar stated that the most perplexing problem his Army had faced centered on junior sergeants. He said that the British Army had found that its attempts to weed out weak NCOs as it reduced its size had a frightening effect on young sergeants. Indeed, he said, the attempts his Army made to raise the quality of its NCO Officer Corps deterred recruitment and retention. As the young first-term enlistee looks up the professional slopes at a goal of an arm load of stripes, the tests, schools, and
boards pose formidable obstacles. The road to his goal, a sergeant major's insignia, looks steep from where he stands; he must be encouraged to set out on it in earnest. General Dunbar said that his Army had found a need for a special program for junior sergeants, designed to build his self-assurance, and his confidence in the Army. He opined that the U.S. Army would find it very much worthwhile to go to some lengths to bring into being such a program, before the real pressures of raising and sustaining a volunteer force were brought to bear. Such a program, he advised, should have as its ultimate objective the convincing of first term enlistees that, if they have only average sense plus willingness to apply themselves, they can travel the professional road through a rewarding career in military service to comfortable retirement. Otherwise, the U.S. Army will find, as his Army did, that prospective sergeants do not reenlist, and leave the service in droves.

The Board's investigations, prompted in large part by General Dunbar's comments, showed that the U.S. Army already faces a significant shortage of quality combat arms noncommissioned officers in grades E5 and E6. Moreover, its inquiries indicated that there is a widespread crisis of confidence in the U.S. Army Noncommissioned Officers Corps. As the Board survey establishes, senior NCOs seriously doubt the professional qualification of their juniors. The Board's interviews indicated that many noncommissioned officers, reacting to the results of their MOS proficiency tests, have serious self-doubts concerning their professional ability.

The MOS proficiency tests administered annually by the Enlisted Evaluation Center of Fort Benjamin Harrison, Indiana, were originally designed for normative testing, to discriminate among NCOs for the purpose of awarding proficiency pay. Among combat arms MOSs, such awards were usually confined to within the upper third of those taking the test. Within the past year, the test has been made mandatory for all noncommissioned officers of the combat arms, and the test results widely applied as criteria for promotion, reenlistment, retention (under quality-control programs), and eligibility for schooling.
In examining Infantry MOSs basic high density leader groups, the Board found broad cause for concern. For example, last spring the Army distributed to each NCO bearing MOS 11B an MOS Study Guide. This document listed field and technical manuals with which the NCO would be expected to be familiar when he took a written test the following November. There were some incongruities within the MOS Study Guide, e.g., the lower skill level, 11B20, was expected to know two rifles while the higher skill level was held responsible for only one rifle. Yet, the references were specific (chapters from 17 field manuals) and more than six months warning of the test was provided. The Board discovered, however, that many combat arms units did not possess all of the field manuals, or enough of them, to permit study of the references by NCOs. At some posts, as test-time approached, a black market in field manuals sprang up, with buying and renting of test references. Obviously, NCOs assigned to small detachments, where field manuals were readily available, had an advantage over their counterparts in tactical units. Moreover, the NCO in an assignment which permitted his studying systematically was in a better position to do well than the unit NCO with the time-consuming responsibilities for leadership.

Results of the tests tend to bear out these advantages. Two-thirds of the senior NCOs who earned proficiency pay on this year's test were in assignments other than tactical units.

Test results also substantiate General Dunbar's assertion that the U. S. Army needs a program for its junior sergeants. Those Regular Army E4's, our journeymen sergeants, who took the test scored on the average only 6 points above random chance -- a dismally low level of professionalism.

The Enlisted Evaluation Center sends a report on the performance of each NCO tested to his commanding officer -- his company commander in a tactical unit. The report is diagnostic in that it indicates the professional areas in which the NCO did well, and those in which he did poorly, so that he
can direct his study effort. The company commander can refer a deficient NCO to his Post civilian education counsellor, who in turn can help the NCO enroll in an appropriate service school course. But correspondence courses take a long time to complete, and relatively few NCOs in tactical units have the time to pursue them systematically.

Reserve Component NCOs do not take the MOS proficiency test annually, or ever for proficiency pay. Rather, they are tested once every four years to validate their entitlement to their MOS. Reservists enrolled in correspondence courses at the service schools outnumber Active Army correspondents almost two for one, which indicates a substantial interest in self-improvement. But most Reservists interviewed expressed apprehension that the Army might extend the annual MOS testing program to Reserve units, and the hope that the Army would, by resisting such a move, avoid what they considered a serious degradation of already poor NCO motivation.

The status of the Noncommissioned Officer Corps of the U. S. Army, particularly in the combat arms, poses both problem and opportunity in the management of training. The centralized testing program has created a genuine sense of urgency among NCOs. Whether this can be turned by the Army into an impulse toward professionalism which will directly contribute to unit training, or whether this will lead to personal discouragement and widespread distrust of the Army, depends on what the Army can do in the near future to persuade its sergeants -- particularly its junior sergeants -- that it understands their plight, and is interested in extending a helping hand to any NCO who will take it.
III. TOWARD BETTER SUPPORT OF TRAINING

A. FIELD: SUPPORT REQUESTED

The overwhelming consensus among units in the field is that training is a low priority, under-resourced unit activity Army-wide, seldom dynamic and only marginally adequate in the categories of individual, unit, and mission training for all combat arms. The primary obstacles to achieving dynamic training are in the areas of personnel turbulence, inadequate manning, and an inadequate budget. In addition, great concern exists over unqualified junior NCOs (E5-E6) who do not know how or what to teach their subordinates at the platoon, squad, or fire team level. Significantly, however, there is no perceived problem in the motivation, qualification, or dedication of junior company grade officers in the Active Army today, although there is concern over motivation of Reserve Component counterparts.

1. Active Army

In the Board's survey, its visits, consultations and study, it worked to compile a list of the sort of help which the Army's trainers want:
For Dynamic Training--
Support Needed, Top Priority:
  Raised unit manning levels
  Reduced Turnover

Commander's Training Purse for:
  Incentives
  Local Purchase Aids

NCO Proficiency

Support Useful, But of Lower Priority:
  Better Training Techniques
  Better Training Devices

  Improved Schooling in Administration for Lieutenants

  More Understanding Among Higher Commanders of Their
  Proper Role in Decentralized Training

Support Unsought:
  Large Maneuvers and Field Exercises
  Guidance on How to Do the Training Job

The Board records that trainers across the Active Army seem to be telling the Chief of Staff that if he will give them a stable unit and modest resources, they will give him dynamic training. It considers significant that there was no substantial opinion that money expended for large-scale field exercises would produce dynamic training. To the contrary, the Board sensed widespread conviction that maneuvers had little bearing on solving current training problems, and are generally regarded as a diversion from more remunerative kinds of training. The cautious expression of mild interest in training techniques and devices may reflect, the Board feels, concern that information on these will soon be transformed into "command guidance," and that, in turn, into directive: a reversion to the old order, which nobody wants.
2. Reserve Components

A comparable list for Reservists is as follows:

For Dynamic Training---
Support Needed, Top Priority:

- Meaningful Association with an Active Army Unit
- An Improved ATP
- Quick-tap Service from the Combat Arms Schools
- Unit Structure to Support Training
- Motivational Incentives
- Recruiting Incentives

Support Useful, But of Lower Priority:

- Additional Close-in Weekend Training Sites
- Elimination of Old New Equipment Mixes
- Modern Techniques and Devices for WETS and Armory Training

Support Unsought:

- Large Maneuvers or Field Exercises
- More Extensive Tests of Training or Readiness

The principle point Reservists seemed to want to make with the Board is that they wholly accept the Army's rhetoric about "One Army" and "Total Force," and they want the Army to act on it, and act now. They plainly wanted more incentives: pay, promotion, points for retirement. They as plainly complained that the Army treats them as second class citizens, that it does not provide them the support that it could and should. But there seemed to be genuine interest in making training more exciting and meaningful, usually accompanied by stories of just how dull it has been in the recent past. Throughout most discussions with Reservists, the Board detected worry over...
the cessation of the draft, and noted that virtually all Reservists accept better training as the principal support of better recruiting and retention.

B. BOARD: SUPPORT NEEDED

1. Relief from the Squeeze

The company commander has been caught in a historical training squeeze which has tightened each year, greatly handicapping any training he and his unit wished to undertake:

   a. Tactical concepts and doctrine are getting more complex.

   b. MOS skills have greatly proliferated.

   c. Equipment is more sophisticated, and there is a greater density at unit level.

   d. Maintenance requirements grow with equipment density and complexity. These requirements tend to assert priority over training.

   e. Personnel turbulence as a result of the Vietnam War and Army end-strength reductions has caused severe fluctuations in unit strengths, high turnover rates, and MOS mismatches.

   f. In an ostensible attempt to reduce the teeth-to-tail ratio, civil service and general support force spaces have been reduced, resulting in an ever increasing diversion of tactical unit personnel to perform post support functions.

   g. Headquarters are kept overstrength to meet the increasing bureaucratic administrative load, resulting in a further erosion of company rifle strength to fill the headquarters.

   h. The frequency of diversionary missions and high-visibility unit shows, in the genre of firepower or airmobile demonstrations, the hosting of marksmanship matches, etc., remains high.

The totality of the training job of a combat arms unit commander today is little understood or appreciated: the company commander is expected to accomplish the following training in addition to maintaining his equipment and meeting administrative and self-sustainment responsibilities:
a. Mission Training. Examples:

(1) Contingency.
   (a) Reconnaissance.
   (b) CPX's.
(2) Threat.
   (3) Environmental, both for a specific area as well as a general orientation.
   (4) ORTT's.

b. Unit Training. Examples:

(1) Adventure.
(2) Domestic action.
(3) CPX's.
(4) FTX's.
(5) ATT's.

c. Individual Training. When discussing training, most senior commanders are concerned with unit or mission training, overlooking the company commander's direct role and responsibility for individual training, an area which has grown to staggering proportions. A partial listing of the individual training for which the company commander is presently responsible is as follows:

(1) MOS proficiency.
   (a) Officer.
   (b) NCO.
(2) Advanced Individual Training.
(3) Cross training.
(4) Weapons proficiency, which, in the case of the arms room concept, demands of the mech rifle squad member skill in all weapons from the pistol through the TOW.
(5) Physical training.
(6) On-the-job training.
(7) Adventure training.
(8) Project transition.
(9) General educational development.
(10) Community relations.
(11) Race relations.
(12) Drug abuse.
(13) Recruiting to include individual responsibilities in sponsoring the unit of choice recruitment drive.
(14) Laws of land warfare and the rights and responsibilities of the soldier.

The company commanders of combat arms units need massive help now from the training establishment to do his training job. But there is no effective staff mechanism in existence which champions training or fosters effective two-way communications between the training establishment and the company commander/trainer.

2. Need for a Catalyst

The Board perceives a significant ignorance of sound training technique for doing the aforementioned jobs among trainers of the combat arms, occasioned by the Army's concentration on individual rather than unit training for the past six years. Moreover, it believes that technology could have provided training devices which would assist trainers significantly in making such training more exciting and meaningful for the youth of today. That better technique and devices are not in use in units of the Army today, the Board considers as evidence that the existing training system needs overhaul. The Board believes that some ad hoc, ad interim arrangement is needed to catalyze a rapid redirection of the interests and energies of the Army from operations to training, from materiel to men. It gave consideration to reliance on CONARC and other chartered commands and agencies, but found, on examining their modus operandi, reason for grave doubt that present institutions could contribute substantially or expeditiously to dynamic training.

For example, the Board looked into techniques for teaching battlefield camouflage. As a first question, it asked why combat arms soldiers could not be equipped with green underwear, as they had been in
Vietnam, so that they could "think green" from the skin out. It appears, however, that a decision had been recently reached to perpetuate the bold white V blaze on each trooper's chest because (1) white underwear is a few cents cheaper than green, and (2) soldier opinion is against the wearing of the green. Moreover, such matters involve weighty transactions between the Deputy Chief of Staff for Personnel at DA, and the CG, Army Materiel Command—a net on which unit trainers seldom transmit. At DA level, training matters are divided among the ACSFOR (Unit Training and Readiness), DCSPER (Individual Training), DCSLOG (New Equipment Training), and CRD (Training Research). Below DA, AMC handles the development and procurement of training devices, CDC produces what is to be taught (doctrine), and CONARC handles training policy. Within CONARC, training is divided among the DCSOPS (Unit Training) and the DCSIT (Individual Training); the latter has most of the horsepower in the training field, since that is where the action has been. Many training issues cannot be resolved short of the Chief of Staff; conversely, many training programs are unified only in the person of the company commander. The practical effect all too often is that they are not raised to the attention of the former and descend with full impact only on the latter.

3. Functions of the Catalyst

Accordingly, the Board concluded that it should look for a mechanism capable of performing two broad functions:

**Advocacy:** The Army's whole approach to training in units (as distinct from unit training), needs rejuvenation, and revision. Change will require firm support for better training management, better techniques, and better devices at the highest echelons of Department of the Army, among its major commands, world-wide, and within the CONARC service schools.
Communication: Consistent with the policy of decentralization, unit trainers must be assured an informed voice in management, technique and devices; they should be able to tap the expertise of the service school faculties, and benefit from the sound ideas of contemporaries; they should be able to provide for their unit's access to the best training ideas in the world, and actively influence the development of better ideas for the Army. The problem in dynamizing training is less the message than the medium--less what to do better to support the trainer, than how to communicate improvements to him.

4. Options for the Catalyst

In looking through the Army for an entity with similar roles, the Board identified the Army Maintenance Board at Fort Knox, Kentucky, as one approximation. If there is a subject on which the Army has been able to get and keep the soldier's attention, it is maintenance; the Board's survey indicated that there was general agreement among all ranks that it is an important unit activity, and that it often has to take precedence over all others. Whether the Maintenance Board caused this sentiment, the Board cannot judge; that the Maintenance Board makes a significant contribution the Board has no doubt. The success of PS Magazine, its soldier-pitched, company-distributed periodical, in promoting communication within the Army on the subject of maintenance, can be measured in part by the fact that its 200-man staff devotes half its effort to answering mail direct from soldiers to Sergeant Half-Mast or his buxom colleagues. Established by DA General Order 24 of March 1955, under AR 15-470, the Board operates "customer assistance teams" world-wide, coordinates with all Army major commands and agencies, and deals direct with company level in tactical units. It is a modest undertaking:
U. S. Army Maintenance Board

Personnel: 30 military, 168 civilians

Budget: $3.7 million per annum

PS Magazine
$182,000 per annum for art
$200,000 per annum for printing

But no board-like group seemed likely to have the "clout" required to swing opinion, assert priority, and compete for resources in the major command-agencies arena. Accordingly, the Board looked hard at another possibility: that of having the Center commanders of the combat arms—Infantry Center, Armor Center, Field Artillery Center, and Air Defense Artillery Center—act as their branch's inspector of training. The major disadvantage of this idea is that it flies in the face of the increasing commonality of training among the combat arms, a commonality recognized under the proposed Officer Personnel Management System, which blurs branch distinctions, and concentrates on professional function. Moreover, such a split of responsibility for unit training, along the old "branch chief" lines which were once organizationally recognized within Army Ground Forces, hardly seemed calculated to unite the several commands and agencies to contribute more support to unit training.

Accordingly, the Board developed as a third option, a single "advocate," a unit training czar. Such an individual would probably have to be at least a Lieutenant General; would have to operate from at least CONARC level; and would have to have, as a minimum, access to, and lien on the services of the principal DA staff officers charged with training responsibilities, and the commanding generals of CDC and AMC. Obviously, his responsibilities for unit training world-wide would be like those presently assigned Commanding General, CONARC within CONUS. But the Board's notion was that unit training requires, for the foreseeable future, a concentration of personal effort and attention that CG, CONARC, cannot give
because of his numerous other responsibilities. Accordingly, the Board considered a Deputy CG, CONARC, charged with Unit Training.

The three options, in summary:

Option 1: U. S. Army Combat Arms Training Board
Option 2: Center Commanders as Inspectors of Training
Option 3: Deputy CG, CONARC, in charge of Unit Training, World-wide

5. Conclusion

The Board for Dynamic Training recommended Options 1 and 3, together, with the concept of holding the Combat Arms Training Board responsible for communications among the supporting agencies, and with units; and of having a CONARC Deputy CG represent the interests of unit trainers world-wide in the Army's highest councils, and among its principal organizations.
IV. RECOMMENDATIONS

A. PROGRAM OF ACTION:

1. Termination of Board for Dynamic Training

The Board recommended, and the Chief of Staff of the Army approved, discontinuance of the Board for Dynamic Training effective 17 December 1971.

2. Establishment of the Combat Arms Training Board (CATB)

On 17 December 1971 the Chief of Staff authorized opening of CATB at Fort Benning, Georgia, with temporary and limited personnel authorization and funds, directed to draw up a Table of Distribution for manning and a budget. Guidance from the Chief of Staff was to plan for a three year life-span (thru FY 75). Action was to be initiated on the program sketch below, pending further guidance.

3. NCO/Specialist Professionalism

Of prime importance is the rapid restoration of NCO/Specialist confidence through professional competence. CATB is to sponsor proposals for following actions:

* Manage exceptionally the key MOS's for the combat arms E4 striker, and junior leader, E5 and E6.

   (1) Infantry: 11B40, 11C40.


* Coordinate with EEC and the combat arms schools in revising the present unsatisfactory MOS tests, which are poorly written, evaluating only reading ability. New tests must be oriented toward "hands-on"
performance, coupled with a more practical written portion based upon the system-engineered skill and knowledge criteria developed for NCOES—that which the soldier must know to be proficient in his MOS. An EIB equivalent badge for each combat arm should be awarded to recognize annually those who, by passing the test, have demonstrated they know their job.

* Arrange specially packaged, MOS-related, extension courses from the Combat Arms Schools directly to small units, using multi-media material applicable for both individual and small group study.

* Arrange for on-duty study time in the unit training program on a regular basis, integrated with individual NCO/Specialist general educational development, as a significant step in ameliorating the "crisis of confidence" which currently exists throughout the NCO/Specialist Corps.

* Extend comparable educational opportunities to Reserve Component NCOs--unit training extension courses--. Arrange to offer them the opportunity to take the annual MOS test on a wholly optional basis, with the proviso that thereby they could compete for a badge, proficiency pay, and possibly increased retirement/promotion credits. While continuing the mandatory validation test for non-volunteers, excuse volunteers who pass any annual test from further mandatory testing for four years.

4. Training Techniques

CATB is to gather together the good training techniques of the past, and integrate them with the doctrine and concepts of today, to be promulgated through informal training literature and/or multi-media material direct to company level. This would provide for real-time unit-school communication, short cutting the present TM/FM developmental cycle which requires 1-2 years. Informal training literature advertised in a serialized catalog published by CATB would help bridge doctrinal gaps while TM/FM's were updated. A representative listing of immediate pay off areas for informal communication on training technique follows:
* Marksmanship, to include musketry at reduced ranges.
* Battle drill, to include techniques of training while understrength.
* Tactics, to include use of sand tables.
* Terrain walks, or TEWT (tactical exercise without troops).
* Anti-Armor, to include enemy vehicle recognition, use of terrain, and optimum weapons site selection and employment.

5. Training Devices

CATB is to sponsor development of 20th Century training devices using state-of-the-art technology. There is an immediate need for at least the following:

* An indoor moving target screen with which to train weapon crews, fire teams, squads, and platoons, as well as individuals. It is feasible to develop an inexpensive prototype now.
* Driving simulator for track vehicles, similar to the British or French operational models.
* Indirect and direct fire simulators.
* Hologram 3-D terrain visualizations which would improve upon the sand table for tactical training.
* PEMA-substitute vehicles with which to conduct "jeeper" exercises. A mech battalion equivalency in all terrain, swimming, vehicles can be procured for as low as $56,000, and not more than $100,000. Besides being cost effective in terms of PEMA maintenance, the all-terrain vehicles would be fun to operate, an outstanding change of pace for the soldier while conducting exercises which are free from maneuver damage, plus of potential adventure training/recreation value.
6. Training Management

In the area of training management, the Army must squarely face up to its training dilemma. Small unit commanders are often asked and expected to do the impossible—to be combat ready, while possessing neither enough men, nor an appropriate state of individual or team training. Command failures to stipulate other goals have frequently created an environment for false readiness reporting, or at least high frustration among members of units who know that they do not deserve to be labelled ready for combat, and are unlikely to become so no matter how hard they try to train. It is time to "tell it like it is," and thus to restore confidence in higher commands, and to enhance integrity throughout the officer corps. The following measures are recommended for vigorous support by CATB and Deputy CG, CONARC:

* Match training missions to manning levels. It is imperative that combat arms battalions be assigned reasonable and obtainable training goals, clearly understood by the unit as well as all higher headquarters. The keen frustration often felt now by junior leaders will be removed, because the training establishment has at last faced up to real-world unit training problems. Significantly, dynamic training can and is being conducted at all strength levels. Some of the very best training noted by the Board was being conducted in units at 40% manning or less; however, in every case, the unit had come to terms with its mission and concentrated on dynamic cadre training. In turn, this was enthusiastically received by the officers and men, who appreciated the command effort to improve their skills with available resources while at the same time striving for exciting and meaningful training.
**MATCH TRAINING MISSION TO MANNING LEVEL**

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<td>BN FULLY TRAINED TO PERFORM TOE COMBAT MSN</td>
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<tr>
<td>BN HAS CO LEVEL DYNAMIC TNG</td>
<td>90%</td>
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<td>BN HAS PLT/COMPOSITE CO DYN TNG</td>
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<td>60%</td>
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<tr>
<td>CADRE TNG ONLY</td>
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*WE TELL IT LIKE IT IS - SHOWING UNITS WE RECOGNIZE THE TNG PROBLEM*

*Block leave.* Permit commanders to grant block leave to minimize the continuous absenteeism caused by spreading leaves throughout the year.

*Prime unit training time.* Encourage blocks of time, possibly mornings or specific days of the week, solely to training, with personnel excused only for emergency reasons. This will entail coordinating post support functions and facilities around these periods. It will also be necessary to integrate on-duty study time for NCO/Specialist professional development within the normal 40-hour training week.
Zero-out units. Commanders should be given the authority to zero out units to keep others close to 100% (ALO 1) in strength for meaningful battalion-level training. If a unit is expected to be combat ready to perform its full TOE mission, then it must be at full authorized strength.

*Labor saving devices. Every effort must be explored to substitute machine-power for man-power to minimize the number of personnel devoted to post support details; gang grass mowers, commercial snow removal equipment, sensor or burglary alarm substitutes for guard personnel, civilian contract trash collection and kitchen police are but a few of the areas which can be exploited to keep the combat arms soldier present for training in his unit.

7. Total Force Training Management System

CATB was to take the lead in revising FM 21-5, instruction in the Army's service schools, and related Army training literature. For the Active Army, the objective should be development of training programs based on operational, rather than institutional, modes of instruction. For the Reserve Components, the objective should be the same, but cast in the form of a program relevant to the exigencies of the fragmented annual RC training cycle. For both, the Army should introduce the notion of managed individual training in units, and systematic team training; the former to be termed "continuation" training, referring to the extension of institutional training while in the unit; the latter to be termed "collective" training. It is time to underscore by word and deed that the defense of the nation rests on a total force concept, and that the Reserve Components are an equal partner of the Active Army, participating in the same forms of professional development. Three forms of Army Training Programs are envisaged:
### Mobilization Training Program (MTP)

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<th>PURPOSE</th>
<th>SCOPE</th>
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<tr>
<td>Mobilization Training</td>
<td>One Time</td>
<td>Train Newly Activated Units</td>
<td>Basic Combat Training</td>
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<td>Advanced Individual Training</td>
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<td>Advanced Unit Training</td>
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### Reserve Component Training Program (RCTP)

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<td>Reserve Component</td>
<td>Annual</td>
<td>Develop and Maintain Premobilization Mission Readiness</td>
<td>Continuation Training Basic Unit Training and Advanced Unit Training Packages</td>
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<td>Training Program</td>
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### Operational Readiness Training Program (ORTP)

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<td>Operational Readiness</td>
<td>On Going</td>
<td>Develop and Maintain Mission Readiness</td>
<td>Continuation Training Collective Training</td>
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The Reserve Component Training Program should be coordinated with a simplified readiness reporting system which candidly reports status of training. It should apply the principle of decentralized management to the degree feasible within the Reserve program, including the following:

* Flexible Yearly Training Objectives With Realistic Levels Established by Mission Commanders

* If The Training Situation Dictates, Mission Commanders May Set Lower Objectives, Even If Units Had Reached Full BUT Previously

* Bn and Higher Headquarters Will Conduct Annual CPX's, Or Other Exercises Without Troops (TEWT) To Maintain Proficiency

* Mission Commander Authorized to Allocate Paid Drill Time Among Cadre and Troops To Provide For More Cadre Training and Improve Training Preparation
Annual objectives within the RCTP would be expressed by stipulating the level of training tests to be accomplished during Annual Training in the summer, and the RCTP would lay out annual packages of training for each level through company, organized around drill periods or WETS sessions. Continuation training would be provided throughout the program, with special attention to cadre development. Operational readiness training and testing would be included for units below the level of the test objective.

8. Methods of Instruction

CATB, similarly, should lead in revision of FM 21-6, TECHNIQUES OF MILITARY INSTRUCTION, to break military training out of its institutional, "podium-pointer-poop" mold, and to point unit trainers toward dynamic training techniques suitable for employment in operating units. As importantly, the revision should adapt, for unit use, the best institutional techniques, especially those employing self-paced instruction, and other advanced learning techniques.

9. Augmentation for Training

US Army combat arms battalion TOEs have been scrubbed until there is virtually no flexibility left. However well designed these units may be for the combat missions of moving, shooting, and communicating, they are patently deficient for their primary peacetime mission of training. They are not adequately manned, equipped, or funded for training: most units have detail personnel working full-time on training functions at cost to tactical organizations; training devices are rudimentary; and flexible funds are not available for the training manager. Analysis should be undertaken to determine the potential of the British concept of adding full-time, school-trained instructor personnel to the battalion - e.g., weaponry instructors, or physical training coaches. At a minimum, the following structure changes would provide the personnel necessary for dynamic decentralized training:

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Company level TDA. In every Active Army combat arms company there is a training NCO and an assistant who prepare lesson plans and training schedules, coordinate training facilities and support, as well as maintaining the informal (and factual) types of individual training records which are essential to the commander. It is time to recognize officially what unit commanders consider essential, and authorize at company level:

1. A training NCO.
2. An assistant training NCO.

Company executive officers for ALO-2 units. Some units organized at ALO-2 have deleted from the TOE the executive officer position, which necessitates taking a platoon leader to perform the administrative, executive officer function. The cumulative effect is to remove a lieutenant from training a platoon; or burden further the company commander who, instead of training his company, is also required to do some of the executive officer’s duties or to devote more time to an NCO led platoon. The solution is to restore the company executive officer position for ALO-2 units.

Special signal detachment at Bde/Bn level. As better training devices, and special educational and communications equipment becomes available at company level, it will be necessary to provide experts to maintain and coordinate the use of the equipment. It is envisaged that a two man signal detachment will be required at Brigade level, dependent upon maintenance-experience factors.

Reserve Component Augmentation. The desire for closer association between Active Army and Reserve Component units should be met through increasing the present "advisor" complement. The objective should be to provide sufficient Active captains to permit extending actual, working assistance in the preparation of training down to Reserve Component company level -- where the training pay-off is. "Advisors" are not needed at the field grade level, where officers of many years experience are abundant. Where the Reservists want and need help is down where the training is taking place.
10. Money for Training Managers

Training managers for both the Active Army and the Reserve Components should be provided money which they can spend on training incentives and training aids. The Reserve Component manager needs appear to be more extensive, in that he could also use such funds to defray the cost of commercial transportation to WETS, and of communicating with CATB and/or the service schools on the subject of training techniques. In that respect, the Active Army should seek a way of providing a prepaid communications system -- something like Autovon -- for these managers. The Active Army should devise some sort of "travel bureau" service for RC trainers to coordinate transportation to special WETS for exciting and meaningful training -- this certainly should include coordinating Active and Reserve Air Force and Army airlift, and efficient commercial means.

11. Reserve Component Motivation

Deputy CG, CONARC, should propose a comprehensive set of incentives related to Reserve Component combat arms training for units including the following:

* Annual Option For Combat Arms MOS Test And Award of Proficiency Pay And Skill Badge
* Access to Improved Combat Arm Schools Correspondence Courses and UTEC
* Additional Quotas for CGSC And Combat Arm Schools
* Adventure Training:
  * Individuals To Ranger, Airborne, Pathfinder (Even If Not Assigned to An Airborne Unit)
  * Reconnaissance Units To Environmental FTX's (Jungle, Mountain, Desert With The Ranger Department Or Active Army Tactical Units)
The Army must act now to increase prestige for combat arms Reservists, and promote dynamic training in their units. Accordingly the Deputy CG, CONARC, should strongly support:

- Variable Reenlistment Bonuses for RC Combat Arms Personnel
- Guarantees of Active Duty for Rep-63 Personnel within 60 Days of Enlistment
- A Program of Bootstrap/Vocational Schooling, on the formula of 1 Year of Training per 6 Year Enlistment in the RC
- Full PX and Commissary Privileges
- Hazardous Duty Pay on the same scale used by Active Personnel
- Full Retirement Benefits at Age 55
- Full Survivor Benefits after completing 20 Qualifying Years in the RC
B. FUNCTIONS OF THE CATB.

Consistent with the foregoing, the Combat Arms Training Board is to undertake the following specific tasks:

* Monitor the establishment of audio-visual master stations at combat arms service schools for transmitting individualized training packets to units; initial costs to be funded by CATB, subsequent costs by each branch school.

* In conjunction with the OACS C-E, DA develop audio-visual professional training "stations" at company level in selected combat arms battalions in CONUS to receive service school material, using on-the-shelf commercial equipment (see Annex H). It is envisioned that each battalion would be authorized four company stations plus one of each item as backup. Each service school would require a company packet for compatibility testing and development of audio-visual instructional material.

* In consonance with CRD, BESREL, OACSFOR, and OACS C-E, assist in the development of MOS related, computer assisted instruction for field testing at PROJECT MASSTER in FY 72-73.

* Arrange for publication of additional references for NCO use in preparing for annual MOS proficiency tests to assure a plentiful supply in combat arms units.

* In conjunction with the US Army Training Device Agency, AMC, initiate limited R and D for modern training devices.

* Publish up to 12 issues of a Combat Arms Training Board serialized catalog, and other informal training literature, on training techniques and devices.

* Open direct lines of two-way communications with combat arms company and battalion commanders, to include training assistance visits.

* Act as an interface between Reserve Component combat arms units and service schools, as necessary, to promote communication on training technique, and foster meaningful mutual support programs between RC combat arms units and Active Army counterparts.
Devise a workable, two-way communications system between the RC training manager and the training establishment, to provide the RC combat arms unit:

- Combat arms school packets of instruction
- Informal training literature
- Catalog of training technique
- Answers to questions on training problems

Assume proponency for revision of FM 21-5 (Training Management) and FM 21-6 (Techniques of Military Instruction).

Focus upon energizing the training establishment with the goal of disbanding the Combat Arms Training Board by the end of FY 1975.

Submit a charter and budget for approval not later than 17 February 1972.

C. FUNCTION OF THE DEPUTY CG, CONARC (Training).

There exists a bifurcation of training responsibility throughout all strata of the Army above company level. ODCSPER, OACSFOR, ORC, OCRD, and intermediary levels have established vertical lines of communication for their parochial piece of the training pie. With the great complexity of the training task, it is necessary to insure that all is done to streamline procedures and establish lateral as well as vertical lines of communication in order to expedite and revitalize support for decentralized training. It is envisaged that a Deputy CG, CONARC, will monitor and communicate training matters at basically three levels: the DA staff, the training support level, and directly at the unit level through the CATB:

At the DA staff level, Deputy CG, CONARC, will act as an interface on matters affecting unit training with DCSPER, ACSFOR, CORC, CRD, DCSLOG, and other principals.
At the training support level, he will shepherd training actions among CDC, AMC, EEC, etc. In addition, through CATB he will optimize training support provided by the service schools for units.

At the unit level, active as well as reserve components, through CATB, he will listen to the trainer's problems and search the training establishment for feasible solutions. A real-time communications link will be maintained through:

1. Informal training literature.
2. Answering questions from the field.
3. Visits by CATB training assistance teams.