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ARMY TRAINING BASE CAPACITY. REVISION, (U)  
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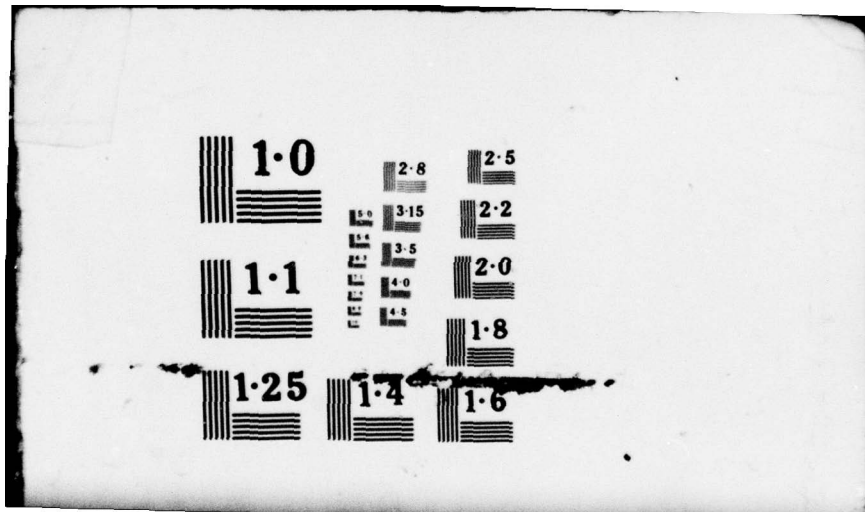
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The study analyzes the time-phased capacity of the Army's recruit training base after mobilization is announced. Emphasis is on the effect of the several limiting factors on optimum capacities.		

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ARMY TRAINING BASE CAPACITY

INPUT CAPACITIES BASED ON  
TRAINING BASE FORCE STRUCTURE

ABSTRACT

This study of Army Training Base Capacity is a revision of an earlier paper dated 13 April 1979. The revision is based upon comments received from the Director of Mobilization and Deployment Planning, OASD, MRA & L and the Army Staff. An expanded summary and conclusions and recommendations precede the main study.

ARMY TRAINING BASE CAPACITY

INPUT CAPACITIES BASED ON  
TRAINING BASE FORCE STRUCTURE

Summary

1. The purpose of this analysis is to examine the time-phased input capacity of the Army's mobilization recruit training base. Time frame is 1979.
2. Calculating finite capacities is a complex task because of the many and variable limiting factors which must be considered. Mobilization input capacity at any given training center is a function of:
  - a. Training base force structure: training companies and instructors.
  - b. Training equipment: tanks, machine guns, rifles, etc.
  - c. Training facilities: ranges, classrooms, maneuver areas, etc.
  - d. Installation support: housing, utilities, messing, supply, transport medical, finance, etc.
  - e. Competing requirements: deployment and mobilization, other installation missions.
3. The limiting factor most easily measured is the size of the training base force structure, quantified in terms of training companies. This, then, is the starting point. Assuming all other limiting factors away, and further assuming that the training companies are manned, equipped, and trained to perform their wartime mission prior to M-day, an initial estimate of training base capacity can be made using the number of training companies as the sole criterion. This is essentially the technique that has been employed by the Army staff in their calculations to date.
4. Using these assumptions, the optimum monthly input capacity of the Army training base is:

Months:	M+1	M+2	M+3	M+6
Cumulative Inputs:	95K	190K	308K	616K

5. a. The above inputs were achieved using a 40-hour training week and the Army's optimum load of 220/trainees per company. Training companies were filled and began training immediately after M-day in a regular and orderly manner to achieve an optimum posture

within the training cycle, with companies evenly spread (e.g., if there were 24 companies and the cycle was 12 weeks, 2 companies would start each week).

- b. Within the context of this optimum posture, inputs can be increased in two ways: (1) increase the number of trainees per company, and/or (2) shorten the course length by training the same number of hours in fewer weeks (10-hour days, 6-day weeks). It should be noted that a favorable legal interpretation would be required in order to shorten the 12-week mandatory requirement for recruit training using this equivalency technique. The Summary Table (Part A) shows the effects of these parametric changes. (A 48-hour week is also addressed in the analysis.)

#### SUMMARY TABLE

##### CUMULATIVE MONTHLY INPUT CAPACITIES (000's)

	Hours/ Week	Trainees/ Company	M+1	M+2	M+3	M+6
A. Optimum Capacities	40	220	94.8	189.6	308.1	616.2
		275	118.8	237.6	386.1	772.2
	60	220	142.0	285.6	464.1	928.2
		275	178.8	357.6	581.1	1162.2
B. Considering Personnel Shortages	40	(Note)	48.4	131.1	250.7	636.8
	60	(Note)	72.8	197.3	377.3	958.4

NOTE: Assuming Active Army training companies begin accepting 275 trainees per company at M-day; USAR training companies beginning at M+4 weeks, conduct first cycle (12 weeks) at 220/Company, then surge to 275/Company. Personnel shortages filled by M+3 months.

6. a. The optimum posture described above (i.e., training companies evenly spread through the cycle) has the advantage of minimizing bottlenecks caused by any of the limiting factors previously listed. It also optimizes administrative and logistic support. Further, in

a mobilization situation, it initially provides training companies (waiting to start) for use in short refresher/retraining courses.

- b. In the short-warning scenario, this orderly approach will not suffice. Given the urgent requirements for maximum early output of trained replacements, there will be great pressure to "front-end load" the training base. In such a situation, front-end loading would be justified up to some upper limit. That limit would be defined by the ability to maintain minimum standards of training quality and by the ability to overcome bottlenecks. Front-end loading would produce increased early output, but, in the long run, no increase in total output without an increase in training force structure.
7. The capacities shown in Part A, Summary Table must be considered maximums. In fact, they are not currently attainable because they are based on assumptions which put aside the important limiting factors listed in paragraph 2 above.
- a. The training base force structure (78% of which comes from USAR Training Divisions) is not manned to accomplish its wartime mission. The USAR Training Divisions are at about 50% of wartime strength. Part B, Summary Table, shows the effect of these personnel shortages on training base capacity.
  - b. The training base force structure is not equipped to accomplish its wartime mission. There are serious shortages in peacetime authorizations (i.e., equipment for "training the trainers"). There is no identified source of wartime equipment needed to train the trainees.
  - c. The training divisions are not trained to accomplish their wartime missions. They are currently undergoing a major reorganization into the OSUT configuration. This will require large numbers of drill sergeants and instructors to qualify in new MOS's. This reorganization will take 1-2 years to complete. Even then personnel and equipment shortages will inhibit the achievement of training readiness.
  - d. There is a technical documentation problem involving MTOE vs. MTDA authorization documents. Unless this is favorably resolved, the training divisions will be bureaucratically prevented from attaining wartime levels of personnel and equipment until M-day is upon them. Given their low priority as non-deploying units, post M-day fill will be slow.
  - e. Tanks present a particularly serious problem for armor training. The tank modernization program has given rise to a large family of "prime" tanks. The priority system properly insures that front-line units get the most modern tanks. The USAR portion of the armor training base (90% in terms of training companies) receives the least modern. Yet these training units are charged with training combat replacements for front-line units. In the near future

This means trainers equipped with M48A5 tanks will be training replacement crew members for M60A3 and XM-1 models. There is also a serious quantitative problem. Large numbers of tanks will be required for post M-day training. A potential source is the equipment left behind by units deploying to POMCUS stocks, however, the current priority system relegates the non-deploying USAR training divisions to last in line.

- f. Similar problems will occur for infantry and reconnaissance training when the Infantry Fighting Vehicle and Cavalry Fighting Vehicle replace the M-113 Armored Personnel Carrier.
- g. Assumptions that training facilities and installation support as defined above will be adequate cannot be considered valid until after a detailed survey is made. This can only be done properly at the installation level. Installation commanders should be informed of the total requirement expected of them and then match requirement against assets. Shortfalls can thus be identified, and programs and budgets can be formulated in an effort to close the gap between assumption and fact. Where shortfalls are very large, it may be more prudent to shift training loads among installations.
- h. All installations which will conduct post-mobilization recruit training are also major mobilization and deployment stations. Exercise Nifty Nugget (Army MOBEX 78) revealed very heavy demands on installation facilities and support operations during the turbulent post M-day period. Installation commanders must consider these high priority mobilization and deployment requirements when they are examining their capability to support concurrent training base expansion. Future mobilization exercises should include full consideration of training expansion.



## CONCLUSIONS

1. The training base capacities calculated in this analysis (and those calculated by the Army staff to date) cannot be achieved in the current time frame because they are based on invalid assumptions. Specifically:
  - a. The USAR training divisions represent 78% of the mobilization recruit training base (90% of infantry and armor training). They are not manned to perform their wartime mission. Assigned strength is currently about 50% of required.
  - b. The USAR training divisions are not equipped to perform their wartime mission. Further, they are not now equipped to perform their peacetime mission of training themselves to be trainers.
  - c. The USAR training divisions are not trained to perform their wartime mission. This is due largely to the reorganization into OSUT configuration, personnel shortages, and equipment shortages.
  - d. There is a serious documentation problem which threatens to freeze the training divisions into peacetime manning and equipment levels which are too low.

## RECOMMENDATIONS

1. All of the major limiting factors on training base capacity must be addressed before realistic estimates can be made. The Army should make and maintain a realistic, current time-frame estimate for war planning purposes. It should then methodically plan and program for expansion of capacity by reducing the effects of the major limiting factors.
  - a. Recruiting incentives should be considered for these important units. Additionally, while employed and deploying units must have priority on pretrained manpower pools (IRR, Retirees, Veterans), careful screening will identify limited service or otherwise non-deployable personnel who could be preassigned to the training base particularly among retirees.
  - b. DAMPL priorities should be reviewed for these units. The current system puts them last because they do not deploy. Peacetime authorized equipment should be expedited in parallel with the on-going reorganization into OSUT configuration. Wartime stocks of equipment should be identified and earmarked.
  - c. Expedite the current reorganization. Key personnel in the training divisions must be given every opportunity to "practice their art" during AT and IDT. Implement a. and b. above.
  - d. Whatever the format, MTOE's or MTDA's the approved authorization documents should reduce the gap between peacetime and wartime levels of personnel and equipment.

e. There are special problems in the training of armor personnel:

(1) There is a qualitative problem due to the wide spectrum of prime tank models. (Note: similar problems will exist for infantry and cavalry with the advent of the new fighting vehicles, IFV and CFV.)

(2) There is no identified source of tanks to be used by the training divisions after mobilization.

f. There is not now available sufficient hard data on installation base support and training facilities with which to estimate the effect of these limiting factors on training base expansion.

g. Mobilization and deployment of AC and RC units at those installations which are also post-mobilization training centers will cause turbulence and additional strains on all facilities.

2. In a short warning scenario, front-end loading of the training base to the upper limits of capacity will be necessary in order to maximize early output.

3. In the long run, the most efficient training posture avoids front-end loading and strives for an even distribution of trainees throughout the training cycle.

(1) An exception to the DAMPL should be made for the USAR training divisions (as it is now for the Active Army center at Ft. Knox) so that the newer models can be "seeded" into the training units for familiarization.

(2) Consideration should be given to earmarking all or a significant number of the tanks which will be left behind by units deploying to POMCUS. Alternatively, tank production and rebuild programs should be increased.

f. This data should be compiled by a detailed installation-by-installation survey. The most current Army requirements for each installation should be matched against actual capabilities. Shortfalls can then be addressed in annual programming and budgeting and/or by shifting training requirements among installations.

g. The facilities survey in f. above must take these other post-mobilization missions into account. Training should be completely integrated into all future mobilization exercises.

2. This should be foreseen and planned for. Installations must know what is expected of them in order to plan and program for maximum capacity and reduction of bottlenecks.

3. Training centers should work toward achieving the optimum posture as soon as the situation permits, after M-day.

4. Training base capacity can be increased by increasing the number of trainees per company (surge).
5. Training base capacity can be increased by shortening course lengths. This can be done by training the same number of hours in longer days and/or weeks.
4. Active Army training companies should plan to surge immediately after M-day. USAR training companies should probably wait until the second cycle to do so, in light of probable personnel and equipment shortages.
5. This effective expedient should be used. However it will require a favorable legal opinion which approves conducting the equivalent of 12 mandatory weeks of training in a shorter time period.

## ARMY TRAINING BASE CAPACITY

### INPUT CAPACITIES BASED ON TRAINING BASE FORCE STRUCTURE

#### A. INTRODUCTION

1. a. Calculation of the time-phased capacity of the Army's training base after mobilization is a complex task. There are many limiting factors to consider. Some important ones are: (1) size and readiness of the training base force structure; (2) shortages of key items of training equipment; (3) availability of ranges and training space; and (4) adequacy of housing and other base support facilities for trainees and trainers. All of these factors operate singly and together to create constraints on training base capacity. The relative importance of any one factor varies depending on the type of training and specific installation being considered. Finally, all the constraints will be exacerbated by the turbulence resulting from mobilization and deployment of AC and RC units. These units will be competing for many of the same resources as the training base (i.e., personnel, equipment, training facilities, and base support).
  - b. It is important to establish the time-frame in which the capacity of the training base is calculated. A necessary starting point is now -- 1979. This will establish a baseline understanding of present capabilities and limitations. From this baseline, the impact of future programs and decisions can be assessed more accurately.
  - c. Training base capacity may be measured in two principal ways: (1) input to the system; and (2) output of the system. Input capacity is of interest to planners dealing with Selective Service requirements, AFEES capacities, etc. Outputs are useful in comparisons with time-phased post M-day pretrained manpower. This analysis will initially be concerned with input capacities. Later, by applying attrition rates and length of training cycles, it will be possible to establish outputs.
2. The limiting factor most easily measured and common to all training installations is the size of the training base force structure, quantified in terms of training companies. A training company is a cadre of leaders, drill sergeants and support personnel capable of accepting, administering and training a group of trainees. There are two types of training companies which accept recruits (input), One Station Unit Training (OSUT) companies and Basic Training (BT) companies. The first estimates of training base capacity made below will be based on training company capacities, assuming, for the moment, that other limiting factors are secondary. Specifically, this means that, for the first set of calculations, we are assuming: (1) the training companies of the Active and Reserve forces are at full strength on M-day, (2) they are trained and equipped to accomplish their mission, and (3) Army installations can support the increased training load concurrently with other post-mobilization missions. (The Army staff, in its own estimates of training base capacity, has used the same criterion and assumptions.)

B. CALCULATION OF INPUT CAPACITIES

3. Optimum Training Posture vs. Front-End Loading

- a. It is important to understand how a training center functions most efficiently. Every training commander strives to achieve a posture in which his training companies are spread evenly through each week of the training cycle. For example, if there were 24 companies available to conduct a 12-week course, it would be most efficient to start two companies each week. This posture has several advantages:
- (1) It minimizes the effect of bottlenecks caused by limited training facilities (ranges, special sites, etc.). Every training center has one or more such bottlenecks.
  - (2) It calls for a smooth flow of recruits from the AFEES which is matched to input capacity.
  - (3) It optimizes administrative and logistic support.
- b. A temporary increase or surge in input might be achieved after M-Day by filling all available training companies as soon as trainees are available. This will not produce an equivalent surge in early output, however, due to the inevitable accordion effect which will pile trainees up at critical bottlenecks. There will also be later drops or gaps in output due to sporadic nonavailability of training companies to accept new recruits each week. "Front-end loading" a training cycle is not normally desirable.
- c. Though not desirable, such front-end loading may be the best course of action during the initial weeks after M-Day when the demand for combat replacements is highest. Faced with a requirement for maximum output quickly, the Army might devote all or a portion of its training base capacity to a series of short refresher retraining courses (2-4 weeks) for selected IRR personnel, veterans, trainees already in training but not in combat skills, and active duty support personnel who might be redesignated into combat skills. Such a situation would justify front-end loading up to some upper limit. That upper limit would be defined by the requirement to maintain standards of quality training and by the ability of each separate training installation to minimize the bottlenecks in its courses of instruction.
- d. The increases in early training inputs and outputs which might be realized by this sort of contingency training operation could only be measured after a detailed installation-by-installation survey. Each installation would have to be notified as to the types and duration of courses it would conduct in the initial period after

M-Day. It could then set out to minimize training bottlenecks accordingly. If this were done innovatively (e.g., using floodlights to make training facilities equally usable after dark) and if adequate resources were made available, a major increase in early input and trained output could be realized.

- e. Because of the difficulty in quantifying the increases in training base capacity as a result of front-end loading (and assessing the impact of later drops or gaps in output), this course of action has not been included in the calculations made below. In the long run, there will be no net increase because borrowing force structure (training companies) for early use must be repaid later, unless there is a net increase in structure.
- f. Increased inputs can be achieved in two other ways: (1) reduce the length of the training cycle by eliminating or drastically reducing time between courses devoted to fill and maintenance; (2) place a larger number of trainees in each training company. These two measures are, in fact, used by Active Army Training Centers now, during summer months, when there is a seasonal surge in volunteer enlistments.
- g. A third method for surging capacity is to increase the number of hours and/or days per week devoted to training. By this device a 12-week, 480 hour (40/hours/week) course can be reduced to 10 weeks (48 hours/week) or 8 weeks (60 hours/week). Judgement must be exercised here, however. There is a legal requirement at present for 12 weeks of mandatory training a recruit must receive before being deployed overseas. The current interpretation of this requirement is 12 calendar weeks. A new legal opinion will be required and a decision implemented before equivalency (480 hours in 10 or 8 weeks) could produce trained output any faster. This is not to say that training hours should not be stepped up after mobilization. There are other advantages to be gained in training intensity and depth of coverage of important subjects.

#### 4. Calculating Weekly Input Capacities

- a. Assuming that the training base force structure is capable of achieving the optimum training posture described above, weekly input capacities can be determined by the following formula:

$$\frac{\text{Input Capacity}}{\text{Week}} = \frac{\text{Trainees/Training Company} \times \text{Number Training Companies}}{\text{Course Length in Weeks}}$$

- b. Trainees per Training Company: Current Army staff planning factors:
  - (1) Optimum -- 220 trainees/company,
  - (2) Surge -- 275 trainees/company.

- c. Number of Training Companies -- Active Army Training Centers: Table 1. Source: FY 77-80 Training Base Structure, 21 March 1979, furnished by DA staff, (from TRADOC Msg. 0222107 Mar. 79).
- d. Number of Training Companies -- Army Selected Reserve Training Divisions: Table 2. Source: FORSCOM Report to DA, Subject: General Accounting Office (GAO) Request for Information, dated 6 April 1979. (Revised by TRADOC comment on earlier version of this analysis.)
- e. Course Lengths: Table 3. Source ARPRINT-COURSES-1979, 9 January 1979, furnished by DA staff. Course lengths in this document are based on 40 hour weeks. Equivalent course lengths for 48 and 60 hour weeks are also shown in Table 3. (Revised by TRADOC comment, op. cit.)

TABLE 1  
 TRAINING COMPANIES  
 CURRENT ARMY TRAINING CENTERS

Installation	Type Training (OSUT)	OSUT Co's.	Basic Co's.
Ft. Dix	SPOT - Self-paced one-station specialized training	17	18
Ft. Knox	Armor	15	--
	Recon	9	--
	Inf. TST -2d $\frac{1}{2}$ Benning	13	--
Ft. Jackson	Basic only	--	36
Ft. Len Wood	Engineer	24	16
Ft. Benning	Infantry	20	--
Ft. Sill	Artillery	16	9
Ft. Bliss	Artillery	14	--
Ft. Gordon	Signal	26	--
Ft. McClellan	Military Police	16 (1 female)	9 (female)
<hr/> TOTAL		170	88



TABLE 2  
 TRAINING COMPANIES  
 U.S. ARMY RESERVE TRAINING DIVISIONS

Training Division	Installation	Type Training	OSUT Co's		BT Co's	
		OSUT	Required (Wartime)	Authorized (Peacetime)	Required (Wartime)	Authorized (Peacetime)
70	Ft. Benning	Infantry	62	62	5	5
76	Ft. Campbell	Infantry	32	32	17	17
78	Ft. Dix	Infantry	49	49	--	--
80	Ft. Bragg	Infantry	78	60*	16	5*
84 5th Bde	Ft. Hood	Armor	70	48	--	--
		Artillery	26	18	--	--
		Recon	26	18	--	--
85	Ft. Bliss	Armor	52	34	--	--
		Recon	13	13	--	--
91	Ft. Ord	Infantry	65	25*	24	16*
95	Ft. Polk	Infantry	80	80	--	--
98	Ft. L. Wood	Engineers	50	50	--	--
100	Ft. Knox	Armor	39	39	--	--
		Recon	26	19*	--	--
104	Ft. Lewis	Infantry	78	65*	16	8*
108	Ft. Jackson	Infantry	80	80	--	--
TOTAL			826	692	82	55

\* Note that four training divisions have significantly different numbers of companies in the required (wartime) and authorized (peacetime) columns. This anomaly in organization is a serious one because training divisions are expected to perform their mission very soon after M-Day. This problem has been recognized and is under study by the Army Staff. Further discussion is in paragraph 15 b.(3) below.

TABLE 3  
 COURSE LENGTHS  
 RECRUIT TRAINING COURSES

Course	Course Length		
	40-Hour Week	48-Hour Week	60-Hour Week
Infantry OSUT			
Artillery OSUT			
Engineer OSUT	12.0	10.0	8.0
Armor OSUT			
Recon OSUT			
Basic Training	7.0	5.8	4.6

NOTE: These course lengths do not include fill time or maintenance weeks.

C. OPTIMUM AND SURGE CAPACITIES -- TRAINING BASE AT WARTIME STRENGTH

5. The following four tables (4-7) depict the weekly input capacity of the Army Training Base under optimum conditions. That is:
- a. The optimum training posture has been achieved or can be achieved starting immediately.
  - b. Training companies are at wartime strength, prepared to receive optimum or surge loads.
  - c. No allowance has been made for fill or maintenance weeks in determining course lengths. This assumption may be valid initially but cannot continue indefinitely. However, some "nice-to-have" training may be found in current peacetime POI's which could be removed to make room for these important phases.
  - d. The number of training companies is the single limiting factor.

6. Capacity of Active Army Training Centers

- a. Table 4 shows weekly input capacities for each training center now operating. Inputs have been calculated for optimum (220) and surge (275) loads and 40, 48, and 60 hour training weeks.
- b. Table 5 arranges the input capacities from Table 4 by type of training: combat arms, basic training and other.

7. Capacity of Reserve Training Divisions

Table 6 shows the weekly input capacity of each Army Reserve Training Division calculated by the same means as for Tables 4 and 5. Also shown are the installations to which each division reports upon mobilization and the types of recruit training it will conduct.

8. Total Optimum and Surge Capacities

Table 7 combines input capacities of active and reserve training structures. It also shows totals by type of training.

9. a. The preceding tables depict the capacity of the training base in an optimum posture. The only limiting factor was the number of training companies, and these were considered to be at full strength. These capacities could only be expected at M-day if there was a warning period long enough to get the training structure fully established with filler personnel, equipment, facilities, and housing. Even then, a firm policy of keeping this structure intact after M-day and D-day would be required.
- b. These tables are not "pie-in-the-sky" however. They will serve in this analysis as a baseline. From this baseline, the effect of the main limiting factors can be assessed and the capacities reduced accordingly. It will also be possible to estimate the increases in capacity of future corrective actions and programs.

TABLE 4  
ACTIVE ARMY TRAINING CENTERS  
WEEKLY INPUT CAPACITIES

Installation	Optimum Weekly Input (220/Co)			Surge Weekly Input (275/Co)		
	40 Hour Week	48 Hour Week	60 Hour Week	40 Hour Week	48 Hour Week	60 Hour Week
Ft. Dix	877	1,057	1,329	1,087	1,321	1,660
Ft. Knox	787	947	1,192	985	1,184	1,490
Ft. Jackson	1,131	1,366	1,721	1,414	1,707	2,152
Ft. Len. Wood	943	1,135	1,425	1,179	1,418	1,782
Ft. Benning	367	440	550	458	550	688
Ft. Sill	576	693	870	721	867	1,088
Ft. Bliss	257	308	385	321	385	481
Ft. Gordon	477	572	715	596	715	894
Ft. McClellan	723	874	1,094	904	1,093	1,368
<b>Total Per Week</b>	<b>6,138</b>	<b>7,392</b>	<b>9,281</b>	<b>7,675</b>	<b>9,240</b>	<b>11,603</b>

TABLE 5  
WEEKLY INPUT CAPACITIES  
BY TYPE OF TRAINING  
ACTIVE ARMY TRAINING CENTERS

Type Training	Optimum			Surge		
	40 Hour Week	48 Hour Week	60 Hour Week	40 Hour Week	48 Hour Week	60 Hour Week
Infantry	776	933	1,172	969	1,166	1,465
Armor & Recon	378	454	570	474	568	713
Artillery (incl. Missiles)	550	660	825	688	825	1,031
Engineer	440	528	660	550	660	825
<b>Total Combat</b>	<b>2,144</b>	<b>2,575</b>	<b>3,227</b>	<b>2,681</b>	<b>3,219</b>	<b>4,034</b>
<b>Basic Training</b>	<b>2,482</b>	<b>2,997</b>	<b>3,777</b>	<b>3,104</b>	<b>3,745</b>	<b>4,723</b>
<b>Other:</b>						
Signal	477	572	715	596	715	894
Military Police	440	533	664	550	666	830
SPOT	312	374	468	390	468	584
Female Basic	283	341	430	354	427	538
<b>Total</b>	<b>1,512</b>	<b>1,820</b>	<b>2,277</b>	<b>1,890</b>	<b>2,276</b>	<b>2,846</b>
<b>GRAND TOTAL PER WEEK</b>	<b>6,138</b>	<b>7,392</b>	<b>9,281</b>	<b>7,675</b>	<b>9,240</b>	<b>11,603</b>

TABLE 6

## WEEKLY INPUT CAPACITIES

## USAR TRAINING DIVISIONS AT WARTIME STRENGTH

Type OSUT	Training Division	Installation	Optimum (220/Co)			Surge (275/Co)		
			40 Hour Week	48 Hour Week	60 Hour Week	40 Hour Week	48 Hour Week	60 Hour Week
Infantry	70	Ft. Benning	1,137	1,364	1,705	1,421	1,705	2,131
	76	Ft. Cambell	587	704	880	733	880	1,100
	78	Ft. Dix	898	1,078	1,348	1,123	1,348	1,684
	80	Ft. Bragg	1,430	1,716	2,145	1,787	2,145	2,681
	91	Ft. Ord	1,192	1,430	1,788	1,490	1,788	2,235
	95	Ft. Polk	1,467	1,760	2,200	1,833	2,200	2,750
	104	Ft. Lewis	1,430	1,716	2,145	1,788	2,145	2,681
	108	Ft. Jackson	1,467	1,760	2,200	1,833	2,200	2,750
Total Infantry			9,608	11,528	14,411	12,008	14,411	18,011
Armor & Recon	84	Ft. Hood	1,760	2,112	2,640	2,200	2,640	3,300
	85	Ft. Bliss	1,192	1,430	1,788	1,490	1,788	2,235
	100	Ft. Knox	1,192	1,430	1,788	1,490	1,788	2,235
Total Armor			4,144	4,972	6,216	5,180	6,216	7,770
Artillery	84	Ft. Hood	477	572	715	596	715	894
Engineer	98	Ft. L. Wood	917	1,100	1,375	1,146	1,375	1,719
Basic Training	70	Ft. Benning	157	190	239	196	237	299
	76	Ft. Campbell	534	645	813	668	806	1,016
	80	Ft. Bragg	503	607	765	629	759	957
	91	Ft. Ord	755	911	1,148	944	1,139	1,436
	104	Ft. Lewis	503	507	765	629	759	957
Total Basic Training			2,452	2,960	3,730	3,066	3,700	4,665
GRAND TOTAL			17,598	21,132	26,447	21,996	26,417	33,059

TABLE 7  
TOTAL WEEKLY INPUT CAPACITIES  
(000's)

	Time Period		Optimum (220/Co)			Surge (275/Co)		
	Weeks	Months	40 Hour Week	48 Hour Week	60 Hour Week	40 Hour Week	48 Hour Week	60 Hour Week
	<b>Total Active</b>			6.1	7.4	9.3	7.7	9.2
<b>Total Training Divisions</b>			17.6	21.1	26.4	22.0	26.4	33.1
<b><u>Grand Total</u></b>	<b>M+1</b>		23.7	28.5	35.7	29.7	35.6	44.7
	<b>M+4</b>	1	94.8	114.0	142.0	118.8	142.4	178.8
	<b>M+8</b>	2	189.6	228.0	285.6	237.6	284.8	357.6
	<b>M+13</b>	3	308.1	370.5	464.1	386.1	462.8	581.1
	<b>M+26</b>	6	616.2	741.0	928.2	772.2	925.6	1162.2
<b>Infantry</b>			10.4	12.5	15.6	13.0	15.6	19.5
<b>Armor</b>			4.5	5.4	6.8	5.7	6.8	8.5
<b>Artillery</b>			1.0	1.2	1.5	1.3	1.5	1.9
<b>Engineers</b>			1.4	1.6	2.0	1.7	2.0	2.5
<b><u>Total Combat</u></b>	<b>M+1</b>		17.3	20.7	25.9	21.7	25.9	32.4
	<b>M+4</b>	1	69.2	82.8	103.6	86.8	103.6	129.6
	<b>M+8</b>	2	138.4	165.6	207.2	173.6	207.2	259.2
	<b>M+13</b>	3	224.9	269.1	336.7	282.1	336.7	421.2
	<b>M+26</b>	6	449.8	538.2	673.4	564.2	673.4	842.4
<b><u>Basic Training</u></b>	<b>M+1</b>		4.9	6.0	7.5	6.2	7.4	9.4
	<b>M+4</b>	1	19.6	24.0	30.0	24.8	29.6	37.6
	<b>M+8</b>	2	39.2	48.0	60.0	49.6	59.2	75.2
	<b>M+13</b>	3	63.7	78.0	97.5	80.6	96.2	122.2
	<b>M+26</b>	6	127.4	156.0	195.0	161.2	192.4	244.4
<b><u>Other</u></b>	<b>M+1</b>		1.5	1.8	2.3	1.9	2.3	2.8
<b><u>Grand Total</u></b>	<b>M+1</b>		23.7	28.5	35.7	29.7	35.6	44.7
	<b>M+4</b>	1	94.8	114.0	142.0	118.8	142.4	178.8
	<b>M+8</b>	2	189.6	228.0	285.6	237.6	284.8	357.6
	<b>M+13</b>	3	308.1	370.5	464.1	386.1	462.8	581.1
	<b>M+26</b>	6	616.2	741.0	928.2	772.2	925.6	1162.2

D. TIME-PHASED CAPACITY -- CONSIDERING STRENGTH SHORTFALLS

10. Strength Shortfalls

- a. There may be personnel shortages in the current Active Army training base vis-a-vis required wartime strength. It is anticipated, however, that these can be quickly filled, at least in the OSUT and BT (input) companies, from other parts of the training base which will discontinue or sharply curtail activity in the immediate post M-day period.
- b. There is a serious strength shortfall in the Reserve Training Divisions, however. Table 8 shows required (wartime), authorized (peacetime) and assigned strengths of these units as of 28 February 1979. The Army planning factor for show-rate for the Selected Reserve is 95%. Thus, today the training divisions can be expected to arrive at their mobilization stations at 95% x 51% or 48% of required strength.
- c. The next set of calculations will consider these shortfalls. Some realistic assumptions will be made in order to time-phase the build-up of training capacity from an M-day preceded by little or no warning.

11. Active Army Training Centers

- a. Table 9 shows the status of the Army's Training Centers on 5 January 1979.
- b. Note that each training center has companies which could, if required, immediately begin to accept post M-day input. Admittedly, January is a seasonally low point in the training calendar. Total utilization of the active training base depicted in Table 9 is 56%. There are months during the summer when utilization surges to or slightly beyond 100%. This begins some time in June and ends in September. It is accomplished by eliminating or drastically cutting fill and maintenance time. However, during these months the training centers are operating with a "full head of steam" and in most cases are in an optimum posture of training efficiency (i.e., training companies spread evenly through the weeks of the training cycle).
- c. In light of the above, it can be assumed that training companies in Active Army training centers can accept their optimum (or surge) input capacities in the first week following M-day.

12. Reserve Training Divisions

- a. Strength and training readiness of individual training companies vary widely within and among the training divisions. It may be necessary to reinforce companies receiving initial inputs with personnel resources (especially drill sergeants) from other companies within the division, including GST companies. This could cause a lull, or drop, in input when trained resources have been stretched thin.



TABLE 8  
PERSONNEL STRENGTHS  
U.S. ARMY RESERVE TRAINING DIVISIONS

Division	Required*	Authorized *	Authorized	Assigned**	Assigned	Assigned
	(Wartime)	(Peacetime)	as % of Required	28 Feb 79	as % of Authorized	as % of Required
	No.	No.	%	No.	%	%
70	3,886	3,120	80	2,229	71	57
76	3,395	2,412	71	2,177	90	64
78	3,251	2,423	75	1,780	73	55
80	5,885	2,614	44	2,755	105	47
84	4,993	3,102	62	2,237	72	45
85	4,373	2,443	56	1,658	68	38
91	3,533	2,445	69	1,790	73	51
95	3,950	3,153	80	2,343	74	59
98	5,293	3,120	59	2,539	81	48
100	5,755	2,624	47	2,391	91	42
104	5,286	3,175	60	2,507	79	47
108	5,109	3,155	62	3,403	107	67
TOTAL	54,709	33,786	62%	27,809	82%	51%
(Shortage)		(20,923)		(26,900)		

\* Source: MTOE

\*\* Source: RCPAC data furnished by Office, Chief of Army Reserve.

TABLE 9  
ACTIVE ARMY TRAINING CENTERS  
STATUS -- 5 JANUARY 1979

Installation	TST									
	Bliss	Dix	Jackson	Knox	Knox	Sill	Wood	McC	Benn	Gordon
Training Companies-OSUT	-	13	-	19	14	27	15	16	21	21
Training Companies-BT	9	20	40	7	-	9	18	-	-	-
Total	9	33	40	26	14	27	33	16	21	21
Number in Training	5	21	21	20	11	17	23	14	13	16
Number in Maintenance*	3	7	16	4	1	8	6	1	6	4
Number in Fill*	1	5	3	2	2	2	4	1	2	1
Average Company Size:										
OSUT	-	51	-	81	-	-	166	167	172	-
BT	112	111	163	138	157	135	112	-	-	228

\* - These companies are available to fill to optimum or surge capacity should the need arise.

- b. All training divisions report to mobilization stations by M+12 days (except the division reporting to Benning, M+14). They have all been to these stations before and, in most cases, conducted actual training there. It can therefore be assumed that the training divisions can begin to accept trainee input into their best prepared training companies during the third week (M+3 weeks) or the fourth week (M+4 weeks) after mobilization
- c. NOTE: Current Army staff projections of training capacity envision that training of recruits will not begin until M+7 weeks at five installations now under FORSCOM command. The reasons given are that turbulence caused by deployment of active divisions which now occupy these posts, the need to build up stocks of high turnover equipment, and the requirement to augment base operations capabilities, will preclude an earlier start. This may be the case. However, all 12 installations to which reserve training divisions report are major mobilization stations and face similar problems. Mobilization and deployment turbulence is an across-the-board limiting factor, and, as such, will be considered later in this analysis.
- d. The initial shortages of trained personnel (trainers) can be overcome in a number of ways:
- (1) Retirees are an excellent source for training base personnel. Time required to access, condition, and conduct necessary refresher training is difficult to estimate, but this source must not be overlooked. <sup>1/</sup>
  - (2) Veterans with training experience may be induced to volunteer. Future programs may be designed to conscript qualified veterans.
  - (3) IRR personnel will be in great demand by deploying units and it must be assumed that those units will get priority. However, careful screening of the IRR will inevitably reveal some number of limited service and non-deployable personnel who could be used in the training base.
  - (4) Partially trained drill sergeants and other key personnel will become trained by OJT and observation. Increased capacity here will show itself markedly after one complete cycle of training.
  - (5) Retention of promising trainees for use in a following cycle as assistant drill sergeants. These individuals will permit trained drill sergeants to move to the most critical positions.

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<sup>1/</sup> See concurrent study, William G. Stewart, Mobilizable Inventories of Military Retirees, Washington, D.C.: Linton & Company, Inc. 1979. Data now available shows that virtually the entire current personnel shortage in Training Divisions (27K) is matched by the pool of retirees with combat MOS who have been retired less than 10 years.

13. Time-Phased Weekly Input Capacities

- a. Table 10 depicts one estimate of weekly input capacity based on the foregoing discussion.
- b. The following assumptions were made:
  - (1) The 12 calendar weeks of mandatory training required before deploying a new recruit remains in effect. Therefore, capacities for a 40-hour week were used. (Table 11 uses 60-hour week.)
  - (2) Active Army training companies begin immediately upon mobilization to accept inputs at surge capacity (275 trainees/company).
  - (3) Training Division companies begin accepting trainees after M+3 weeks at optimum capacity (220/company). Surge capacities will begin after first cycle, M+15 weeks for a 12-week OSUT cycle, M+10 for Basic Training. (In Tables 10-11 a combined surge is shown after M+12.)
  - (4) A severe drop in input capacity occurs after M+6 weeks due to shortages of trained personnel. This is an initial drop of 52% chosen rather arbitrarily, but related to overall strength shortfalls of assigned vs. required.
  - (5) Capacities gradually improve from M+6 to M+12 weeks due to the combination of factors discussed in paragraphs 12.d above. Straight line improvement is assumed.
  - (6) Trainees already in Active training centers at M-day are not counted when calculating inputs after M-day. (However, they will be counted as output.)
- c. Table 11 shows the same type of data, but assuming a 60-hour week (8 week OSUT cycle, 4½ week BT cycle).
- d. Tables 10 and 11 depict totals for all types of OSUT and Basic Training. This includes that OSUT presently being conducted by the Active Training Centers in Signal, Military Police, Food Service, Transportation, and Female. Tables 12 and 13 strip these out and show weekly inputs and cumulative totals for combat branch OSUT and Basic Training.

TABLE 10  
WEEKLY INPUT CAPACITIES (000's)  
(40 HOUR WEEK)

Weeks	M+1	M+2	M+3	M+4	M+5	M+6	M+7
Input to Active Training Base	7.7*	7.7	7.7	7.7	7.7	7.7	7.7
Input to Training Divisions				17.6**	17.6	15.7	8.4
Total	7.7	7.7	7.7	25.3	25.3	23.4	16.1
Cumulative	7.7	15.4	23.1	48.4	73.7	97.1	113.2

Weeks	M+8	M+9	M+10	M+11	M+12	M+13	M+26
Input to Active Training Base	7.7	7.7	7.7	7.7	7.7	7.7	7.7
Input to Training Divisions	10.2	12.0	13.8	15.7	17.6	22.0***	22.0
Total	17.9	19.7	21.5	23.4	25.3	29.7	29.7
Cumulative	131.1	150.8	172.3	195.7	221.0	250.7	636.8

3 Month Total            250.7K  
6 Month Total            636.8K

- \* - From Table 4, Surge Capacity, 40 hour week.
- \*\* - From Table 6, Optimum Capacity, 40 hour week.
- \*\*\* - From Table 6, Surge Capacity, 40 hour week.

TABLE 11  
WEEKLY INPUT CAPACITIES (000's)  
(60 HOUR WEEK)

Weeks	M+1	M+2	M+3	M+4	M+5	M+6	M+7
Input to Active Training Base	11.6	11.6	11.6	11.6	11.6	11.6	11.6
Input to Training Divisions				26.4	26.4	23.6	12.7
Total	11.6	11.6	11.6	38.0	38.0	35.2	24.3
Cumulative	11.6	23.2	34.8	72.8	110.8	146.0	170.3

Weeks	M+8	M+9	M+10	M+11	M+12	M+13	M+26
Input to Active Training Base	11.6	11.6	11.6	11.6	11.6	11.6	11.6
Input to Training Divisions	15.4	18.1	20.8	23.6	26.4	33.1	33.1
Total	27.0	29.7	32.4	35.2	38.0	44.7	44.7
Cumulative	197.3	227.0	259.4	294.6	332.6	377.3	958.4

3 Month Total            377.3K

6 Month Total                958.4K

TABLE 12  
 COMBAT ARMS AND BASIC TRAINING  
 WEEKLY INPUT CAPACITIES (000's)  
 (40 HOUR WEEK)

<u>Weeks</u>	<u>M+1</u>	<u>M+4</u>	<u>M+8</u>	<u>M+13</u>	<u>M+26</u>
<u>Combat OSUT</u>					
Input to Active Training Base	2.7	2.7	2.7	2.7	2.7
Input to Training Divisions	0.0	15.1	8.7	18.9	18.9
Total	2.7	17.8	11.4	21.6	21.6
<u>Cumulative Combat</u>	<u>2.7</u>	<u>25.9</u>	<u>81.2</u>	<u>164.4</u>	<u>410.1</u>
<u>Basic Training</u>					
Input to Active Training Base	3.1	3.1	3.1	3.1	3.1
Input to Training Divisions	0.0	2.5	1.4	3.1	3.1
Total	3.1	5.6	4.5	6.2	6.2
<u>Cumulative Basic Training</u>	<u>3.1</u>	<u>14.9</u>	<u>34.6</u>	<u>62.0</u>	<u>142.6</u>
<u>Total Cumulative</u>	<u>5.8</u>	<u>40.8</u>	<u>115.8</u>	<u>226.4</u>	<u>552.7</u>

TABLE 13  
 COMBAT ARMS AND BASIC TRAINING  
 WEEKLY INPUT CAPACITIES (000's)  
 (60 HOUR WEEK)

Weeks	M+1	M+4	M+8	M+13	M+26
<u>Combat OSUT</u>					
Input to Active Training Base	4.0	4.0	4.0	4.0	4.0
Input to Training Divisions	0.0	22.7	13.2	28.4	28.4
Total	4.0	26.7	17.2	32.4	32.4
<u>Cumulative Combat</u>	4.0	38.7	121.8	242.6	663.8
<u>Basic Training</u>					
Input to Active Training Base	4.7	4.7	4.7	4.7	4.7
Input to Training Divisions	0.0	3.7	2.1	4.7	4.7
Total	4.7	8.4	6.8	9.4	9.4
<u>Cumulative Basic Training</u>	4.7	22.5	51.9	94.0	216.2
<u>Total Cumulative</u>	8.7	61.2	173.7	336.6	880.0



E. DISCUSSION OF SOME OTHER LIMITING FACTORS

14. a. Table 13 marks the end of the quantitative portion of this analysis at this stage. For the present, the capacities calculated above should be considered maximums for the 1979 time frame. The Army has recognized the need to expand its mobilization training base capacity and is studying a number of planning options and program changes directed toward that end. These, when implemented with necessary resources, will increase capacity.
- b. There are, however, certain other limiting factors on training base capacity which have been assumed away in this analysis and in the Army's own calculations. It is important that these factors be understood and that efforts continue to remove or minimize their negative effect on the training base. Several of these are discussed below, as follows:
- (1) USAR training division organization,
  - (2) Shortages of key equipment,
  - (3) Facilities, ranges, housing, and other base support,
  - (4) Mobilization and deployment turbulence.

F. USAR TRAINING DIVISION ORGANIZATION

15. a. In calculating optimum capacities above, and in Army calculations of training base capacities made to date, the assumption is made that USAR Training Divisions are manned and equipped to perform their mobilization mission. Since these twelve divisions represent about 78% of the total post mobilization capacity, this is a big assumption -- and it is not currently a valid assumption.
- b. The assumption is not valid for several reasons:
- (1) All twelve USAR training divisions are undergoing a major reorganization into the OSUT configuration. This requires a considerable amount of retraining of drill sergeants and instructors in new MOS skills. The reorganization will probably not be completed for 1-2 more years.
  - (2) There are serious shortages of both personnel and equipment. The personnel shortages are reflected in Table 8 above. They are not easily solved in today's recruiting climate. Equipment shortages are even more acute. These shortages are due, at least in part, to the low DAMPL priority assigned to the training divisions because they are non-deploying units.
  - (3) There is a documentation problem. MTOE's were prepared for each reorganizing training division. In the "required" (war-time) column of these MTOE's are listed the personnel and

equipment required for each division to perform its post-mobilization training mission, tailored for the predesignated installation and the forecast training load. The "authorized" (peacetime) column lists reduced numbers for peacetime economies. (It was noted in Table 2 that four of the twelve divisions show reduced numbers of training companies in the authorized column.) In terms of total personnel in all twelve divisions, 62% of what is required is listed as authorized (54.7K required -- 33.8K authorized). Generally, the equipment listed as authorized is only sufficient for "training the trainers." Consequently, there are very large differences between required vs. authorized major items of equipment, such as tanks and APC's.

- (4) Because of the large differences between the "required" and "authorized" columns in the MTOE's, the Army staff has not accepted these documents into the official documentation system. If they were accepted, the "required" columns would become valid requirements. The personnel system would generate programs to assure rapid fill upon mobilization with pretrained manpower; the logistics system would commence long-term "buys" against equipment requirements. This would have the effect of putting these reserve divisions ahead of major Active Army installations who also have large post-mobilization personnel and equipment requirements, expressed in Mobilization Tables of Distribution and Allowances (MTDA's). But MTDA's do not energize the personnel and logistics systems in the way that MTOE's do. MTDA's express post-mobilization requirements, but no "up-front" actions are taken in peacetime to fill them.
- (5) At present the Army staff has accepted the "authorized" column in the training divisions' MTOE so that the reorganizing units have a basis for acquiring personnel and requisitioning equipment. TRADOC has been directed to prepare MTDA's to cover the difference between authorized and required. If this course of action is pursued (TRADOC is objecting) it will effectively keep the training divisions at 62% of required strength and practically devoid of training equipment until M-Day.

c. If the Army expects to realize its stated current training base capacities, and beyond these the increased capacities available through certain planning options and program changes, it must change its basic planning assumption into a fact. In sum, prior to M-Day the USAR Training Divisions must be manned and equipped to accomplish their post-mobilization mission.

#### G. SHORTAGES OF KEY EQUIPMENT

15. Tanks. Another serious limitation on training base capacity is that imposed by equipment shortages. This is particularly true in the case of tanks for armor training where there is a qualitative as well as a quantitative problem.

a. Rapid technological and engineering progress in the design of tanks and tank sub-systems has given rise to a mixed tank inventory. It is no longer possible or desirable to turn-over the entire fleet with each technological advance, although over a considerable time the XM-1 will replace the M60 series. Past experience, however, suggests that before that exchange is completed, we may expect the XM-1A, XM1A3, etc. We may conclude, therefore, that this evolutionary process of modernization is the steady state for planning of armor training.

b. (1) Listed below are the tanks which today are considered "prime tanks" by the Army.

<u>Group A:</u>	M48A5	M60 type gun & fire control
	M60	
	M60A1	Improved fire control system
	M60A1 (AOS)	Add-on stabilizer
	M60A1 (RISE)	Engine design improvements
	M60A1 (RISE-P)	Improved imate intensification sights (Passive)
<u>Group B:</u>	M60A3	Passive sights, laser range finder, new computer
	M60A3 (TTS)	Tank thermal sights
<u>Group C:</u>	XM-1	105 mm gun
	XM-1	120 mm gun
<u>Group D:</u>	M60A2	Shillelagh missile system

(2) The groupings above represent training differentials. The Army considers that personnel trained on one tank within a group can move quickly to one of the other tanks in the same group. Shifting to a more modern group (A to B, B to C) requires significant additional training (2½-3 weeks for moving from M60A1 group to M60A3, 5-6 weeks from M60A3 to XM-1). Group D (Shillelagh) is unique and requires completely different training.

c. (1) Under today's priority of issue for new tanks, the active training base (under an exception to DAMPL policy) is issued sufficient numbers of new model tanks to ensure a diffusion of "know-how" as active units receive the new system. This is not true in the Reserve Components. Certain high priority RC units have DAMPL Nos. which put them just behind active units with similar early deployment priorities. Lower priority RC units lag behind, and the USAR Training Divisions (because they are non-deploying units) are at the end of the line.

(2) This system of priorities, together with the slow peacetime rate of production of new tanks (and conversion of older tanks) virtually guarantees that the three training divisions charged with

armor training will always be equipped with tanks several generations older than those in front-line combat units. Yet, upon mobilization, these training divisions have the responsibility to train combat replacement for those very front-line units.

- d. At the present time there is a serious quantitative, as well as qualitative, shortage of tanks in the training divisions. A recent FORSCOM query to each division <sup>1/</sup> revealed that there are virtually no tanks of any type currently in their possession. It is understandable that the divisions are not filled to the wartime required levels of tanks. These (supposedly) are to be furnished upon mobilization at the training centers. The source of these tanks is not now clear.
- e. The training divisions should, however, be issued sufficient tanks (peacetime authorized level) so that the trainers can train. It is not possible to gain and maintain armor drill sergeant and instructor expertise without tanks. The current shortages of authorized tanks for training may be a function of the on-going reorganization of the training divisions into OSUT configuration. If true, then proper documentation and issue of minimum essential equipment should be expedited. Priority should go to training battalions who, due to geographic location, are least able to receive training assistance from Active Army sources during IDT.
- f. An exception to policy similar to that made for the Active base should be made for the USAR training divisions. They should be issued sufficient numbers of each type of tank group so that familiarity can be maintained across the entire modernization spectrum.

16. Infantry and Cavalry Fighting Vehicles

- a. There are two additional vehicles which will soon come into infantry and reconnaissance units (2-3 years) to replace the M113 Armored Personnel Carrier: The Infantry Fighting Vehicle (IFV) and the Cavalry Fighting Vehicle (CFV). These represent basic concept changes in mechanized infantry and cavalry doctrine. Each vehicle has a mixed array of mounted armament. The IFV will have a crew of 9, the CFV of 5. In the infantry, the "crew" of the IFV (commander, driver, gunner at a minimum) will require training beyond standard mechanized infantry. New MOS will probably be required.
- b. It is clear that infantry and reconnaissance units and training systems will face the same kinds of problems that armor faces with the introduction of a radically new tank (XM-1). The problem of modern equipment constraints on training capacity will not be confined to armor.

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<sup>1/</sup> Op.Cit., para. 4d., FORSCOM Report.....

#### H. TRAINING FACILITIES AND BASE SUPPORT CAPABILITIES

17. a. It has been assumed in this analysis (and in Army calculations to date) that training facilities and base support capabilities would be sufficient to handle the expanded training loads. This assumption cannot be considered valid until after a detailed survey is made. Such a survey can only be made accurately at the installation level since it involves so many factors which are subject to change. Among the most important are: ranges, classrooms, maneuver areas, troop housing, utilities, messing, supply, maintenance, transportation, storage, finance, medical, ADP, and personnel administration. The collective restraints imposed by these factors may be one of the most restricting of the major limiting factors.
- b. To conduct such a survey, installations should be informed of the total requirement expected of them, and then capabilities should be matched against those requirements. Shortfalls can thus be identified, and programs and budgets can be formulated to close the gap between assumptions and fact. Where shortfalls are very large, it may be more prudent to shift training loads among installations.

#### I. MOBILIZATION AND DEPLOYMENT TURBULENCE

18. a. Earlier it was noted that current Army staff projections envision that training of recruits at five installations now commanded by FORSCOM would not begin until M+7 weeks. Reason -- turbulence caused by deployment of Army divisions now stationed at these five posts. While this may be the case, this kind of turbulence will not be unique to those five installations. Consider Table 14.
  - b. Table 14 shows in gross numbers what can be expected at each of the installations where post-mobilization recruit training will take place. Strengths shown under "Mobilization Units" do not include trainees.
  - c. While Table 14 does indicate large mobilization loads for the FORSCOM posts, it also reflects that they are large posts now, with concomitantly large support staffs and facilities. At the same time, there are other posts with loads comparable to some of the FORSCOM installations. The salient point here is that commanders on all these posts have important mobilization and deployment responsibilities which will loom large immediately after M-day.
  - d. The major responsibilities of a mobilization station are to see that mobilized units are filled to wartime authorizations with personnel and equipment and trained to minimum standards for deployment. This puts heavy additional loads on post support facilities. Concurrently, active units are deploying which demand similar high priority support.
19. Exercise NIFTY NUGGET (Army MOBEX-78) revealed major problem areas and shortfalls at the installation level when the major focus was on mobilization and deployment. The additional support loads imposed by expansion of training centers were not fully considered in the exercise. It seems

TABLE 14  
 MOBILIZATION AND DEPLOYMENT RESPONSIBILITIES  
 OF TRAINING CENTER SITES

Installation	Recruit Training Center Now	Active Units Now*		Mobilization Units**	
		Number	Wartime Strength	Number	Wartime Strength
Ft. Bragg	No	150	40,000	200	47,000
Ft. Polk	No	40	14,000	70	16,000
Ft. Hood	No	150	48,000	100	29,000
Ft. Ord	No	50	18,000	80	15,000
Ft. Lewis	No	70	23,000	100	19,000
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Ft. Benning	Yes	50	18,000	150	27,000
Ft. Knox	Yes	40	14,000	140	15,000
Ft. L. Wood	Yes	20	6,000	90	14,000
Ft. Dix	Yes	20	5,000	100	13,000
Ft. Bliss	Yes	40	12,000	50	7,000
Ft. Sill	Yes	50	15,000	40	6,000
Ft. Jackson	Yes	20	6,000	40	6,000
Ft. Gordon	Yes	13	7,000	15	5,000

\* - "Units", as used here, means HqsCo's, Bn's, Sep.Co's, and Sep Plats and detachments.

\*\* - Army Reserve and National Guard units scheduled to mobilize after M-Day.

imperative that future exercises include a more complete treatment of training base expansion.

J. CONCLUSIONS AND RECOMMENDATIONS

20. Conclusions and recommendations are listed at end of Summary.

