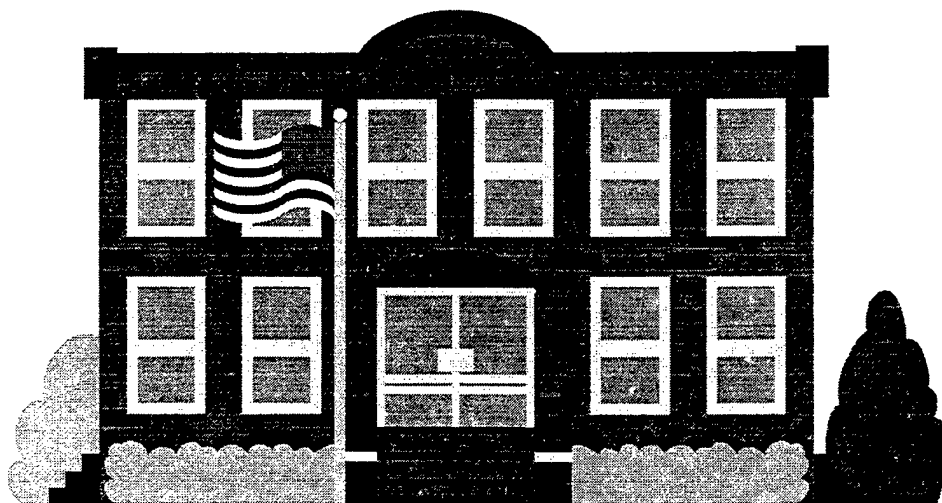




Department of Defense

Military Manpower Training Report FY 2000



August 1999

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Department of Defense

Military Manpower Training Report FY 2000

*Prepared by Defense Manpower Data Center
for:*

Office of the Under Secretary of Defense
(Personnel & Readiness)
Department of the Army
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EXECUTIVE SUMMARY

The Military Manpower Training Report (MMTR) describes individual institutional military training requirements based upon the President's Budget. The FY 2000 MMTR specifically compiles Department of Defense military student training data by Service component, active and reserve, for each category of individual institutional training for Fiscal Years 2000 and 2001. Data elements for this report are compiled and submitted by the Services. Many calculations in this report are affected by rounding. The Department's required training loads are listed below:

TABLE 1. Component Student Load		
	FY00	FY01
Active Components		
Army	51,364	54,013
Navy	40,886	40,991
Marine Corps	20,956	21,157
Air Force	28,299	28,048
Subtotal	141,505	144,209
Reserve Components		
Army Reserve	8,326	9,394
Army National Guard	10,213	10,624
Naval Reserve	720	753
Marine Corps Reserve	3,003	2,954
Air Force Reserve	3,325	3,169
Air National Guard	3,219	3,099
Subtotal	28,805	29,993
Total	170,310	174,202

Component student loads are derived from the President's Budget for FY 2000 and are consistent with the Department of Defense request for authorization of military manpower strengths, active and reserve.

Definitions and Explanation of Training Load

This report discusses individual training and education within the Department of Defense provided by active Military Service training and education institutions. Individual training and education, for purposes of this report, is divided into six categories:

- Recruit Training, given to enlisted entrants who have not had previous military service.
- One-Station Unit Training (OSUT), an Army program that combines Recruit Training and initial Specialized Skill Training into a single course.
- Officer Acquisition Training, which leads to a commission in one of the Services.
- Specialized Skill Training, which prepares military personnel for specific jobs in the Military Services.
- Flight Training, which prepares prospective pilots and navigators for an initial operational assignment.
- Professional Development Education, relating to the advanced professional duties of military personnel or to advanced academic disciplines to meet Service requirements.

"Training load" is the number of student-years that a Service Component received (will receive) in formal institutional training and education courses during a fiscal year.

Training loads are derived from the need to replace losses in each skill required in the military force structure. Losses, through separations, promotions and other causes, are projected at various points in the future and compared to the projected inventory of trained personnel. The difference between the requirement in each skill and the inventory becomes the demand for newly trained personnel. A phased input of students to the training establishments is then scheduled so that trained personnel, in each skill area and skill level, are available at the proper time to replace the losses. This is the basis of the training load addressed in this report.

The training load of each component is the measure of the amount of training planned for members of that component, although some of the training will be done by other Services, in DoD schools or, in some cases, by institutions outside the Department of Defense. The training of members of the Reserve Components included in the report is the formal school training provided by the active training establishment to individual members of the Reserve Components

while they are on active duty for training. This is primarily training provided to non-prior service personnel entering the Reserve Components.

An Overview of Training Load

For FY 2000 the total required DoD training load is 170,310. About 83 percent of this training load is for members of the active forces. The remaining 17 percent is training for members of the Reserve Components on active duty at training establishments operated by the Active Components. Whenever possible, Reserve Component personnel attend the same classes and are provided the same instruction as Active Force personnel.

Table 2 displays the distribution of total Active Force and Reserve Component load attributable to each of the major categories of training in FY 2000 and FY 2001.

TABLE 2. Distribution of Training Load		
	FY00	FY01
Training Category		
Recruit Training	39,152	41,226
One-Station Unit Training (Army)	9,998	9,216
Officer Acquisition Training	18,295	18,163
Specialized Skill Training	87,182	89,372
Flight Training	4,704	5,165
Professional Development Education	10,979	11,060
Total	170,310	174,202

In terms of training load, the largest categories of training load are Specialized Skill Training and Recruit Training, both of which, along with the Army One-Station Unit Training, are strongly influenced by the number of enlisted non-prior service accessions. Specialized Skill Training is the largest training category for FY 2000 with 51 percent of the Active Force and 45 percent of the Reserve Component load.

Table 3 divides the required training load for FY 2000 and FY 2001 into two parts: (1) accession-related training which provides civilian entrants with the initial skills needed to perform the duties of their first military occupations; and (2) other training that is conducted to prepare members for more specialized duties in later stages of their military careers.

For FY 2000, training related to new accessions amounts to about 70 percent of all training programmed for the Active Forces. For the Reserve Components, the percentage is 88. The load dedicated to accession-related requirements highlights the priority the military services place on training new military members. Detailed information on each category of training is provided in Chapters III through VII of this report.

TABLE 3. Accession-Related Training (Thousands of Loads)				
	FY00		FY01	
	Active	Reserve	Active	Reserve
Accession Related Load				
Recruit	30.7	8.4	31.5	9.7
One-Station Unit Training	7.0	3.0	6.8	2.4
Officer Acquisition	16.1	2.2	16.2	2.0
Initial Skill (Off & Enl)	41.6	11.2	41.7	11.9
Undergraduate Flight	3.5	0.4	3.8	0.4
Subtotal	98.9	25.2	100.0	26.4
Other Training Load				
Other Specialized Skill	31.6	2.9	33.0	2.8
Other Flight	0.7	0.2	0.7	0.2
Professional Development	10.4	0.6	10.5	0.6
Subtotal	42.6	3.6	44.2	3.6
Total Load	141.5	28.8	144.2	30.0
Accession Related Load as a Percent of Total Load	70%	87%	69%	88%

Manpower In Support of Individual Training

Individual training requires manpower to conduct and support instruction, manage military schools and training centers, maintain training bases, and provide support to students, military staff members and their dependents. Chapter VIII of this report provides information about the military and civilian manpower needed for individual training. Manpower in support of individual training for FY 2000 and FY 2001 is shown by Service in the following table.

NOTE: All individual training categories are included. The manpower includes instructors, instructional support, school/training center administration, student supervision and direct training support.

TABLE 4. DoD Manpower in Support of Individual Training (End Strength, Thousands)						
	FY00			FY01		
	MIL	CIV	Total	MIL	CIV	Total
Army	29	15	44	29	15	44
Navy	19	6	25	19	6	24
Marine Corps	11	1	13	11	1	13
Air Force	16	9	25	16	9	25
Total	76	31	107	75	31	106

TABLE 5. DoD Manpower in Support of Individual Training by Function (End Strength, Thousands)						
	FY00			FY01		
	MIL	CIV	Total	MIL	CIV	Total
Conduct of Individual Training	59	13	72	59	13	72
Operating Support	16	18	33	15	17	32
Training Headquarters	1	1	2	1	1	2
Total	76	31	107	75	31	106

Trends in Individual Training

This section provides information on the individual training load, workload, manpower and funding. Two years of actual (executed) data are provided to compare with current and budget year estimates. Please note that for various reasons unrelated to the requirements for training, Services typically are not able to execute 100% of their estimated training loads. Table 6 shows the FY 1997 to FY 2001 trend in training loads for each Active and Reserve Component.

TABLE 6. Active and Reserve Training Load Trends by Service (Thousands of Loads)					
	Actual		Estimates		
	FY97	FY98	FY99	FY00	FY01
Active Components					
Army	45.1	42.9	48.8	51.4	54.0
Navy	39.5	40.2	40.8	40.9	41.0
Marine Corps	21.2	20.7	21.0	21.0	21.2
Air Force	25.9	26.2	29.5	28.3	28.0
Subtotal	131.7	130.0	140.0	141.5	144.2
Reserve Components					
Army National Guard	8.1	8.0	10.0	10.2	10.6
Army Reserve	6.1	6.0	8.0	8.3	9.4
Naval Reserve	.4	.7	.7	.7	.8
Marine Corps Reserve	2.9	2.9	3.1	3.0	3.0
Air National Guard	2.9	2.4	3.2	3.2	3.1
Air Reserve	2.9	2.6	3.2	3.3	3.2
Subtotal	23.2	22.7	28.2	28.8	30.0
Total	154.8	152.7	168.3	170.3	174.2

Training workload accounts for all students trained by the Service Training Commands. This includes DoD military students, civilians, foreign students and students from other U.S. government agencies. Table 7 shows actual and estimated training workload trends for each Service, FY 1997 through FY 2001.

TABLE 7. Training Workload Trends (Thousands of Loads)					
	Actual		Estimates		
	FY97	FY98	FY99	FY00	FY01
Army	63	60	71	74	78
Navy	42	44	44	44	44
Marine Corps	18	17	18	18	18
Air Force	32	31	37	36	36
Total	155	153	171	172	176

The following table demonstrates the Department's emphasis on improving training efficiencies. Although total training workload requirements are estimated to increase by 14 percent from FY 1997 to FY 2001, there has been a 9 percent reduction in training manpower.

TABLE 8. Manpower Trends in Support of Training (Combined Military and Civilian End Strengths, Thousands)					
	FY97	Actual FY98	FY99	Estimates FY00	FY01
Army	47	47	46	44	44
Navy	29	28	27	25	24
Marine Corps	13	13	13	13	13
Air Force	27	26	26	25	25
Total	117	114	112	107	106

The Necessity for Individual Training

The primary objective of individual training is to provide the operational forces with personnel who are adequately trained to assume jobs in both Active and Reserve military units. One of the cornerstones of readiness is the conduct of effective individual training at Service Training Institutions. Unlike in past wars, we may not be able to count on extended periods of mobilization and training in response to future conflicts. Maintaining excellence in our individual training at Service Training Institutions during peacetime results in a military force ready to respond in a national emergency.

INTRODUCTION

Training Requirements and Manpower Requirements

Requirements for training and education of military personnel are derived ultimately from national security objectives. The Military Manpower Training Report (MMTR), the Report of the Secretary of Defense to the Congress on the FY 2000 Budget, and the Defense Manpower Requirements Report, describe the progression from national security objectives to training load requirements. The Report of the Secretary of Defense explains the relationship between the threat and the forces designed to cope with the threat. The Defense Manpower Requirements Report describes the requirement for trained manpower to man the forces. Using this trained manpower requirement as its starting point, the Military Manpower Training Report details the amount of training needed, describing the "training demand" in terms of student loads. The Defense Manpower Requirements Report and the Military Manpower Training Report are mutually supportive; however, the data in the two reports are not interchangeable or directly comparable. The principal reason for this difference is that the main focus of the Defense Manpower Requirements Report is upon requested strength on the last day of fiscal years (that is, end strength), whereas the main focus of the Military Manpower Training Report is upon required student loads (a concept more comparable to average strength, or man-years, than to end strength).

Definition of "Individual Training and Education"

This report addresses the "individual training and education" activities of the Department of Defense; that is, the training of individual military members in formal courses conducted by organizations whose primary mission is training. This training is different from training activities conducted by operational units incidental to their primary combat, combat support, or combat service support missions. Training conducted within operational units (including the training of crews and teams) is not included in the training loads discussed in this report. In certain categories of training, on-the-job training (OJT) in units substitutes to some extent for all or part of formal course training requirements. OJT is also not included in the training loads discussed in this report.

The purpose of individual training is to give individual service members the skills and knowledge that will qualify them to perform effectively as members of operational military organizations. "Individual training" includes formal military and technical training and professional education conducted under centralized control, generally under the supervision of a Service Training Command or similar organization. The trainees and

students undergoing the training and education addressed in the MMTR include Active Force members and Reserve Component members:

- Active Force trainees and students include officers, enlisted personnel, warrant officers, noncommissioned officers, and Service academy cadets and midshipmen.
- Reserve Component trainees and students include officers, warrant officers, noncommissioned officers, and enlisted members on active duty for training in formal school courses.

Some civilian students attend training in programs such as the Reserve Officers' Training Corps (ROTC) prior to their entry into a Service. These programs are also discussed in the report. However, training loads only account for training and education of personnel while they are in active military status.

In general, the training discussed in this report is conducted under Major Defense Program 8, "Training, Medical and Other General Personnel Activities," as presented in the Defense budget. Exceptions to these general rules are pointed out, where appropriate, in the body of the report.

Personnel undergoing individual training and education are classified for manpower accounting purposes as trainees, students, or cadets. The exceptions are: (1) personnel undergoing training while on temporary duty or temporary additional duty away from their unit of assignment, or (2) personnel being trained while en route to new stations as transients. The term "trainees" is generally used for all enlisted personnel in Recruit Training and Initial Skill Training. "Cadets" (or "midshipmen" in the case of the Naval Academy) are members being educated at one of the Service academies. All others receiving individual training and education are identified as "students." The distinction is not important for the purposes of this report, and the term "student" will be used where appropriate to describe members of all three classifications as well as temporary duty and transient personnel being trained.

FY 2000 Military Manpower Training Report and the FY 2000 Budget

It is important to emphasize that this MMTR, while consistent with the Department of Defense Budget for FY 2000, differs in structure from the budget justification. Budget justifications are focused on explaining how, by who, and why money is to be spent. The Service conducting the training programs, therefore, prepares budgets for training and their justifications. As a result, each Service must justify and obtain funds to train personnel from other Services in addition to its own personnel.

By contrast, the MMTR details and justifies the requirement for student training loads of the components of the parent Service whose members are undergoing the training. For example, Navy personnel being trained by the Air Force are treated in the MMTR as part of the Navy military student training load since they are being trained to fill Navy

requirements. However, in O&M budget justification documents, Navy students attending Air Force schools are included in the Air Force training workload tables that justify Air Force training resources. This report also contains summary tables of the manpower required by the Services to conduct training based on estimated workloads.

Definitions of Major Training Categories

The portion of this report that discusses training loads in detail is organized into five chapters (Chapters III through VII), each of which addresses one of the major categories of training. These major categories are briefly defined below. Each chapter will more fully describe the training category and its sub-categories, the required training loads, and the training methodology.

Recruit Training includes the introductory physical conditioning, basic military training, indoctrination and the acquisition of common skills given to all new enlisted entrants in each of the Services.

One-Station Unit Training (OSUT) is an Army training program that meets the training objectives of both Recruit and Specialized Skill Training in certain skills through a single course conducted by a single training unit. Because it includes elements of two categories of training, it is treated separately in this report.

Officer Acquisition Training, sometimes called pre-commissioning training, includes all types of education and training leading to a commission in one of the Services. Examples are programs of the Service academies and Officer Candidate/Training Schools. Students not in active military status, such as Reserve Officers' Training Corps cadets, are excluded from required loads in this report.

Specialized Skill Training provides officers, warrant officers, noncommissioned officers, and enlisted personnel with initial job qualification skills or new or higher levels of skill in their current military specialty or functional area. This category includes Army Advanced Individual Training and Navy Apprenticeship Training. Certain flight-related training, such as training of air traffic controllers, aircraft mechanics, and Air Force survival training, is reported under Specialized Skill Training. The Marine Corps Combat Training (MCCT) phase of the Marine Battle Skills Training has been included in this category since FY 1989.

Flight Training provides the individual flying skills needed by pilots, navigators, and naval flight officers. The undergraduate flight training programs culminate in an officer receiving "wings" and being categorized as a "designated" or "rated" officer. The undergraduate programs do not include formal advanced flight training programs. Training conducted by Service advanced flight training organizations is beyond the scope of this report.

Professional Development Education includes educational courses conducted at the higher-level Service Schools or at civilian institutions to broaden the outlook and

knowledge of military personnel or to impart knowledge in advanced academic disciplines to meet Service requirements. Training of this type is required to prepare individuals for progressively more demanding assignments, particularly for higher command and staff positions. Programs include undergraduate and graduate education as well as courses not leading to a degree.

Education and training for senior non-commissioned officers, which has a broad professional content, is included in Professional Development Education rather than in Specialized Skill Training. Professional Military Education (PME) conducted by the Air Force for more junior enlisted personnel are also included in the Professional Development category. However, training of junior and middle-grade officers and non-commissioned officers usually includes specific branch or job-specific training rather than broad, common skills. Designation of this training varies by Service: for example, Navy Leadership Training, which is given to all grades of petty officers, is included in Specialized Skill Training.

Determining Training Requirements and Training Load

The amount and type of training to be conducted in the Department of Defense is the product of a series of calculations that is described in Appendix A to this report.

In brief, the process begins with the determination of the requirement for military personnel with specific skills to fill positions in the approved or projected force. The requirement for trained manpower must then be measured against the available inventory of trained personnel projected at various points in the future.

This comparison, made for each military skill and skill level, establishes the need for training personnel to fill current and projected skill shortages. The requirement for the training of personnel to maintain the skill inventory becomes part of the workload of the Service training establishments. Training load is measured by Component in terms of the cumulative military student-years, or "training load." The training load for a given period is a measure of the amount of training to be accomplished. It is also a basis for establishing the requirement for resources (manpower, funds, materiel, and facilities) needed to support the training to be conducted by a Service.

Conceptually, the training load for a given period is the cumulative student strength for the period, roughly equal to man-years. The total training load is the sum of the loads for all the individual courses. Training loads for individual courses are determined by the following factors:

1. The length of the training course
2. The desired number of graduates, or output, of the course.

3. The number of entrants, or inputs, into the course required to obtain the desired output. This, in turn, depends on the pattern of attrition, or failures of entrants to graduate, for the course.

The training load is computed by the following formula:

$$\frac{\text{Entrants} + \text{Graduates}}{2} \times \text{Course Length}^{1/} = \text{Load}$$

^{1/}Training time is expressed as a fraction of a year

This is the basic method for computing the training loads discussed in this report. However, if attrition does not occur at a uniform rate (as is frequently the case) and the rate and phasing of that attrition can be specified, more complex formulas and computer routines are used to estimate training loads.

Accuracy in Projecting Training Loads

Training load authorizations are requested well in advance of the period when the training is actually conducted. While loads for some long lead-time programs, such as the Service Academies, can be predicted with considerable accuracy, there are many uncertainties in projecting training loads. Some of the causes of uncertainty are:

1. Unanticipated changes in end strength levels and force structure, requiring adjustment of the skill inventory and the mix of courses in the training load.
2. Unpredictability of individual decisions to enlist, re-enlist, or retire. These factors may lead to unanticipated changes in the skill inventory, requiring changes in the composition or size of training loads, or to shifts of portions of the training load from one fiscal period to the following period.
3. Changes in attrition rates and patterns, causing unprogrammed fluctuations in training rates and loads.

By forecasting training needs as far as possible into the future and continuously reviewing and adjusting training inputs and loads, the Services adapt the training system to changing conditions. The MMTR represents a "snapshot" of the Services' training objectives early in their budget cycles. Extended projections based on that snapshot are subject to change. Adjustments are inevitable -- in fact, necessary -- for good management.

Training Load Request by Component and Category

The following two tables display by category the required training loads for FY 2000 and FY 2001. The loads for each period are shown by component and by each of the major categories of training.

TABLE I-1. Military Training Student Loads, Fiscal Year 2000
by Component and Major Training Category

	One-Station		Officer		Specialized		Flight Training	Prof. Dev. Education	Total
	Recruit	Unit Training	Acquisition Training	Skill Training					
Active Forces									
Army	8,613	6,954	4,727	27,504	808	2,758	51,364		
Navy	10,225	0	5,577	21,971	1,418	1,695	40,886		
Marine Corps	8,293	0	535	10,126	484	1,518	20,956		
Air Force	3,610	0	5,274	13,545	1,490	4,380	28,299		
Subtotal	30,741	6,954	16,113	73,146	4,200	10,351	141,505		
Reserve Components									
Army National Guard	3,139	2,399	56	4,333	196	90	10,213		
Army Reserve	2,986	645	140	4,446	21	88	8,326		
Naval Reserve	240	0	0	473	0	7	720		
Marine Corps Reserve	1,416	0	212	1,348	0	27	3,003		
Air Force Reserve	287	0	1,769	958	80	231	3,325		
Air National Guard	344	0	5	2,478	207	185	3,219		
Subtotal	8,411	3,044	2,182	14,036	504	628	28,805		
Total	39,152	9,998	18,295	87,182	4,704	10,979	170,310		

TABLE I-2. Military Training Student Loads, Fiscal Year 2001
by Component and Major Training Category

	One-Station Unit		Officer		Specialized			Total
	Recruit	Training	Acquisition	Training	Skill	Flight Training	Prof. Dev. Education	
Active Forces								
Army	9,268	6,780	4,746	29,509	909	2,801	54,013	
Navy	10,242	0	5,656	21,993	1,403	1,697	40,991	
Marine Corps	8,462	0	531	10,170	477	1,517	21,157	
Air Force	3,541	0	5,246	13,056	1,743	4,462	28,048	
Subtotal	31,513	6,780	16,179	74,728	4,532	10,477	144,209	
Reserve Components								
Army National Guard	3,652	1,957	57	4,612	274	72	10,624	
Army Reserve	3,688	479	131	4,999	29	68	9,394	
Naval Reserve	276	0	0	470	0	7	753	
Marine Corps Reserve	1,409	0	212	1,308	0	25	2,954	
Air Force Reserve	344	0	1,579	917	101	228	3,169	
Air National Guard	344	0	5	2,338	229	183	3,099	
Subtotal	9,713	2,436	1,984	14,644	633	583	29,993	
Total	41,226	9,216	18,163	89,372	5,165	11,060	174,202	

TRAINING PATTERNS

General Description

The development of Service members through formal training, education, and practical experience generally follows a common pattern. New Service members (or, in the case of some Officer Acquisition Training, prospective Service members) first receive training designed to develop the basic attributes of the members of their Service. In most cases, a graduate of the initial training is then taught the skills required for a military job at the lowest skill level. Service members who do not remain beyond their initial enlistments or obligated terms of service do not, in most cases, receive additional formal training. Those who remain, the career members will further develop their military knowledge and technical skills through experience in military jobs augmented with training or education needed to prepare them for more responsible positions. During their terms of service, military personnel are also encouraged, as their military assignments may permit, to improve themselves through off-duty and voluntary education programs. This combination of job experience, training and education is essential to the development of a military force that is capable of carrying out the national security mission.

Enlisted personnel usually work in relatively specialized skill fields, whereas the duties of officers, particularly those in the career force, call for broader expertise. For these reasons, the training and education patterns of officers and enlisted personnel differ and will be discussed separately in the following sections of this chapter.

In addition to training members of the active forces, the Service training establishments also train members of the Reserve Components. Reserve Component training, as part of individual training and education involves Reservists and Guardsmen who are on active duty for formal school training. It does not include training of Reserve Component members provided under the following circumstances:

- Training received by individuals while on extended active duty serving with an active component (this training is included in active force aggregates);
- On-the-job training (OJT) or other individual training conducted by Reserve units;
- Training received while on annual active duty for training, except if provided through courses conducted by the active training establishment;

- Training received while the individual is not in an active military status. (As a minor exception, some Reserve and Guard technicians attend military schools in Civil Service status.)

Training of members of the Reserve Components will comprise 17 percent of all individual training and education in FY 2000 and FY 2001.

Officer Training Patterns

Each Service has developed career patterns to prepare its officers to assume progressively higher command and staff responsibilities. These career patterns are composed of operational assignments during which the officers learn their profession through experience and periodic individual training and education. This provides them with the knowledge and skills needed for progressively more demanding follow-on assignments.

Officer training and education can be divided into three types. First, each Service maintains a progressive system of professional military education. This education is related more to the increasing responsibilities associated with career progression and promotion than to the individual's current assignment or specialty. The primary topics are the study of officership and the command and staff knowledge required of all professional military officers. The second type of education and training includes the many skill-producing courses that enable the officer to perform immediately upon assignment to a specialized or functional area. These courses vary in length from a few days to several months. They present, for the most part, strictly job-oriented training and are often orientation or refresher courses. Third, the Services provide selected officers with advanced academic education, either in-house or at civilian institutions, to meet specific requirements for officers educated in technical, scientific, engineering, and managerial fields. Officers also participate in a variety of other educational programs, many on a part-time basis, usually with the student sharing in the cost.

Training and education for career officers involves one or more of the types of training and education described above and follows the general patterns outlined in the next paragraphs. The patterns vary among the Services to some extent, and not all officers will participate in all of the schooling described. The number of officers participating in schooling becomes progressively smaller, and participation more selective and demanding, as officers move through their careers.

Generally, non-career officers (those who are expected to serve only an initial tour of active duty) receive training only at the entry level. In some cases, lengthy skill-oriented training (such as pilot training) results in a commensurably longer active duty obligation.

Entry Level Training. Initial officer training is Service-oriented and intended to prepare officers for duties at the lowest operational level, i.e., company, squadron, or ship. Newly commissioned Army officers will attend a basic course conducted by the particular branch of the Army, such as infantry, armor or artillery. Navy ensigns are usually assigned to school training based on their warfare specialty. All newly commissioned Marine officers attend the Basic School. A newly commissioned officer in the Air Force may go to Flight Training or training in a technical specialty.

Career Training. After some operational experience, the career officer requires further professional military education to prepare for service at the next level; for example, as a unit commander or a headquarters staff officer. In the Army this entails a return to branch school for more advanced training. Navy officers at this stage in their careers may attend a school in a specialty appropriate to their future assignments. A Marine Corps officer would normally attend the Amphibious Warfare School. An Air Force officer could be selected for the Squadron Officer School.

To satisfy Service requirements and as a further step in professional development, some officers are selected for participation in an advanced academic educational program at a civilian institution or at one of the two Service technical institutes, the Naval Postgraduate School and the Air Force Institute of Technology. Selected Army officers may attend the Advanced Military Studies program at the School of Advanced Military Studies.

Intermediate Service Schools. As officers progress (between six and sixteen years of service, depending on Service criteria) they are ready for the next level of professional military education. These schools prepare officers for command and staff responsibilities in preparation for assuming higher responsibilities. Officers are competitively selected to attend each Service's program.

Senior Service Colleges. Little technical training is provided after the intermediate years. The final level of professional military education is that of the Senior Service Schools (the war colleges) for which attendance is highly selective. The Army, Navy, and Air Force each have a war college. In addition, there is the National Defense University, consisting of the National War College, the Industrial College of the Armed Forces, and the Capstone Course for general officers. Officers graduating from the Senior Service Schools have the academic foundation required for command and staff positions at the highest level. The different curricula of these schools reflect the different missions of the Services. In some instances Reserve officers are able to attend Senior Service Schools in residence. The schools also offer a non-resident course that consists of correspondence studies and resident phases.

Enlisted Training Patterns

Recruit Training introduces new enlistees to military life. Following this indoctrination, they will follow one of three possible avenues dictated by their respective component's requirements:

1. Initial Skill Training that prepares the enlistee for an initial duty assignment;
2. Direct assignment to first duty unit based on skill already acquired in civilian life;
or
3. Direct assignment to first duty unit for on-the-job training (OJT).

The Army One-Station Unit Training (OSUT) program is a variation of the first of these three avenues, since it combines Recruit and Initial Skill Training into a single course followed by assignment to an operational unit.

The expected distribution of Active Recruit Training graduates for FY 2000 is shown in the following table.

TABLE II-1. Disposition of Active Recruit Training Graduates FY00				
	Army	Navy	Marine Corps	Air Force
To Initial Skill Training	99%	65%	99.9%	100%
To Duty Assignment (Civilian-Acquired Skill)	1%	n/a	0.1%	0%
To Duty Assignment (On-The-Job-Training)	0%	35%	0.0%	0%
Total	100%	100%	100%	100%

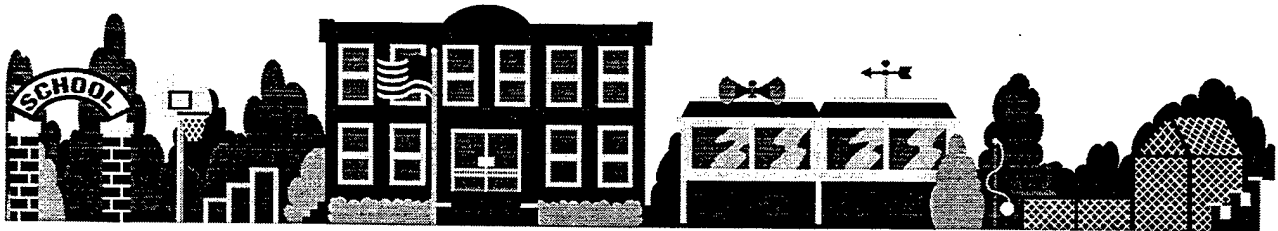
As the table indicates, most enlisted personnel receive formal Initial Skill Training to provide them with a basic military skill. This combination of Recruit Training and Initial Skill Training (or Army One-Station Unit Training) turns civilians into Service members qualified to fill positions in Active or Reserve units.

During their initial enlistment, personnel normally receive no further formal skill training but gain experience through on-the-job training in the work environment. The major

exception is Navy training, conducted by fleet training centers in such shipboard duties as fire fighting.

After reenlistment, individuals may be selected for attendance at a journeyman-level course in their specific occupational area. This training emphasizes the appropriate military applications for the skills being taught. Most enlisted personnel are given the opportunity to attend Non-Commissioned Officer (NCO) professional development training programs that prepare them for increased supervisory and leadership responsibilities.

Enlisted personnel attend regularly programmed specialized courses when circumstances require it: for example, where new equipment or systems are introduced into a Service, and senior level enlisted personnel need to be formally trained in operation and maintenance techniques. Selected Active and Reserve senior enlisted personnel attend schools, such as the Army's Sergeants Major Academy and Air Force's Senior NCO Academy, which are on the NCO level, similar in purpose to the Intermediate and Senior Service Schools in the officer education system.



RECRUIT TRAINING AND ARMY ONE-STATION UNIT TRAINING

General Description

Recruit Training is the basic indoctrination training given to enlisted personnel upon their initial entry into military service. Recruit Training provides an orderly transition from civilian to military life, instruction in the required basic skills, and motivation to become dedicated and productive. Training in each of the Services emphasizes discipline, military rules, social conduct, physical conditioning and development of self-confidence. Beyond these common objectives, Recruit Training in each Service is designed to meet the particular training requirements of that Service that reflect the Service's mission. Graduates of Recruit Training have the basic knowledge and skills required to qualify them, after formal or on-the-job training in a particular skill, for service in an operational unit of the parent Service.

Army One-Station Unit Training (OSUT) is unique in that it combines Recruit Training and Initial Skill Training in certain skills into a single course conducted by a single training unit at a single training installation. OSUT therefore includes elements of two major training categories; consequently, it is treated separately at the end of this chapter. OSUT training loads are displayed separately in Tables III-5 and III-6 at the end of this chapter. OSUT training loads are not included within Recruit Training tables neither in this chapter nor in Specialized Skill training loads displayed in Chapter V.

Recruit Training Loads

The training loads for FY 1995 through FY 2001 for each component of each Military Service are shown in Table III-1 on the following page. Note that the upward trends during this period coincide with accessions. As accessions have returned to the levels required for each Service to sustain authorized end strengths and support enlisted career force planning, Recruit Training loads have increased. Total Recruit Training loads reflect only a slight change for FY 2000 and FY 2001 despite a significant increase for the Army.

TABLE III-1. Recruit Training Load Trends							
Service							
Component	FY95	FY96	FY97	FY98	FY99	FY00	FY01
Army							
Active	5,141	6,281	7,524	6,119	7,735	8,613	9,268
Reserve	2,136	1,831	1,924	1,819	2,842	2,986	3,688
Natl Guard	1,795	1,664	2,295	2,300	3,099	3,139	3,652
Navy							
Active	8,134	7,926	8,304	8,558	9,482	10,225	10,242
Reserve	209	324	140	182	218	240	276
Marine Corps							
Active	5,895	6,591	7,749	8,199	8,359	8,293	8,462
Reserve	1,116	1,190	1,397	1,419	1,403	1,416	1,409
Air Force							
Active	3,378	3,536	3,718	3,544	3,873	3,610	3,541
Reserve	142	75	57	137	287	287	344
Natl Guard	185	251	243	349	344	344	344
Total							
Active	22,548	24,334	27,295	26,420	29,449	30,741	31,513
Res/Gd	5,583	5,335	6,056	6,206	8,192	8,411	9,713
Total	28,131	29,669	33,351	32,627	37,642	39,152	41,226

NOTE: In this table and in all subsequent tables in this report, training loads for the years prior to and including FY 1998 data are actual, FY 1999 and subsequent years' data are estimates.

Table III-1 does not include Army One-Station Unit Training loads.

Recruit Training

The following table displays the average Recruit Training loads for each year from FY 1998 to FY 2001 and, for FY 2000 and FY 2001, the number of entrants (input) and number of graduates (output). Data are shown separately for each component of each Service.

TABLE III-2. Recruit Training Input, Output, and Load

Service Component	FY98 Load	FY99 Load	FY00 Input	FY00 Output	FY00 Load	FY01 Input	FY01 Output	FY01 Load
Army								
Active	6,119	7,735	50,454	46,347	8,613	54,275	49,718	9,268
Reserve	1,819	2,842	17,099	16,086	2,986	21,644	19,349	3,688
Natl Guard	2,300	3,099	17,972	16,906	3,139	21,329	19,238	3,652
Navy								
Active	8,558	9,482	55,042	50,088	10,225	55,134	50,172	10,242
Reserve	182	218	1,122	1,021	240	1,355	1,233	276
Marine Corps								
Active	8,199	8,359	57,353	49,494	8,293	58,064	50,106	8,462
Reserve	1,419	1,403	9,932	8,302	1,416	9,792	8,181	1,409
Air Force								
Active	3,544	3,873	31,500	28,665	3,610	30,900	28,119	3,541
Reserve	137	287	2,500	2,275	287	3,000	2,730	344
Natl Guard	349	344	3,000	2,730	344	3,000	2,730	344
DoD								
Active	26,420	29,449	194,349	174,594	30,741	198,373	178,115	31,513
Res/Gd Tot	6,206	8,192	51,625	47,320	8,411	60,120	53,461	9,713
Total	32,627	37,642	245,974	221,914	39,152	258,493	231,576	41,226

Rationale for Recruit Training

The underlying philosophy of Recruit Training is that the demands of military service are fundamentally different from those of civilian life. Military service requires a high level of discipline and physical fitness, a homogeneous outlook, and an ability to live and work as part of a highly structured organization. There are few parallels in civilian society to the demands of military service. Each recruit, therefore, must be transformed into a member of the military team in order to function effectively in the military environment. The attitudes, habits, and basic skills formed in Recruit Training are the foundation of a cohesive military organization. Later training provides the skills and knowledge needed for specific jobs. Recruit Training shapes civilian entrants into dedicated members of their Military Services with the potential for further development.

The major determinants of Recruit Training loads are the total number of people entering service who must receive Recruit Training (input), the length of the training course, and projected patterns of attrition. Course length and attrition are discussed later in this chapter. The following two sections discuss inputs: (1) inputs of active duty personnel, and (2) inputs of members of the Reserve Components on active duty for initial training.

Active Duty Input

The annual recruiting objective for active duty enlistees without prior military service is a function of the following factors:

1. Current trained enlisted strengths.
2. Number of enlisted personnel currently in training.
3. Projected enlisted losses through separations or other reasons, e.g., desertion, death, acceptance of a commission, retirement, etc.
4. Projected prior-service enlistments, i.e., the return from civilian life of former Service members.
5. The projected requirement for trained enlisted personnel.

"Trained strength" is the number of personnel required to fill "structure" spaces, i.e., positions in military organizations that require specific grades and skills, and individual "pipeline" spaces, such as transients en route between assignments. The Defense Manpower Requirements Report contains a full discussion of how military manpower requirements are determined. The projected trained strength requirement is compared with the projected trained strength inventory to forecast future skill and strength imbalances. Future shortages that are not expected to be satisfied, either by prior service enlistees or Service members currently in skill training courses, determine the training output needed to man the force with trained personnel. To determine the necessary input to achieve this output, allowance must be made for the number of students entering a course of instruction who fail to complete it. The total input requirement is increased to compensate for expected attrition losses.

Training organizations attempt to manage inputs to achieve the most efficient use of training staff personnel and training facilities. However, the phasing of inputs may at times be varied in order to take advantage of the best recruiting periods for maintaining quality and quantity.

Historically, the highest accessions occur in June through September and in January, a reflection of the civilian academic calendar. Enlistments increase (1) shortly after high school graduation, (2) when peers return to school in the fall and (3) after the results of the first term of college academic work are announced.

The Services must be able to accept most prospective enlistees when they are ready to enter service. Requiring enlistees to enter military service in phase with requirements and on an even flow-basis would result in the loss of many potential enlistees to other sources of employment. Accepting enlistees as they become available, however, requires a training structure capable of accommodating surges of enlistments.

Reserve Component Input

Persons enlisting in the National Guard and Reserve forces without active duty experience require the same Recruit Training as active duty enlistees, and for the same reasons. Recruit Training loads for the Reserve Components are based on the same factors as active force loads. Guard and Reserve trainees, while in Recruit Training, are mingled with active duty trainees in units so that their training is identical.

Reserve Component recruits form a significant part of the workload of the active Recruit Training establishment. Recruit Training for the Reserve and Guard will account for 21 percent of all DoD Recruit Training in FY 2000 and 24 percent in FY 2001. Reserve Component training accounts for 30 percent of all Army One-Station Unit Training programmed for FY 2000 and 26 percent for FY 2001.

Planning considerations for Reserve Component personnel are essentially similar to those for the active force. Detailed phasing of this training is complicated, however, by the additional consideration of civilian employment or school commitments for these personnel. For this reason, a pool of personnel who have enlisted but who have not yet attended initial training is normal. This backlog is kept within a reasonable size.

Course Length and Course Content

Enlisted training loads depend not only upon the numbers of entrants but also on the extent of skills required of entering enlisted personnel. Enlisted personnel attain those skills in Recruit Training and in Specialized Skill Training. Recruit Training course lengths are determined in part by how much of the required training is to be provided during the Recruit Training phase and how much is to be deferred to later training. Because of differences in their missions, the Services take somewhat different approaches in establishing the content and length of their Recruit Training courses.

Recruit Training in each of the Services covers four areas: (1) some in-processing and testing; (2) introduction into Service life; (3) instruction in military courtesies, discipline, and hygiene; and (4) fundamental military-related training involving physical fitness, military drill, and self-defense. In addition, each Service provides training in military skills that should be possessed by most members of that Service. The degree to which these Service-wide skills exist differs among the Services. This factor accounts for most of the differences in course content and, therefore, course length. The Services' recruit training syllabi is essentially the same for men and women, but women generally receive less training on combat-oriented skills. Length of the standard Recruit Training course in each Service is shown in the following table.

TABLE III-3. Recruit Training Course Length (Weeks)				
	Army	Navy	Marine Corps	Air Force
FY00	9.0	10.1	12	6
FY01	9.0	10.1	12	6
NOTE: Chart reflects average weeks of training. Actual course time may vary by a few days depending upon service requirements and training location.				

Army and Marine Corps Recruit Training differ from the Air Force and Navy programs because all recruits are given intensive physical conditioning and instruction in basic ground combat skills, including the use of individual weapons. The Army and Marine Corps train all enlisted personnel to achieve a basic level of qualification in ground combat skills during their Recruit Training program. Beginning in FY99 Army Recruit Training increased from 8 to 9 weeks to allow for a more intense, more rigorous soldierization and the inculcation of Army values.

The Air Force is able to accomplish Recruit Training in six weeks because the curriculum concentrates on military indoctrination subjects. Relatively little training in Service-wide occupational skills is provided, since there are few common occupational skills needed by all Air Force enlisted personnel. In addition to indoctrinating recruits to military life, the Navy course includes phases designed to prepare them for conditions in a fleet environment and common duties found on board ships.

The average length of time spent in recruit status in any of the Services may be longer than the standard course lengths discussed above. Some recruits fall behind their peers due to medical problems. Others require remedial training. A recruit may be sent to a special training unit or recycled to a following class to repeat a portion of the course.

Enlisted members of the Reserve Components without prior service receive the same basic qualification training as active service members. Each non-prior service enlistee in the Reserve Components undergoes, as a minimum, the equivalent of twelve weeks of active duty training. This is accomplished by sending the enlistee through Recruit Training and, in most cases, on to Initial Skill Training.

Many Army Guardsmen and Reservists are provided initial military training in certain occupational skills through One-Station Unit Training. Members of the Reserve

Components have the option to split their Recruit Training from Specialized Skill Training. This option is limited to enlisted entrants who cannot attend all their required training in one block due to educational or occupational commitments. The Reserve member attends unit drills after completing Recruit Training and normally returns to active duty within one year to complete Initial Skill Training.

Attrition in Recruit Training

A final factor in the computation of loads is the projection of the rate and timing of attrition. Recruits may fail to complete training for medical reasons, inability to absorb the instruction, lack of motivation, disciplinary problems, or a variety of administrative causes, such as discharge for fraudulent enlistment or family hardship.

The table below shows projected attrition rates, which remain the same as the FY99 MMTR projections (with the exception of the Army, which projects a decrease of about 1.5%).

TABLE III-4. Recruit Training Attrition Projections (Active and Reserve Combined)				
	Army	Navy	Marine Corps	Air Force
FY00	6.5%	9.0%	16.8%	8.9%
FY01	6.5%	9.0%	16.8%	8.9%

The timing of attrition varies from situation to situation. In the case of slow learners or individuals that have difficulty in adjusting to military life, trainees usually are reentered or given special instruction. Those who do not respond adequately may not become attrition losses until late in the course.

Army One-Station Unit Training

The Army's One-Station Unit Training (OSUT) program combines Recruit Training and Initial Skill Training into a single continuous course (primarily for male soldiers in selected combat arms MOSs and male and female soldiers in selected combat support MOSs). This report treats OSUT separately rather than arbitrarily breaking it into two segments.

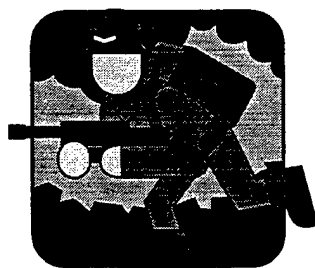
TABLE III-5. OSUT Training Load							
Service							
Component	FY95	FY96	FY97	FY98	FY99	FY00	FY01
Army							
Active	5,494	5,435	5,400	5,925	6,165	6,954	6,780
Reserve	418	498	475	396	651	645	479
Natl Guard	1,630	1,863	1,974	1,877	2,144	2,399	1,957
Total	7,542	7,796	7,849	8,198	8,960	9,998	9,216

TABLE III-6. OSUT Training Input, Output, and Load						
Service	FY00			FY01		
Component	Input	Output	Load	Input	Output	Load
Army						
Active	24,888	22,320	6,954	24,614	21,401	6,780
Reserve	2,296	2,384	645	1,697	1,509	479
Natl Guard	9,961	9,788	2,399	8,004	7,043	1,957
Total	37,145	34,492	9,998	34,315	29,953	9,216

In FY 2000 approximately 30 percent of Army Active and Reserve Component entrants will be trained under OSUT. OSUT is conducted for 12 military occupational specialties within the six major skill areas described in Table III-7 below. Four courses are offered within each OSUT specialty.

TABLE III-7. OSUT Training Time (Weeks)	
Skill Area	Training Time
Infantry a/	13 weeks, 3 days
Artillery	14 weeks, 4 days
Armor	15 weeks
Engineer b/	14 weeks
Military Police b/	17 weeks
Chemical b/	19 weeks
a/ 11M soldiers require an additional 3 weeks of training for heavy vehicle track qualifications. b/ Skill areas open for female soldiers	

OSUT training was increased by one week, effective October 1998, to allow a more intense, more rigorous soldierization and the inculcation of Army core values. In general OSUT requires less training time than the separate recruit training and initial skill training courses that it replaces. The time required to complete Recruit Training and the Initial Skill Training in separate courses for these skills would be about 4 weeks longer, including the time required to move the trainee from one training organization to another. The shorter OSUT course lengths provide a significant saving in trainee man-years and, consequently, in trainee pay, allowances, and supports costs.



IV

OFFICER ACQUISITION TRAINING

General Description

Officer Acquisition Training consists of training and education programs leading to a commission in one of the Military Services. These programs fulfill the need both for junior officer entrants into the career force and for non-career junior officers in the force structure. Officer Acquisition Training programs produce officers for both the active forces and the Reserve Components.

ROTC and Health Professions Acquisition Programs

The total training loads in Table IV-2 on the following page do not include three types of Officer Acquisition Training: the Army, Navy, and Air Force Reserve Officers' Training Corps (ROTC) programs, the Armed Forces Health Professions Scholarship program, and the Marine Corps' Platoon Leaders Class (PLC). Students who make up the training loads discussed in this report are either members of the active forces or members of the Reserve Components being trained on active duty by the active establishments. ROTC, Health Professions Scholarship and PLC students are not in active military status, but features of the programs are discussed in this chapter to provide a complete account of Officer Acquisition Training. The following table shows the number of participants in these programs in the period FY 1998 through FY 2001.

TABLE IV-1. Average Enrollees, Senior ROTC				
	FY98	FY99	FY00	FY01
Service				
Army	28,550	29,390	30,289	31,941
Navy	5,909	5,985	5,985	5,985
Air Force	12,774	13,644	13,710	13,710
Total	47,233	49,019	49,984	51,636

TABLE IV-2. Total Officer Acquisition Training Load

Service							
Component	FY95	FY96	FY97	FY98	FY99	FY00	FY01
Army							
Active	4,917	4,753	4,857	4,765	4,792	4,727	4,746
Reserve	102	119	124	130	145	140	131
Natl Guard	45	46	56	56	75	56	57
Navy							
Active	5,596	5,635	5,527	5,606	5,562	5,577	5,656
Reserve	0	0	0	0	0	0	0
Marine Corps							
Active	431	766	462	665	636	535	531
Reserve	118	123	146	135	206	212	212
Air Force							
Active	4,664	5,419	5,238	5,133	5,226	5,274	5,246
Reserve	1,562	1,573	1,477	1,646	1,743	1,769	1,579
Natl Guard	0	0	3	5	5	5	5
Total							
Active	15,608	16,573	16,084	16,169	16,216	16,113	16,179
Res/Gd	1,827	1,861	1,806	1,972	2,174	2,182	1,984
Total	17,435	18,434	17,890	18,141	18,390	18,295	18,163

Officer Requirements and Structuring the Officer Acquisition Program

Requirements for new officers, like requirements for new enlisted personnel, are a product of the need for officers in the projected force as compared to the projected future inventory of officers. Properly functioning programs fill the gross number of officer entrants for any given year and provide an even flow of sufficient new officers to each Service to avoid the emergence of unmanageable shortages and overages by age and grade in the future. Each of the Services uses a mix of sources for new officers.

Officer Acquisition Training may be divided into six separate programs:

- Service Academies
- ROTC
- Officer Candidate Schools
- Off-Campus Commissioning Programs
- Other Enlisted Commissioning Programs
- Health Professions Acquisition Programs

Each of these programs has different characteristics. The Service Academies and ROTC programs, for example, provide a stable input of officers, but require long

lead-times before changes in output can be made. Officer candidate programs, on the other hand, can quickly respond to increased or decreased requirements for officers. The Services exploit these differences in planning and executing their officer procurement programs. In addition to these practical considerations, having a variety of commissioning sources opens officership opportunities to a wider segment of the population.

Service Academies

The mission of each of the Service Academies (United States Military Academy, United States Naval Academy, and United States Air Force Academy) is to meet a portion of the long-range requirement for career military officers. They provide instruction and experience to cadets or midshipmen so that they graduate with the knowledge and character essential to leadership and with the motivation to become career officers. Cadets and midshipmen receive a rigorous four-year undergraduate college education that includes a technically oriented core curriculum regardless of major. Successful completion of the specified academic, leadership and military requirements entitles the graduate to a Bachelor of Science degree and a commission in one of the Military Services. Up to one-sixth of each year's Naval Academy graduates may be commissioned in the Marine Corps.

The Service Academies are distinctive in that their curricula are specifically designed to prepare young men and women for duty as professional officers. The total curriculum at each Academy is designed to develop the qualities of character, intellect, and physical competence needed by the officer who may, in the course of a full career, be called upon to perform duties ranging from leading a small combat unit to advising the highest government councils. The curricula, which include the sciences, the humanities, and military and physical training, form the basis for further professional development or, when required, graduate education.

Law establishes the maximum enrollment at each of the Service Academies. This fact establishes relatively stable training loads for the Academies. Training data for the Service Academies are shown in Table IV-3. [NOTE: Inputs = new freshmen; Grads = graduating seniors.]

TABLE IV-3. Training Input, Output and Load, Service Academies

	FY98 Load	FY99 Load	Input	FY00 Grads	Load	Input	FY01 Grads	Load
Service								
Army	3,999	4,057	1,140	984	3,973	1,140	984	3,973
Navy	3,988	4,042	1,194	921	4,045	1,193	887	4,081
Air Force	4,033	4,047	1,242	929	4,067	1,141	872	4,045
Total	12,020	12,146	3,576	2,834	12,085	3,474	2,743	12,099

Each of the Military Departments sponsors an Academy preparatory school. Marine Corps and Coast Guard personnel attend the Navy school. The mission of these schools is to provide approximately one year of intensive instruction and guidance to selected enlisted personnel in preparation for entry to the Service Academies. Students compete for nominations by the Secretaries of the Military Departments and from other sources. The Naval Academy Preparatory School also provides instruction to candidates for the Marine Corps Enlisted Commissioning Education Program during the summer months. Training load data for the Academy preparatory schools is shown in Table IV-4.

TABLE IV-4. Training Input, Output, and Load, Academy Preparatory Schools

	FY98 Load	FY99 Load	Input	FY00 Output	Load	Input	FY01 Output	Load
Service								
Army	184	167	225	164	167	225	164	167
Navy	209	277	260	195	250	260	195	250
Marine Corps	13	13	17	14	13	17	14	13
Air Force	205	207	230	184	207	230	184	207
Total	611	664	732	557	637	732	557	637

ROTC Programs

ROTC is a long lead-time program that is the single largest source of officers for the Armed Forces. Like the Service Academies, ROTC is used to provide a relatively constant input of officers for active duty. The program is currently conducted at approximately 470 civilian colleges and universities throughout the nation. The Army, Navy, and Air Force each sponsor a ROTC program. Up to one-sixth of the Navy

ROTC graduates may be commissioned into the Marine Corps. In addition to conventional recruiting and advertising methods, scholarships and subsistence allowances are used to attract qualified students. Scholarships are awarded to young men and women who exhibit potential ability as officers and have interests in fields of projected Service needs.

There are scholarship and non-scholarship, as well as two-year and four-year, ROTC programs. The curriculum of each program is tailored to the needs of the individual Services. For example, the Navy teaches the basics of ship navigation, while the Army teaches the fundamentals of ground combat and the Air Force provides basic instruction in aerospace history and doctrine. Each of the programs includes instruction in leadership, military customs and military history, and each program provides prospective officers with a gradual transition from the civilian environment to the military environment. Each ROTC program consists of a series of regularly scheduled academic classes throughout the school year combined with mandatory summer camps or cruises that are designed to give the student realistic military experience and a first-hand view of military life.

The ROTC scholarship continues to be an important incentive to attract exceptionally qualified individuals to ROTC. The rising cost of education makes the scholarship even more attractive. The Navy will fund an average of 4,580 scholarships in FY 2000, the Army 8,825 and the Air Force 5,405.

Reduced force structure requires fewer officers and the ROTC Program is being downsized accordingly. The Army now has 270 (down from 272 in FY99) host institutions and the Air Force has 143 (same as FY99). The Navy remains at 57 host institutions.

As noted at the beginning of this chapter, the ROTC program is not included in Service training loads because the students are not in an active military status. The following table shows the three Service ROTC programs for FY 2000 and FY 2001.

TABLE IV-5. Senior ROTC Programs				
	Beginning Enrollments	Graduates	Average Enrollments	Average Number of Scholarship Enrollees
FY00				
Army	29,475	3,017	35,568	8,825
Navy	5,740	1,050	5,985	4,580
Air Force	14,500	2,100	13,710	5,405
Total	49,715	6,167	55,263	18,810
FY01				
Army	29,628	3,017	25,709	8,855
Navy	5,740	1,050	5,985	4,580
Air Force	14,500	2,100	13,710	5,405
Total	49,868	6,167	45,404	18,840

Off-Campus Commissioning Programs

The only Officer Acquisition Training program off the college campus is the Marine Corps Platoon Leaders Class (PLC). This program provides for enlistment as a Marine Corps Reservist while the student is still an undergraduate. All PLC training takes place in the summer. For freshmen and sophomores, PLC consists of two six-week training sessions at the Marine Corps Officer Candidate School in Quantico, Virginia. Juniors attend one ten-week session. As with the ROTC program, training loads for the PLC program are not included in this report because PLC students are not in an active military status.

Students participating in this program attend either one or two summer training sessions, depending upon when during their college career they were enrolled. The objective of the program is to indoctrinate, motivate and train the enrollees by providing instruction in basic military subjects, leadership and physical conditioning. PLC students are commissioned when their college degrees are conferred. Newly commissioned Marine Corps officers then attend The Basic School at Quantico, Virginia.

Officer Candidate Schools (OCS)

Each of the Military Services operates an Officer Candidate School. The Air Force school is entitled Officer Training School (OTS).

Enlisted members can use this route to "rise from the ranks." The existence of OCS and the other enlisted commissioning programs covered in the next section is a significant advancement incentive to ambitious and promising enlisted personnel.

The four Services offer direct entry into OCS to selected college graduates without previous enlisted service. Some college students in highly specialized academic disciplines, such as engineering and physical sciences, cannot afford the time required to participate in ROTC. The OCS program commissions well-qualified college students who desire to become officers after graduation.

The following tables show average course length and load data for Officer Candidate Schools.

TABLE IV-6. FY00 Course Length in Weeks Officer Candidate School			
Amy OCS	Navy OCS	Marine Corps OCS	Air Force OTS
7	13	10	12

TABLE IV-7. Training Input, Output, and Load, Officer Candidate Schools

Service Component	FY98	FY99	FY00		FY01			
	Load	Load	Input	Output	Load	Input	Output	Load
Army								
Active	264	265	1,725	1,616	302	1,776	1,722	314
Reserve	20	29	555	492	28	524	460	25
Natl Guard	35	49	500	458	35	525	477	36
Navy								
Active	263	267	1,184	971	269	1,184	971	269
Reserve	0	0	0	0	0	0	0	0
Marine Corps								
Active	195	150	648	425	103	648	425	103
Reserve	0	0	0	0	0	0	0	0
Air Force								
Active	54	131	452	450	131	452	450	131
Reserve	11	22	75	76	22	75	76	22
Natl Guard	0	0	0	0	0	0	0	0
DoD								
Active	776	813	4,009	3,462	805	4,060	3,568	817
Res/Gd Tot	66	100	1,130	1,026	85	1,124	1,013	83
Total	842	913	5,139	4,488	890	5,184	4,581	900

Other Enlisted Commission Programs

The Services each have enlisted commissioning programs in addition to Officer Candidate Schools. The purposes of these programs are: (1) to provide a source of officers in specific skills with an expected high rate of retention; (2) to provide an avenue whereby enlisted personnel with proven qualifications can augment the commissioned ranks; and (3) to provide a measure of motivation to enlisted personnel. The Navy's Enlisted Commissioning Programs now number seven. A similar program, the Marine Enlisted Commissioning Education Program, has been expanded to offer degrees in technical and liberal arts academic disciplines. Students in the USAF Airman Education and Commissioning Program (AECp) major in engineering and computer science, physical science, or selected health care professions, with matriculation up to three years. The average academic time spent in the program is about 30 months. In the Navy, Marine Corps and Air Force, participants attend the Officer Candidate School of their Service before they are commissioned. Like OCS/OTS, these education programs carry an active duty service requirement. In FY 1988 the Army began reporting the warrant officer candidate program in this category.

While the other Services' participants are all on active duty, the Army's program also includes members of the Reserve and National Guard.

The Navy's Officer Sea and Air Mariner (OSAM) Program provides officer accessions directly into the Naval Reserve. The program covers all phases of training from Officer Candidate School to specific training in a designated warfare specialty. Training is completed after approximately two years and individuals are released from active duty to complete a four-year drilling obligation with the Selected Reserve.

The following table displays load data for these programs. All participants are members of the active forces.

TABLE IV-8. Training Input, Output, and Load Other Enlisted Commissioning Programs								
	FY98 Load	FY99 Load	Input	FY00 Output	Load	Input	FY01 Output	Load
Service								
Army	209	205	1,264	1,281	178	1,220	1,227	179
Navy	1,146	976	887	796	1,013	872	775	1,056
Marine Corps	457	473	532	465	419	499	460	415
Air Force	62	69	24	22	69	22	20	63
Total	1,874	1,723	2,707	2,564	1,679	2,613	2,482	1,713

Health Professions Acquisition Programs

This subcategory may be conveniently divided into two parts, the Armed Forces Health Professions Scholarship Program and the Uniformed Services University of the Health Sciences Program.

The Health Professions Scholarship Program was established in 1972 by Public Law 92-426. Participants are selected from among students or those accepted for enrollment in recognized health profession schools. Participants are commissioned in grade O-1 in the Reserve of their parent Service, but except for a short period of annual active duty, are not in active status. They are, therefore, not included in the training loads of their Services. Upon graduation, participants must serve obligated tours of duty, the length of which depends on the length of their participation in the program.

Service data for FY 2000 and FY 2001 are shown in Table IV-9.

**TABLE IV-9. Health Professions Acquisition
Program, Scholarships Awarded, and Graduates**

Service	Scholarships	Graduates
FY00		
Army	1,384	365
Navy	1,340	370
Air Force	1,337	420
Total	4,061	1,155
FY01		
Army	1,384	365
Navy	1,377	381
Air Force	1,337	420
Total	4,098	1,166



SPECIALIZED SKILL TRAINING

General Description

Specialized Skill Training provides officer and enlisted personnel with skills and knowledge needed to perform specific jobs. Each Service has established a job structure that makes it possible to carry out assigned missions. Each Service's mission is supported by an established job structure and each position within that job structure has been analyzed to determine the skill it requires. Specialized Skill Training provides these required skills to the proper number of individuals in a phased manner so that each vacancy in the structure can be filled promptly with a qualified replacement.

Specialized Skill Training, as used in this report, is defined as:

Initial, progression and functional training for both officer and enlisted personnel. Specialized Skill Training includes such programs as Army Advanced Individual Training, Navy Apprenticeship Training and Marine Combat Training. This training category also includes aviation-related ground training and initial enlisted leadership training other than that carried in Professional Development Education.

Army One-Station Unit Training (OSUT) provides Army personnel with job-related training in a number of skills. However, since OSUT is conducted as one course that combines Recruit and Specialized Skill Training, it is treated separately in this report (see Chapter III). OSUT loads are not included in the Specialized Skill Training loads in this chapter.

Specialized Skill Training loads for Active and Reserve Components are programmed at about the same levels in FY 2000 and FY 2001 as in FY 1999. The Active establishment generally trains reserve and Guard officers and enlisted personnel beyond the initial entry stage. DoD wide, the requirement to improve the technical skills of career personnel to keep pace with new equipment acquisition and modifications to the existing inventory will continue into the foreseeable future. This is reflected in the estimated Specialized Skill Training load.

Specialized Skill Training loads for FY 1995 through FY 2001 are as shown in Table V-1.

TABLE V-1. Specialized Skill Training Load							
Service							
Component	FY95	FY96	FY97	FY98	FY99	FY00	FY01
Army a/							
Active	25,415	23,854	24,306	22,956	26,696	27,504	29,509
Reserve	3,425	3,330	3,462	3,534	4,208	4,446	4,999
Natl Guard	3,723	3,258	3,568	3,560	4,449	4,333	4,612
Navy							
Active	22,034	21,444	22,362	22,721	22,581	21,971	21,993
Reserve	495	374	243	519	498	473	470
Marine Corps							
Active	8,000	11,301	10,891	9,737	9,707	10,126	10,170
Reserve	874	1,364	1,253	1,339	1,425	1,348	1,308
Air Force							
Active	11,175	9,966	11,565	11,868	14,338	13,545	13,056
Reserve	851	613	1,105	592	907	958	917
Natl Guard	1,719	1,623	2,276	1,760	2,442	2,478	2,338
Total							
Active	66,624	66,565	69,124	67,282	73,322	73,146	74,728
Res/Gd	11,087	10,562	11,907	11,304	13,929	14,036	14,644
Total	77,711	77,127	81,031	78,586	87,251	87,182	89,372

a/ Army One-Station Unit Training load is not included.

As in the other types of training covered in this report, the demand placed on the training establishment for individuals is determined by comparing projected requirements for each skill area and skill level with the projected future inventory of trained service members.

When anticipated losses are deducted from the current inventory, shortages in various skill areas are revealed. These shortages, except for those that can be satisfied through on-the-job training, or, in a few cases, through lateral entry of individuals who already possess needed job skills from civilian life, create a demand for a phased output of trained replacement personnel. Also, estimates are made of the proportion of students in each training course who will fail to complete the course. These course attrition factors determine the inputs necessary to achieve the desired course outputs. Inputs, outputs, attrition patterns, and course lengths determine the training loads.

These factors are discussed for each sub-category of Specialized Skill Training in the remainder of this chapter.

One of the challenges facing the Reserve Components is matching an individual's occupational specialty to a specific billet. A majority of the specialties or ratings require formal school training prior to designation. Since limited availability for active duty prevents members of the Selected Reserve from attending many formal schools, initial skill training programs are being developed to train prior-service Reservists in selected occupational specialties using combinations of two-week formal schools, on-the-job training, distance learning, correspondence courses, mobile training teams and civilian vocational technical courses.

Specialized Skill Training is the most diverse of the major categories of individual training. In the interest of clarity, the full category has been divided into five sub-categories. Two are concerned with initial skill training, one for officers, the other for enlisted personnel. Two others cover more advanced training, again divided by officer and enlisted. The last category covers both officer and enlisted training that conveys required knowledge or skills without changing the student's primary skill or skill level.

Initial Skill Training (Enlisted)

Initial Skill Training (Enlisted) includes all formal training normally given immediately after Recruit Training and leading toward the award of a military occupational specialty or rating at the lowest skill level. Successful completion of the training qualifies the enlisted member to take a position in the job structure of the Service and to progress to the journeyman level through job experience. Army One-Station Unit Training which is conducted primarily for those soldiers in combat arms and some selected combat support MOSs satisfies this same purpose but, because it combines skill training with recruit training in a single course, it is treated separately in this report.

The great majority of Service recruits are drawn from the least skilled segment of the population. Most recruits are under age 21 and have little civilian job experience. In addition, some civilian specialties are not in demand in the military job structure, and many of the most important military skills have no civilian counterpart. Consequently, only a small number of people enter the Service with a skill that can be used with little or no additional training. Enlistees must be trained in a technical skill before they can become productive. Some skills can be acquired through experience and on-the-job training. The vast majority, however, are most effectively and efficiently learned through formal courses. In some situations -- for example, on board ship or in remote locations -- the opportunity for on-the-job training is limited.

Load data for Initial Skill Training (Enlisted) are displayed in Table V-2. The classification of this training is determined by its purpose, rather than by whether entrants attend immediately after Recruit Training. Thus, some prior-service students and cross-trainees from other skill areas are reflected in these data.

**TABLE V-2. Training Input, Output, and Load
Initial Skill Training (Enlisted)**

Service Component	FY98 Load	FY99 Load	FY00 Input	FY00 Output	FY00 Load	FY01 Input	FY01 Output	FY01 Load
Army								
Active	9,513	11,179	51,008	50,762	12,206	53,942	50,176	12,625
Reserve	2,122	2,747	16,524	16,388	3,144	19,701	18,653	3,680
Natl Guard	2,563	3,419	16,491	17,200	3,303	18,033	17,267	3,560
Navy								
Active	9,973	10,222	68,156	64,692	9,730	67,506	64,127	9,613
Reserve	273	240	1,807	1,729	228	1,804	1,726	225
Marine Corps								
Active	5,695	5,712	40,276	39,718	5,921	40,574	40,018	6,042
Reserve	1,111	1,160	9,178	9,094	1,111	9,095	9,013	1,103
Air Force								
Active	8,571	10,230	45,539	42,372	9,910	44,343	40,587	9,546
Reserve	443	670	3,510	3,167	710	3,328	3,049	675
Natl Guard	1,407	1,933	8,974	8,337	1,940	8,541	7,821	1,816
DoD								
Active	33,752	37,343	204,979	197,544	37,767	206,365	194,908	37,826
Res/Gd Tot	7,919	10,169	56,484	55,915	10,436	60,502	57,529	11,059
Total	41,671	47,512	261,463	253,459	48,203	266,867	252,437	48,885

New mission requirements and technological change have resulted in consolidating or splitting skill areas and extensive modification of existing training programs. For instance, the introduction of word processors and microcomputers into Air Force personnel, administration and resource management offices has increased the percentage of new accessions requiring formal training for these skills.

Reserve trainees graduating from Recruit Training proceed to Initial Skill Training in their occupational specialty. This may consist of a course in a Service school or Advanced Individual Training at an Army training center. The actual length of active duty training, in comparison with the statutory twelve weeks minimum, varies from twelve weeks to twelve months, depending on the occupational specialties involved. To accommodate the Reserve Component member, a split-training program allows completion of initial entry training in two training segments in a two-year period.

The variety of skills required in the four Services dictates a large number of courses for enlisted personnel in Initial Skill Training, as shown in the following table.

TABLE V-3. Number of Courses, Initial Skill Training (Enlisted)				
	Army	Navy	Marine Corps	Air Force
FY00	223	152	188	233

Course lengths vary widely based on the complexity of the subject matter. For example, an Air Force course for cytotechnology specialists is 52 weeks long; but a course for aerospace maintenance is only 1.4 weeks long. Table V-4 shows the average course lengths for the Services' Enlisted Initial Skill Training.

TABLE V-4. Average Course Length, Initial Skill Training (Enlisted) (Academic Days in Training)				
	Army	Navy	Marine Corps	Air Force
FY00	55	46	81	55

Initial Skill courses includes general skills, intelligence, cryptography and health service training. Some of these courses (for example, nuclear reactor specialist or electronics technician) are highly technical. Others involve less complex skills -- cook, clerk-typist, and vehicle driver. A sampling of high-volume courses is shown in the Table V-5.

**TABLE V-5. Initial Skill Training Courses
with High Student Flow**

FY00	Student Input	Course Length (Weeks)
Army		
Medical Specialist	6,956	10.0
Motor Transport Operator	4,465	6.0
Food Service Specialist	4,160	8.2
Automated Logistical Specialist	3,420	12.0
Unit Supply Specialist	3,065	7.3
Petroleum Supply Specialist	2,881	8.4
TATS Administrative Specialist	2,834	5.0
Light Wheel Vehicle Mechanic	2,802	10.0
Signal Support Systems Specialist	1,971	17.0
TATS Multichannel Trans Sys Op/Maint	1,662	13.3
Navy		
Apprentice Training	10,089	2.7
Engineering Common Core	4,966	2.7
Avionics Common Core Class A1	3,483	7.6
Advanced Electronics Technical Core	3,110	19.7
Hospital Corpsman, Basic	3,050	14.0
Basic Submarine Damage Control	2,028	0.4
Engineering Mechanical Core	1,916	3.4
Aviation Structural Mech Common Core	1,898	6.1
Basic Enlisted Submarine	1,722	4.7
Aviation Structural Mech Org Level	1,613	1.6
Marine Corps		
Rifleman	6,291	7.2
Motor Transport Operator	1,970	8.4
Field Radio Operator (FROC)	1,387	8.4
Basic Electronics Course	1,169	18.6
Avionics Common Core Class A1	1,090	9.8
Automotive Organizational Maint	1,026	16.6
Personnel Clerk	784	11.4
Mortarman	780	3.0
Machine Gunner	779	3.0
Administrative Clerk	756	10.4
Air Force		
Security Apprentice	2,273	3.8
Air Traffic Control Apprentice	1,230	14.4
Law Enforcement Apprentice	1,218	4.8
Supply Management Apprentice	1,069	6.8
Comm-Computer Sys Opr Spec Apr	935	12.6
Personnel Apprentice	870	5.8
Information Mgt Apprentice	850	7.8
Services Specialist Apprentice	848	6.2
Supply Management Apprentice	832	7.8
Aerospace Ground Equip Apprentice	767	21.2

The final determinant of training loads is the anticipated rate of attrition. Attrition rates must be estimated for each course. A routine course may have low attrition while attrition may run high in complex technical courses. Unlike Recruit Training, students who fail Initial Skill Training usually are not discharged but re-trained in other, less difficult skills. The Services have implemented numerous initiatives to manage attrition; the average anticipated attrition rates are shown below.

TABLE V-6. Average Attrition Rates, Initial Skill Training (Enlisted)				
	Army	Navy	Marine Corps	Air Force
FY00	3.0%	5.0%	1.9%	3.1%
FY01	3.6%	5.0%	1.8%	3.1%

Skill Progression Training (Enlisted)

This sub-category covers skill training received by enlisted personnel after Initial Skill Training. Through this training the student gains the knowledge to perform at higher skill levels or in a supervisory position. Skill Progression Training is most frequently given after Service members have gained experience through actual work in their specialty. In some cases, however, training in a relatively narrow subject area as an immediate follow-on to Initial Skill Training is included in Skill Progression Training. Training load data for Skill Progression Training (Enlisted) are shown in Table V-7.

**TABLE V-7. Training Input, Output, and Load
Skill Progression Training (Enlisted)**

Service Component	FY98 Load	FY99 Load	FY00 Input	FY00 Output	FY00 Load	FY00 Input	FY00 Output	FY00 Load
Army								
Active	4,560	5,651	37,110	35,900	5,434	50,864	46,824	6,594
Reserve	497	562	2,757	2,720	717	2,302	2,253	652
Natl Guard	207	283	2,148	2,018	302	1,511	1,380	238
Navy								
Active	6,656	6,578	59,807	57,959	6,571	59,717	57,872	6,722
Reserve	67	128	2,221	2,159	114	2,220	2,158	115
Marine Corps								
Active	2,178	2,026	16,735	15,799	2,265	16,137	15,204	2,200
Reserve	183	182	2,227	2,209	192	2,029	2,010	171
Air Force								
Active	2,055	2,668	37,001	37,197	2,379	36,055	35,706	2,293
Reserve	107	151	3,705	3,730	166	3,608	3,573	161
Natl Guard	268	379	7,615	7,676	409	7,418	7,345	394
DoD								
Active	15,449	16,923	150,653	146,855	16,649	162,773	155,606	17,809
Res/Gd Tot	1,329	1,685	20,673	20,512	1,900	19,088	18,719	1,731
Total	16,778	18,608	171,326	167,367	18,549	181,861	174,325	19,540

The requirement for Skill Progression Training arises from the fact that training in a skill at entry level and subsequent experience do not, in many cases, fully qualify service members to do the more advanced jobs in their field. Several factors may contribute, singly or in combination, to a need for additional formal training:

1. The introduction of new equipment.
2. The need to produce a higher degree of skill in a sub-specialty.
3. The need to impart a broader base of knowledge to qualify an individual for supervisory responsibility.
4. The requirement for refresher training to bring the Service member up to date on the latest information and techniques in a skill.

As in all other types of training, the primary need is to have trained individuals available to replace losses as they occur. Planning future training in this sub-category follows the same general pattern as for Initial Skill Training. Some additional complications,

however, are introduced by the fact that members eligible for schooling are frequently serving overseas or on board ship, rather than flowing from the Recruit Training pipeline. This situation requires scheduling personnel to receive institutional training when they are available, preferably between duty assignments. Reserve Component personnel have similar difficulties attending formal schools because of civilian employer commitments. Service implementation of distance learning has helped to provide alternative delivery of skill progression training from traditional resident settings.

The following table displays course data for Skill Progression Training for each of the Services.

TABLE V-8. Courses, Course Length, and Projected Attrition, Skill Progression Training (Enlisted)				
	Army	Navy	Marine Corps	Air Force
FY00 Number of Courses	395	1,593	396	480
Average Course Length (Academic Days)	39	33	57	16
Projected Attrition	5.4%	2.0%	0.8%	1.0%

The Air Force's average days in training are low compared to the other Services because of the heavy use of short courses. The large number of Navy courses is a reflection of the many Navy occupational subspecialties.

Initial Skill Training (Officer)

As a general rule, Officer Acquisition Training is oriented toward the broad educational background and general military training that is considered necessary for all officers entering a Service. Most newly commissioned officers require further training for the specific type of duty they will be performing in their first duty assignment. Initial Skill Training for officers is, therefore, analogous to Initial Skill Training for enlisted personnel. Both provide the job-oriented training which, added to military fundamentals learned earlier, prepares the individual for taking a place in the job structure.

Load data for Initial Skill Training (Officer) are displayed in Table V-9.

**TABLE V-9. Training Input, Output, and Load
Initial Skill Training (Officer)**

Service Component	FY98 Load	FY99 Load	FY00 Input	FY00 Output	FY00 Load	FY01 Input	FY01 Output	FY01 Load
Army								
Active	1,701	1,969	5,991	6,047	1,737	6,534	6,461	1,823
Reserve	174	281	1,814	1,803	293	2,240	2,120	370
Natl Guard	418	333	1,260	1,142	359	1,236	1,249	365
Navy								
Active	455	464	2,164	2,148	439	2,160	2,144	433
Reserve	2	2	83	82	2	83	82	2
Marine Corps								
Active	954	1,000	2,921	2,887	978	2,905	2,868	977
Reserve	15	11	167	167	16	119	119	7
Air Force								
Active	654	699	4,861	4,812	651	4,843	4,795	642
Reserve	18	28	276	269	18	275	273	17
Natl Guard	42	67	551	547	44	549	544	43
DoD								
Active	3,764	4,132	15,937	15,894	3,805	16,442	16,268	3,875
Res/Gd Tot	669	722	4,151	4,010	732	4,502	4,387	804
Total	4,433	4,854	20,088	19,904	4,537	20,944	20,655	4,679

With minor exceptions, all newly commissioned Army officers attend officer basic courses at their branch schools -- Infantry officers at the Infantry School, Engineer officers at the Engineer School, and so forth. The Army conducts 60 initial officer basic courses with an average course length of 14 weeks. Officers attend before reporting to their initial assignment. In addition, certain officers are selected to attend one of 36 follow-on skill or functional training courses for more specialized assignments.

All submarine and nuclear officers and most Surface Navy officers go to Initial Skill Training. The Navy provides 18 courses for officers in Initial Skill Training, with an average course length of 15 weeks.

All newly commissioned Marine Corps officers attend a basic course for general orientation and training. In addition, most Marine Corps officers attend one of the 55 Initial Skill Training courses sponsored by the Corps. They may also participate in courses conducted by the Navy or other Services. Such courses average 17 weeks in length and are related to specific officer positions.

The Air Force conducts 68 Initial Skill Training courses for officers (which do not include Flight Training courses), with an average length of 9 weeks. The Air Force sends newly commissioned officers to initial skills courses within six months of their commissioning.

Skill Progression Training (Officer)

Skill Progression Training for officers is, in general, aimed at officers with several years of practical experience and provides them knowledge needed to assume more advanced responsibilities. For example, the Army provides advanced courses that are structured to prepare the students for battalion and brigade staff duties in addition to command responsibilities at the company and battery level. Data for Skill Progression Training (Officer) are displayed in the following table.

TABLE V-10. Training Input, Output, and Load Skill Progression Training (Officer)								
Service Component	FY98 Load	FY99 Load	Input	FY00 Output	Load	Input	FY01 Output	Load
Army								
Active	2,201	2,216	12,096	11,972	2,329	11,586	11,679	2,237
Reserve	532	458	2,131	2,066	118	2,069	2,039	118
Natl Guard	158	162	2,030	1,971	141	3,005	2,827	195
Navy								
Active	830	791	6,625	6,596	790	6,617	6,588	789
Reserve	2	1	104	103	2	86	85	1
Marine Corps								
Active	255	214	2,692	2,681	277	2,668	2,657	268
Reserve	9	10	337	335	7	334	334	7
Air Force								
Active	356	453	6,262	6,421	345	6,240	6,208	315
Reserve	8	17	608	611	21	606	603	21
Natl Guard	12	19	1,396	1,383	41	1,391	1,384	41
DoD								
Active	3,642	3,674	27,675	27,670	3,741	27,111	27,132	3,609
Res/Gd Tot	721	667	6,606	6,469	330	7,491	7,272	383
Total	4,363	4,341	34,281	34,139	4,071	34,602	34,404	3,992

The Army conducts 203 courses averaging 38 days in length. The Navy maintains 113 courses averaging 42 days in length. Navy courses cover a variety of specialized duties that are typically performed by officers with several years of service; for example, aviation maintenance officer course and nuclear propulsion plant course.

Both the Marine Corps and the Air Force conduct broad courses for officers at about the same level as the Army's advanced courses; however, as these are Service-wide and uniform in content, they are carried in Professional Development Education in this report. Within Skill Progression Training, Marine Corps officers attend 202 courses, averaging 33 days in length. They also utilize the course offerings of the other Services. The Air Force has 300 courses, averaging 9 academic days each, which train officers in new duties required by their prospective assignments.

Attrition from the Skill Progression courses for officers is significantly lower than for enlisted or initial skill officer training. Attrition of less than one percent is typical of such courses.

The Air National Guard (ANG) also conducts specialized skill progression training in several aviation disciplines at ANG installations. Air Force facilities cannot be used for this training due to constrained training time available for the reservist, geographic dispersion of units, availability of training equipment and location of training areas.

Functional Training (Officer and Enlisted)

Functional Training is an "all other" sub-category covering those types of required training that does not fit neatly into the definitions of the other sub-categories. Functional Training may also be described as training for a specific assignment or duty position. On the whole, Functional Training is in subject areas that cut across the scope of military occupational specialties and provides additional required skills without changing the student's primary specialty or skill level. For example, in the Air Force only survival training is considered functional training. Both officers and enlisted personnel participate in Functional Training. Load data for Functional Training are shown in Table V-11.

**TABLE V-11. Training Input, Output, and Load
Functional Training (Officer and Enlisted)**

Service Component	FY98 Load	FY99 Load	Input	FY00 Output	Load	Input	FY01 Output	Load
Army								
Active	4,981	5,681	57,349	52,128	5,798	63,291	57,600	6,230
Reserve	209	160	4,382	4,360	174	4,855	4,760	179
Natl Guard	214	252	3,384	3,160	228	3,796	3,462	254
Navy								
Active	4,807	4,526	329,878	324,011	4,441	329,485	323,624	4,436
Reserve	175	127	11,791	11,552	127	11,780	11,541	127
Marine Corps								
Active	655	755	13,261	12,925	685	13,264	12,926	683
Reserve	21	62	810	786	22	763	742	20
Air Force								
Active	232	288	5,797	5,716	260	5,797	5,716	260
Reserve	16	41	922	908	43	922	908	43
Natl Guard	31	44	925	921	44	925	921	44
DoD								
Active	10,675	11,250	406,285	394,780	11,184	411,837	399,866	11,609
Res/Gd Tot	666	686	22,214	21,687	638	23,041	22,334	667
Total	11,341	11,936	428,499	416,467	11,822	434,878	422,200	12,276

Army Functional Training includes the airborne, ranger, and special forces qualification courses, many specialized NCO supervision courses, language training, and a number of courses related to specialized equipment, e.g., Satellite Communication Operation and Maintenance. The number of functional courses conducted at Training MACOMs has declined as a result of course consolidations and elimination.

Navy Functional Training differs from that of the other Services because of the very high input to a large number of very short courses. Most of the training is conducted while the ship is in port and includes the following types of activity:

1. Shore training for shipboard teams (firefighting, damage control, anti-submarine warfare, and so forth).
2. Short basic or refresher courses at fleet training centers in the operation of equipment or systems (TOMAHAWK operations and maintenance, SH-60B system familiarization, and 50 cal. machine gun operations).

3. Shipboard in-port training assistance (combat systems, advanced acoustic analysis and command excellence seminar mobile training teams).
4. Pre-commissioning training for newly formed crews of ships under construction (damage control, Combat Information Center team training and radar navigation team training).

Marine Corps functional training provides skills necessary to perform a specific mission outside of the normal primary occupational specialty. Examples of functional training courses taught at Marine institutions are Marine Corps Security Guard, Scout-Sniper, Range Officer, Drill Instructor, and Cold Weather Survival.

Most Air Force Functional Training is survival training related to various environments: water, arctic, jungle, or tropic. These courses train air crews skills needed for long-term combat survival and survival in chemically, biologically, and radiological contaminated environments.

The following table provides course data for Functional Training.

TABLE V-12. Courses, Course Length, Functional Training				
	Army	Navy	Marine Corps	Air Force
FY00 Number of Courses	991	1,741	119	8
Average Course Length (Training Days)	22	5	21	19
FY01 Number of Courses	1,209	1,732	120	8
Average Course Length	21	5	20	19

FLIGHT TRAINING**General Description**

Flight Training programs provide basic flying skills required prior to operational assignment of pilots, navigators, and naval flight officers. Most of the training in this category is undergraduate flight training. At the conclusion of this training, a graduate is awarded "wings" and is classified as a "designated" or "rated" officer. Flight Training includes programs for pilots of all Services, navigators in the Air Force, and naval flight officers in the Navy and Marine Corps. Pilot training may be in jet or propeller-driven fixed-wing aircraft, or in helicopters. Some related advanced flight training, such as Army instructor pilot training, is also included in Flight Training. Enlisted programs in aviation related subjects (for example, in air traffic control) and Air Force survival training are in Specialized Skill Training. Marine Corps enlisted navigator training is included in Flight Training.

Reservists fill critical billets as Naval Flight Officers. The students enter the pipeline on extended active duty and are trained at the Aviation Officers Candidate School (AOCS) with their active duty counterparts. After completing all formal specific aircraft training, they are released from active duty to receive their proficiency training with a Naval Air Reserve squadron. The proficiency or operational training is not included in the training loads of this report.

Generally, Reserve Component participation in Flight Training is relatively minor, since most aviator requirements in Reserve units are filled by experienced aviators who join after extended service in the active components.

Flight Training loads, by Service and component, for Fiscal Years 1995 through 2001 are shown in Table VI-1

TABLE VI-1. Total Flight Training Load

Service Component	FY95	FY96	FY97	FY98	FY99	FY00	FY01
Army							
Active	752	699	657	696	767	808	909
Reserve	30	12	12	17	29	21	29
Natl Guard	151	152	134	148	184	196	274
Navy							
Active	1,586	1,158	1,324	1,648	1,455	1,418	1,403
Reserve	0	0	0	0	0	0	0
Marine Corps							
Active	493	490	471	608	522	484	477
Reserve	0	0	0	0	0	0	0
Air Force							
Active	904	1,154	1,190	1,329	1,518	1,490	1,743
Reserve	38	41	47	64	74	80	101
Natl Guard	138	111	139	129	199	207	229
Total							
Active	3,735	3,501	3,642	4,281	4,262	4,200	4,532
Res/Gd	357	316	332	358	486	504	633
Total	4,092	3,817	3,974	4,639	4,748	4,704	5,165

For purposes of clarity, the following discussion of aviation training is divided into three sections -- Undergraduate Pilot Training, Navigator Training and All Other Flight Training.

Undergraduate Pilot Training

Undergraduate Pilot Training qualifies students to perform the flight duties and to assume the responsibilities of military pilots. Air Force courses include sufficient flying training to allow the student to attain proficiency in the general class of aircraft flown in future assignments. Flight-related ground training and simulator training augment flying training. The Army uses a large number of warrant officer pilots. Enlisted entrants attend Warrant Officer Candidate School and upon graduation receive a conditional warrant appointment to warrant. Conditional warrants convert to Warrant Officer upon successful completion of flight training. Some Army flight training students are already commissioned officers or warrant officers prior to entering flight training.

Training data for FY 1998 through FY 2001 are displayed in the following table.

TABLE VI-2. Training Input, Output, and Load Undergraduate Pilot Training								
Service Component	FY98 Load	FY99 Load	Input	FY00 Output	Load	Input	FY01 Output	Load
Army								
Active	423	492	2,394	2,303	532	2,717	2,585	608
Reserve	3	19	45	50	13	66	68	16
Natl Guard	89	105	524	510	117	645	611	146
Navy								
Active	1,140	977	812	681	940	811	681	930
Reserve	0	0	0	0	0	0	0	0
Marine Corps								
Active	548	462	367	364	430	350	321	427
Reserve	0	0	0	0	0	0	0	0
Air Force								
Active	867	987	2,032	1,911	1,020	2,139	1,962	1,061
Reserve	54	56	136	122	67	153	140	76
Natl Guard	88	132	304	281	151	307	282	153
DoD								
Active	2,978	2,918	5,605	5,259	2,922	6,017	5,549	3,026
Res/Gd Tot	234	312	1,009	963	348	1,171	1,101	391
Total	3,212	3,230	6,614	6,222	3,270	7,188	6,650	3,417

Load data for each Service for undergraduate helicopter pilot training are shown in Table VI-3.



**TABLE VI-3. Training Input, Output, and Load
Undergraduate Helicopter Pilot Training**

Service Component	FY98 Load	FY99 Load	Input	FY00 Output	Load	Input	FY01 Output	Load
Army								
Active	423	492	2,394	2,303	532	2,717	2,585	608
Reserve	3	19	45	50	13	66	68	16
Natl Guard	89	105	524	510	117	645	611	146
Navy								
Active	409	344	335	282	346	335	282	346
Reserve	0	0	0	0	0	0	0	0
Marine Corps								
Active	285	228	216	186	216	216	186	228
Reserve	0	0	0	0	0	0	0	0
Air Force*								
Active	0	0	0	0	0	0	0	0
Reserve	0	0	0	0	0	0	0	0
Natl Guard	0	0	0	0	0	0	0	0
DoD								
Active	1,117	1,064	2,945	2,771	1,094	3,268	3,053	1,182
Res/Gd Tot	92	124	569	560	130	711	679	162
Total	1,209	1,188	3,514	3,331	1,224	3,979	3,732	1,344

* USAF Air Education and Training Command has transitioned the majority of UPT training and all of helicopter training to Specialized Undergraduate Pilot Training (SUPT).

The following table shows FY 2000 programmed course length and projected attrition rates for the Army undergraduate helicopter pilot training program.

TABLE VI-4. Course Length and Attrition Rates, Army Undergraduate Helicopter Pilot Training*		
	Commissioned Officer Candidates	Warrant Officer Candidates
Course Length (Weeks)	40	42.3
Attrition Rate	0.9%	14.0%
* UHPT consists of dual track training in either the UH-1H or the OH-58 A/C		

Navy Undergraduate Pilot Training begins with a common core of basic ground training and primary flight training and then diverges according to whether the student is to be qualified in jet aircraft, propeller aircraft or helicopters. The basic ground phase, or aviation pre-flight indoctrination, is six weeks in length for officer students and 14 weeks for aviation officer candidates. This phase also serves as an officer training period for the latter group.

The following table shows FY 2000 course length in weeks, attrition rates, and type of aircraft used for training for each phase of the syllabus.

**TABLE VI-5. Course Phasing, Navy/Marine Corps
Undergraduate Pilot Training**

Course/Phase	Course Length (weeks)	Attrition Rate		Type Aircraft
		Navy	USMC	
Commisioned Officer				
Aviation Pre-Flight Indoctrination	6.0	3.0%	1.0%	None
Primary Flight Training (Jet, Prop, Helo)	22.0	9.0%	9.0%	T-34C
Strike Training (Jet)				
Intermediate	22.8	5.0%	5.0%	T-2C
TA4J Advanced	24.4	5.0%	5.0%	TA-4J
T45 Advanced	25	5.0%	5.0%	T45A
T 45TS Advanced	40.0	8.0%	8.0%	T45A
Maritime Training (Prop)				
Intermediate	5.2	1.0%	1.0%	T-34C
Advanced	20.2	2.0%	2.0%	T-44A
USAF Adv Multi-Engine	25.0	N/A	N/A	T-44A
E-2/C-2 Training (Carrier Based Multi-Engine)				
Intermediate	14.6	2.0%	N/A	T-44A
Advanced	22.6	12.0%	N/A	T-2C
Rotary Helicopter Training				
Intermediate	5.2	1.0%	1.0%	T-34C
Advanced	21.4	3.5%	3.5%	TH-57

Because of the task requirements which dictate variations in course content, the standard Undergraduate Pilot Training course is as short as 55 weeks for an officer student qualifying in helicopters or as long as 82 weeks for an aviation officer candidate qualifying in jets. Actual course duration may be longer because of unforeseen circumstances such as major aircraft groundings, fuel shortages or inclement weather.

The following table displays load data for Navy and Marine Corps Undergraduate Pilot Training. All participants are in the active force.

TABLE VI-6. Training Input, Output, and Load Navy/Marine Corps Undergraduate Jet Pilot Training								
Service	FY98 Load	FY99 Load	Input	FY00 Output	Load	Input	FY01 Output	Load
NAVY								
Jet	415	369	232	194	330	231	194	320
Prop	316	264	245	205	264	245	205	264
Helo	409	344	335	282	346	335	282	346
Total	1,140	977	812	681	940	811	681	930
Marine Corps								
Jet	222	200	120	108	180	104	108	166
Prop	41	34	31	28	34	30	27	33
Helo	285	228	216	228	216	216	186	228
Total	548	462	367	364	430	350	321	427

Air Force helicopter pilots begin in Primary (T-37: 25.3 weeks or T-34: 34.1 weeks), then continue on to the Army UH-1 (23 weeks). Forecast attrition (all phases) is 15%, not including screening programs.

In addition, approximately 113 Air Force pilots will be trained annually in the EURO-NATO Joint Jet Pilot Training (ENJJPT) program at Sheppard Air Force Base, Texas. Forecast attrition for the program is 12 percent and the course length is 55 weeks. ENJJPT is a cooperative undergraduate pilot and pilot instructor training program that began operation on 1 October 1981 and is scheduled to end in 2005. Nations involved in the program are Belgium, Canada, Denmark, Germany, Greece, Italy, Netherlands, Norway, Portugal, Turkey, the United Kingdom and the United States. ENJJPT is based on the principles of proportionate sharing of program costs and proportionate instructor pilot manning. Alternative scenarios to succeed ENJJPT are being reviewed for future NATO Flight Training which include flexible syllabi, upgraded and/or new trainer aircraft, increased simulation, and concurrent programs in the U.S. and Canada.

Load data for both standard Air Force pilot training and ENJJPT are shown in Table VI-7.

TABLE VI-7. Training Input, Output, and Load Air Force Undergraduate Jet Pilot Training								
Service Component	FY98 Load	FY99 Load	FY00			FY01		
			Input	Output	Load	Input	Output	Load
Active	867	987	2,032	1,911	1,020	2,139	1,962	1,061
Reserve	54	56	136	122	67	153	140	76
Natl Guard	88	132	304	281	151	307	282	153
Total	1,009	1,175	2,472	2,314	1,238	2,599	2,384	1,290

At the conclusion of Undergraduate Pilot Training, the new pilot is qualified in trainer aircraft but requires additional training in operational aircraft units and employment tactics.

Specialized Undergraduate Pilot Training (SUPT)

USAF Air Education and Training Command has fully transitioned from generalized Undergraduate Pilot Training (UPT) to Specialized Undergraduate Pilot Training (SUPT). Students now begin in the T-37 (Columbus, Laughlin, or Vance) or the Navy T-34 (Whiting NAS), and then split into specialized tracks. Fighter-bound students fly the T-38 track in Phase III. Students in the Airlift-Tanker-Bomber track fly the T-1A. Students selected for Multi-engine turboprop train in the Navy T-44. Finally, students going to helicopters continue on to the Army UH-1.

Undergraduate Navigator Training

The Navy trains Navy and Marine Corps personnel to become Naval Flight Officers. The Air Force trains its personnel as navigators. The duties of Naval Flight Officers and Air Force navigators are not precisely the same because of mission differences, but at the undergraduate level they are sufficiently similar that they are referred to collectively in this report as "navigators" (the Army does not train or use navigators).

The Undergraduate Naval Flight Officer (UNFO) training program is a building block training program. Training commences at NAS Pensacola with Aviation Pre-flight Indoctrination (six weeks) during which the student learns the aeronautical and physiological aspects of flight. After completing this phase of the training, the student enters Basic Naval Flight Officer (NFO) training also located at NAS Pensacola. This 14-week course encompasses basic Navigation/Communications training developed in the 1D-23 Computerized NAV/COM training device and 2B37 (T-34C) Simulator. During this phase of training the NFO is taught basic flight skills and knowledge needed

to safely navigate, communicate and manage the (T-34C) aircraft systems. Successful completion of Basic NFO training qualifies student for entrance into either the Joint Undergraduate Navigation Training (JUNT) (22 weeks) conducted at Randolph AFB, Texas (described in a later paragraph), or the Navy Intermediate NFO training held at NAS Pensacola. The Intermediate NFO Phase of training (14 weeks) is divided into two levels of training both of which expand the knowledge gained in Basic NFO phase training and requires higher skill and performance standards. The student receives additional 1D-23 NAV/COM, 2B37 (T-34D) Simulator, and T-34C flight training in the first level of Intermediate training. In the second level of training the student advances to the multi place (T-1A Jayhawk) aircraft for jet instrument and visual navigation. After successful attainment of the performance standards, the student proceeds to one of the following advanced specialized Naval Flight Officer Training phases: Strike Fighter (F-14D/F-18E/F) (28 weeks), Strike (ES-3/S-3B/EA-6B) (21 Weeks), or Airborne Tactical Data Systems (E-2C) (15 weeks of training held at VAW-110 NAS, Norfolk). Students who advance to Strike/Strike Fighter training receive Ground Mapping & Air Intercept simulator training respectively. Both receive advanced flight training in the (T-39N Sabreliner) multi-place aircraft where they perfect the necessary radar skills required by fleet NFOs. Additionally, the students train in the 2F101 T-2 Simulator and T-2C aircraft for jet acclimatization and high speed navigation.

The advanced segment of training for Naval Flight Officers destined for the multi-engine land base community (EP-3/P-3/E-6A) is now managed by the 562 FTS at Randolph AFB. Navigator candidates receive 333 hours of academic instruction, 84 hours of simulator training, and 73 hours of flight instruction in the T-43 aircraft during 22 weeks of training. This training provides sufficient skills and knowledge so that further training for the newly rated navigator can be limited to flight training in operational aircraft and training in employment of applicable weapons systems.

The new Joint Specialized Undergraduate Navigator Training (JSUNT) program begins in Apr 99. Under JSUNT, either the Air Force or the Navy, depending on the track they select trains navigators. NAS Pensacola will train bomber/fighter navigators, while Randolph AFB will train both panel navigators (C-130/C-141/C-5/C-135) and Electronic Warfare Officers (EWO) for all required weapon systems. This training function was formerly provided at NAS Corry Station. The new JSUNT will train students from USAF, USN, ANG, AFRC, and foreign countries. Air Force navigator training starts with CORE, which qualifies students to perform basic navigational skills and prepares them for specialized training. Additionally, this course will strengthen the student's leadership skills, officer qualities and supervisory abilities. Upon completion of CORE, the students are tracked into either the panel navigator qualification or the Electronic Warfare Officer (EWO) qualification. The panel navigator students enter the Airlift/Tanker/Maritime (ATM) course. Here the focus is to qualify navy officers as Naval Flight Officers (NFOs) ready to enter initial operational aircrew upgrade training, and to qualify non-rated USAF officers to perform intermediate navigational duties and prepare them for further specialized training. ATM also stresses leadership skills, officer qualities, and supervisory abilities. After ATM, panel navigator students continue to

Electronic Warfare (EW) Principles, where the fundamental issues concerning electronic warfare are taught. Panel navigator students proceed to Theater Operations, where they learn low-level navigation duties and concepts of geographic theaters as supporters of regional airlift requirements. Finally, panel navigator students attend T-1A Airmanship, where either low level procedures, low level airdrop, or air refueling procedures are taught depending on the student's aircraft assignment. The EWO students will track into the EWO course upon completion of CORE. This course is an extensive field of study into state-of-the-art models of the wartime electromagnetic capabilities and applications scenarios. Upon completion of EWO, these students enter Theater Operations and complete the same training as their panel navigator counterparts. The total training time for panel navigators and EWOs is 170-180 training days. Other navigators, trained at NAS Pensacola, attend some forms of JSUNT training at Randolph. B-1 Weapon System Officers (WSOs) are trained at Pensacola and receive their EWO training at Randolph. Field-experienced F15 WSOs from ACC attend the EWO training to qualify as F15 EWOs. JSUNT graduates receive their assignments via a merit order assignment process.

Training load data for Undergraduate Navigator Training are displayed in Table VI-8.

TABLE VI-8. Training Input, Output, and Load Undergraduate Navigator Training								
Service Component	FY98 Load	FY99 Load	FY00 Input	FY00 Output	FY00 Load	FY01 Input	FY01 Output	FY01 Load
Navy								
Active	453	421	463	341	421	463	336	417
Marine Corps								
Active	7	7	4	4	1	62	60	10
Air Force								
Active	0	0	0	0	0	0	0	0
Reserve	18	17	20	20	5	145	140	25
Natl Guard	275	188	439	425	122	1,706	1,635	350
DoD								
Active	460	428	467	345	422	525	396	427
Res/Gd Tot	293	205	459	445	127	1,851	1,775	375
Total	753	633	926	790	549	2,376	2,171	802

Other Flight Training

This category covers miscellaneous types of flight training, including flight familiarization and other flight programs, which were not previously included in undergraduate pilot or navigator training. Load data are displayed in Table VI-9.

The Army includes courses for instructor pilots and specific aircraft pilot qualification courses in this category. Most of the courses are short, in the range of two to seven weeks.

The Navy Other Flight Training workload is composed mainly of instructor ground school training courses. Prospective instructors are taught unique techniques employed in the training of flight students. These courses are the Flight Instructor Training Course (FITC) and the Academic Instructor Training School (AITS). Jet transition training for designated aviators not qualified in jet aircraft is also included in this category, as are indoctrination flights for U. S. Naval Academy and NROTC midshipmen. For this report, the Navy included Midshipmen T-34C, Midshipmen TH-57, and Aircrew Coordination Training Instructors in Table VI-9.

The Air Force screens its pilot candidates in a 5-week "Enhanced Flight Screening" (EFS) program. The T-3 Firefly was the aircraft used for this program, however, it was grounded in July 1997, and placed on "minimum maintenance" status in August 1998. In December 1998, AETC implemented a new program to accomplish similar goals. Pilot candidates are now offered "Introduction to Flight Training" (IFT). IFT is a 40 hour FAA FAR Part 61 or Part 141 program (minimum 1 hour solo) flown with local civilian flight schools, aero clubs, or Fixed Based Operators (FBO). Pilot candidates must now either complete IFT or possess a Private Pilot License (PPL) prior to entry into SUPT.

**TABLE VI-9. Training Input, Output, and Load
Other Flight Training**

Service Component	FY98	FY99	FY00		FY01			
	Load	Load	Input	Output	Load	Input	Output	Load
Army								
Active	273	275	1,754	1,724	276	1,904	1,855	301
Reserve	14	10	56	55	8	97	96	13
Natl Guard	59	79	520	524	79	881	838	128
Navy								
Active	55	57	2,068	2,068	57	2,065	2,065	56
Air Force								
Active	187	343	2,215	1,954	348	2,130	1,894	332
Reserve	3	11	88	82	12	98	94	15
Natl Guard	23	50	341	309	51	334	302	51
DoD								
Active	515	675	6,037	5,746	681	6,099	5,814	689
Res/Gd Tot	99	150	1,005	970	150	1,410	1,330	207
Total	614	825	7,042	6,716	831	7,509	7,144	896

NOTE: Other Flight Training consists of Flight Familiarization Training, Advanced Flight Training and Other Flight Training.

The balance of the Air Force Other Flight Training workload is limited largely to instructor courses for pilots and navigators. Additionally, the Air Education and Training Command conducts some specialized courses. Included among these are Fixed Wing Qualification, Banked Pilot Requalification, and Medical Officers Training.

In each of the Services, graduates of undergraduate pilot and undergraduate navigator training receive supplementary training in the specific aircraft they will be flying on operational missions. Emphasis is placed on crew training and performance under conditions that would be encountered in combat. In the Army, most of this training is provided as part of normal unit training by the operational unit to which the new pilot is assigned. In the other Services, Navy or Marine fleet readiness squadrons, Marine combat crew readiness training squadrons, and Air Force combat crew training squadrons provide this additional training. As an exception, centrally conducted Army advanced flight training loads are included within Other Flight Training loads. However, most such training is classified as "crew and unit training" by the Navy, Marine Corps and Air Force and is not included in the loads of this report.

Determination of Requirements for Rated Officers

Flight Training rates are developed by comparing projections of future requirements for rated officers with projections of the future status of inventories of both Reserve and Active duty rated officers. Consideration is given to the need to have sufficient active duty aviators on hand, in appropriate grades. Requirements for rated officers include both the numbers needed to man the force in peacetime and the additional increment needed to sustain the force when war breaks out. For analytical purposes, aviator requirements are divided into two parts: unit and individuals. Requirements for aviators for each of these categories are computed to meet both peacetime needs and wartime mobilization needs.

Unit requirements represent the number of rated officers needed to carry out operational, training and management activities for programmed units. Each such authorized position (that is, military space or billet) requires a rated officer as an incumbent in order to carry out the functions of the job, either because the job involves flying duties i.e., "operational flying" positions as defined for purposes of the Aviation Career Incentive Act of 1974, or requires flying experience. Other positions that may be occupied by rated officers for career broadening or similar purposes, but that do not require rated officer incumbents for accomplishing the duties, are not included. Unit requirements have three subcomponents: force, training, and supervision.

- Force requirements are the positions required to man and operate the Services' aircraft. The number of force positions is a product of established crew ratios (the number of crews per aircraft), which take into account workload (flying hour) and readiness factors and the amount of mission flying and unit flight training that is necessary.
- Training positions include the flyers that are conducting formal flight training.
- The supervision component is made up of officer positions entailing actual supervision of flying and flight-related activities and the performance of staff jobs that require the expertise of a rated officer. These positions are continuously scrutinized by the services to assure that rated requirements are valid.

Individual requirements include the transients, students and other individuals needed to make it possible to provide for reasonable manning of positions in units.

Rated Officer Inventory Projections

Projecting rated officer inventories into the future must be based on historical experience, current judgment and an appraisal of how the officers will react to

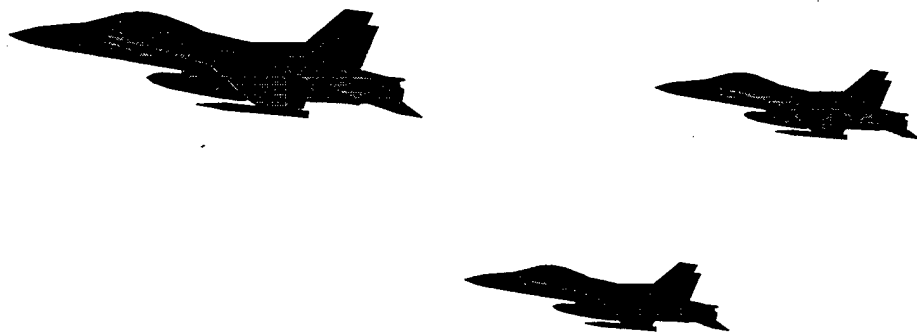
conditions in the future (for example: pay, morale, state of the civilian economy, civilian airline hiring plans and family satisfaction with service life). These estimates are projected for at least five years in the future. Comparisons of total force inventories of rated officers are then made against the computed total force requirements, and training rates for the entire five-year period are adjusted. This process is repeated each year so that adjustments can be made in training rates based on changes in requirements and/or updated inventory projections. This continuing process of adjustment is necessary to insure that the correct number of trained rated officers will be available in the future without large and expensive fluctuations in training rates.

Training Rate Adjustments

When a comparison of requirements and inventories discloses a shortage or overage of projected rated officers, training rates are adjusted upward or downward in order to bring the program back into balance. For example, if projected FY 2004 pilot requirements exceed projected inventories by 500, an increase in training rates (that is, output or production) of pilots of 100 per year starting in FY 2000 may be appropriate. Inputs into the training program would start in FY 2000 in order to obtain the first increase in desired output in FY 2001. This re-evaluation process is repeated at least once each year, with adjustments made as necessary to avoid wide fluctuations in loads.

Determination of Training Loads

The process described above, through continuous updating of the comparison between projected rated officer requirements and inventories, leads to a requirement for phased output from the flight training establishment. The desired annual output, considering the anticipated attrition rates and the planned course lengths, as discussed in the preceding sections on the various types of flight training, establishes the size of the input necessary to achieve the target output. Training loads are then calculated using these factors to determine the average number of students to be on hand during the training year. For FY 2000 and FY 2001, the currently recommended loads are those displayed previously in this chapter.



PROFESSIONAL DEVELOPMENT EDUCATION

General Description

The purpose of Professional Development Education is to provide training and education to career military personnel to prepare them to perform increasingly complex responsibilities as they progress in their military careers. Where Specialized Skill Training is directed toward specific job skills, Professional Development Education is concerned with broader professional development goals in such subjects as leadership and management, military science, engineering and medicine. Professional Development Education is conducted at both military and civilian institutions. This category includes senior enlisted leadership training in recognition of the broad professional content of these courses, as opposed to the narrower skill-oriented training typical of most enlisted training programs. Most of the programs in this category are for officer professional development.

Education in the military is fundamental to the development of military officers, enabling them to become fully qualified to perform duties of high responsibility in both war and peace. In most non-military professions, growth in ability and knowledge is gained through experience. In the military, opportunities for full practice of the profession are limited to wartime, and even those officers with combat experience have not had the opportunity for thorough exercise of warfare decision skills at their current rank and responsibility. The military school system serves partially to fill this shortfall by educating military officers in the skills and knowledge needed to perform their duties in a variety of locales and situations, both in peacetime and wartime.

Training loads for FY 1995 through FY 2001 are as shown in Table VII-1. The total loads in the table show a considerable disparity among the Services in amounts of Professional Development Education. These disparities are more apparent than real, and are related mainly to somewhat different ways of categorizing Service education and training programs.

The first three subcategories of Professional Development Education are officer professional military development programs. These programs are at three levels: career, intermediate and senior. In addition to regular courses for Active Force officers, most schools in this category present non-resident courses and short

seminars. Large numbers of Reserve Component officers and other military students are provided instruction through correspondence courses.

TABLE VII-1. Professional Development Education Training Loads							
Service							
Component	FY95	FY96	FY97	FY98	FY99	FY00	FY01
Army							
Active	3,258	2,329	2,402	2,435	2,683	2,758	2,801
Reserve	70	61	59	77	86	88	68
Natl Guard	79	69	69	87	80	90	72
Navy							
Active	2,147	1,981	1,934	1,709	1,695	1,695	1,697
Reserve	27	22	22	23	13	7	7
Marine Corps							
Active	1,250	1,182	1,590	1,493	1,736	1,518	1,517
Reserve	26	20	64	45	61	27	25
Air Force							
Active	4,254	4,038	4,201	4,305	4,518	4,380	4,462
Reserve	156	164	195	194	233	231	228
Natl Guard	156	177	203	173	187	185	183
Total							
Active	10,909	9,530	10,127	9,942	10,632	10,351	10,477
Res/Gd	514	513	612	599	660	628	583
Total	11,423	10,043	10,739	10,541	11,292	10,979	11,060

Professional Military Education (PME) is the systematic and comprehensive process of developing the skills, knowledge, and military judgment required to deal with the increasingly complex responsibilities associated with the duties and responsibilities of higher grades. In contrast to specific job or billet-related skills, PME is the life-long study of the profession of arms within the framework of military operations. PME is acquired through structured self-study, professional reading, symposia, formal schools attendance and experiences gained in duty assignments. The purpose of PME is to assist all Service members in fulfilling their personal goals and responsibilities for achieving operational competence.

Career Officer Professional Schools

The Marine Corps and Air Force conduct career officer professional courses for officers with some experience in operational units. These courses are Service-wide in scope and are, therefore, carried in this report under Professional Development Education. The Army and Navy conduct courses that are on a similar level, but are oriented toward specific skills, e.g., the Navy's Surface Warfare Officer's Course, or somewhat broader skills within a specific part of the Service, e.g., the Army's Armor Officer Advanced Course. The Army and Navy courses, because of their specialization, are treated in this report as part of Specialized Skill Training.

The Marine Corps Amphibious Warfare School prepares captains for duties in battalion or squadron command or on regimental level staffs. The course length is 40 weeks. The Air Force Squadron Officer School is a 7-week primary level course designed for captains to improve their professional competence and inspire their dedication to the profession of arms.

The training load data associated with these Marine and Air Force courses are displayed in Table VII-2.

TABLE VII-2. Training Input, Output, and Load Career Officer Professional Schools								
Service Component	FY98 Load	FY99 Load	Input	FY00 Output	Load	Input	FY01 Output	Load
Marine Corps								
Active	140	144	225	225	151	225	225	151
Reserve	6	6	16	16	7	14	14	5
Air Force								
Active	366	380	2,439	2,439	317	2,439	2,439	317
Reserve	6	16	105	105	14	105	105	14
Natl Guard	6	15	100	100	13	100	100	13
DoD								
Active	506	524	2,664	2,664	468	2,664	2,664	468
Res/Gd Tot	18	40	221	221	34	219	219	32
Total	524	564	2,885	2,885	502	2,883	2,883	500

commands. A relatively small number of officers from each Service attend one of the Command and Staff Colleges of the other Services and a few attend Allied schools at the same level. Attendance at the Intermediate Service Schools is on a select basis. The following table lists the Command and Staff Colleges and their respective course length in weeks.

TABLE VII-3. Intermediate Service Schools		
Schools	Location	Course Length (weeks)
Army Command And General Staff College	Fort Leavenworth, KS	40
College of Naval Command and Staff	Newport, RI	40
Marine Corps Command and Staff College	Quantico, VA	32
Air Command and Staff College	Montgomery, AL	43
Armed Forces Staff College	Norfolk, VA	12

Load data for military personnel attending Intermediate Service Schools is shown in the following table.

TABLE VII-4. Training Input, Output, and Load Intermediate Service Schools								
Service Component	FY98 Load	FY99 Load	FY00			FY01		
			Input	Output	Load	Input	Output	Load
Army								
Active	699	715	865	864	707	865	864	705
Reserve	16	15	33	33	15	33	33	15
Natl Guard	17	16	34	34	16	34	34	16
Navy								
Active	171	184	1,011	997	198	1,011	1,011	200
Reserve	5	1	0	0	0	0	0	0
Marine Corps								
Active	168	179	542	542	172	541	541	171
Reserve	10	9	218	218	11	218	218	11
Air Force								
Active	402	390	704	704	390	704	704	390
Reserve	10	11	13	13	11	13	13	11
Natl Guard	11	9	11	11	9	11	11	9
DoD								
Active	1,440	1,468	3,122	3,107	1,467	3,121	3,120	1,466
Res/Gd Tot	69	61	309	309	62	309	309	62
Total	1,509	1,529	3,431	3,416	1,529	3,430	3,429	1,528

Senior Service Colleges

Each of the services maintains a senior officers Service School or "War College." In addition, the National Defense University, offers two joint Senior Service colleges, The National War College and the Industrial College of the Armed Forces. Students from all four Services attend these colleges. Senior Service College attendance is highly selective and students are chosen by Service selection boards from among the most promising officers in the lieutenant colonel/colonel, commander/captain grades.

The common purpose of these Senior Service Colleges is to prepare students for senior command and staff positions at the highest levels in the national security establishment and the allied command structure. The unifying focus is the study of national goals and national security policy. Each of the Service colleges, while

concentrating on the employment of the parent Service in the defense mission, also includes the study of the employment of the forces of other Services.

All of the colleges integrate the study of the economic, scientific, political, sociological and other factors into the consideration of national security issues. The Industrial College of the Armed Forces, in its approach to national security issues, emphasizes the use and management of national resources. The length of the principal courses at the Senior Service College is 10 months. Most colleges also conduct shorter special-purpose seminar-type courses, some particularly designed for Reserve Component officers. Use of these short courses is greatest in the Navy.

Load data for the Senior Service Colleges is shown in the following table.

TABLE VII-5. Training Input, Output, and Load Senior Service Colleges								
Service Component	FY98 Load	FY99 Load	Input	FY00 Output	Load	Input	FY01 Output	Load
Army								
Active	320	332	958	964	332	837	866	298
Reserve	39	42	337	334	50	251	275	32
Natl Guard	57	54	464	464	61	392	416	44
Navy								
Active	81	93	149	128	135	149	149	138
Reserve	10	5	0	2	0	0	0	0
Marine Corps								
Active	69	69	122	122	68	124	124	68
Reserve	4	4	104	104	3	104	104	3
Air Force								
Active	224	220	259	259	220	259	259	220
Reserve	9	10	12	12	10	12	12	10
Natl Guard	15	14	16	16	14	16	16	14
DoD								
Active	694	714	1,488	1,473	755	1,369	1,398	724
Res/Gd Tot	134	129	933	932	138	775	823	103
Total	828	843	2,421	2,405	893	2,144	2,221	827

Enlisted Leadership Training

Courses included in this category are designed to provide selected senior enlisted personnel the skills and knowledge needed to assume the

responsibilities of the highest non-commissioned officer grades. These courses are the culmination of formal enlisted training and are, for enlisted personnel, analogous to the officer courses discussed in the preceding sections. In addition to such subjects as methods of leadership, human relations, discipline and training, and the administration and employment of military organizations, these higher level schools provide senior non-commissioned officers a broader perspective of the role and functions of their Services. Schools, locations and course length in weeks are shown in Table VII-6.

TABLE VII-6. Enlisted Leadership Training Courses		
Schools	Location	Length (wks)
Army: Sergeants Major Academy	Fort Bliss, TX	38
Advanced NCO (ANCOC)	TRADOC-wide	4 to 20
Basic NCO (BNCOC)	TRADOC-wide	6 to 19
Primary Leadership Dev Crs (PLDC)	Army-wide	4
Navy: Senior Enlisted Academy	Newport, RI	9
Marine Corps: Senior Level	Quantico, VA	1
Staff NCO Academy (Career Course)	Quantico, VA	7
	Camp Lejeune, NC	7
	Okinawa, JA	7
	El Toro, CA	7
	El Toro, CA	8
Staff NCO Academy (Advanced Course)	Camp Lejeune, NC	8
	Quantico, VA	8
	Quantico, VA	5
Sergeant Course	Camp Lejeune, NC	5
	Okinawa, JA	5
	El Toro, CA	5
	Twentynine Palms, CA	5
	Hawaii	5
Air Force:		
AF Senior NCO Academy	Gunter Annex, AL	7
NCO Academies	15 Worldwide	8
AF Airman Leadership School	69 Worldwide	4

Other enlisted leadership training for more junior noncommissioned officers is carried in Specialized Skill Training (except for the Air Force). This includes command sponsored NCO academies, for example. This training tends to be more skill related for specific types of specialized leadership responsibilities. The senior enlisted leadership training carried in this chapter is more properly thought of as Professional Development Education in a broader sense. All enlisted Air

Force PME is not skill related, but focuses on leadership, followership, management and supervisory roles throughout the member's career. All four Military Services now sponsor Senior Enlisted Leadership Academies. In addition, the Air National Guard conducts Professional Military Education courses at McGhee-Tyson Air Base, Knoxville, TN. These courses include Leadership School, NCO Academy, Academy of Military Science and Professional Continuing Education. Army National Guard NCOs and Army Reserve NCOs are trained in the Reserve Component Noncommissioned Officers Education System (RCNCOES), attending courses at the appropriate level of training at Reserve Component Training Institutions. However, the training loads for RC institutions are not included within this report.

Training loads for enlisted leadership training are shown in Table VII-7.

TABLE VII-7. Training Input, Output, and Load Enlisted Leadership Training								
Service Component	FY98 Load	FY99 Load	FY00 Input	FY00 Output	FY00 Load	FY01 Input	FY01 Output	FY01 Load
Army								
Active	276	384	550	577	433	600	529	434
Reserve	22	29	20	40	23	35	19	21
Natl Guard	13	10	18	15	13	15	17	12
Navy								
Active	43	43	250	250	43	250	250	43
Reserve	4	4	20	20	4	20	20	4
Marine Corps								
Active	823	995	6,361	6,278	781	6,359	6,276	781
Reserve	25	39	191	191	6	185	185	6
Air Force								
Active	2,150	2,323	23,452	23,278	2,333	23,452	23,278	2,333
Reserve	79	87	860	832	87	860	832	87
Natl Guard	119	126	1,209	1,216	126	1,209	1,216	126
DoD								
Active	3,292	3,745	30,613	30,383	3,590	30,661	30,333	3,591
Res/Gd Tot	262	295	2,318	2,314	259	2,324	2,289	256
Total	3,554	4,040	32,931	32,697	3,849	32,985	32,622	3,847

Graduate Education Fully Funded, Full Time

The Department of Defense needs military officers with specialized advanced knowledge, which, in some cases, is attainable only through graduate education.

Under the program established by Section 2004 of Title 10 United States Code and described in this section, military officers pursue graduate education on a fully funded, full-time basis. A minimum service payback obligation of three years for the first year of schooling and one year for each year after the first is required of all officers entering the program. Services establish maximum pay back periods.

The following table displays training load data for these graduate education programs. All participants are members of the Active Forces.

TABLE VII-8. Training Input, Output, and Load Graduate Education, Fully Funded, Full Time								
	FY98 Load	FY99 Load	Input	Output	FY00 Load	Input	Output	FY01 Load
Service								
Army	880	982	587	538	971	587	584	1,015
Navy	930	864	512	490	807	515	493	809
Marine Corps	194	221	118	118	236	118	118	236
Air Force	740	737	483	389	681	541	511	824
Total	2,744	2,804	1,700	1,535	2,695	1,761	1,706	2,884

Officer graduate students attend either a civilian educational institution or one of the two Service institutions, the Naval Postgraduate School or the Air Force Institute of Technology, depending upon where the required education can best be obtained. Curricula in the two Service institutions emphasize military unique courses, such as in logistics management or intelligence operations, and military applications in all other courses. While these schools are primarily used by the parent Services (including Marine Corps use of the Naval Postgraduate School), they also educate some students from other Services. The following table displays student loads for these two schools.

TABLE VII-9. Graduate Education Load at Service Institutions				
	Actuals FY98	FY99	Estimates FY00	FY01
Naval Postgraduate School				
Army	51	100	100	100
Navy	784	718	661	661
Marine Corps	176	203	214	214
Air Force	28	28	28	28
Total	1,039	1,049	1,003	1,003
Air Force Institute of Technology				
Army	1	1	1	1
Navy	0	0	0	0
Marine Corps	6	8	8	8
Air Force	377	337	360	387
Total	384	346	369	396

Requirements for graduate-degreed officers depend upon the number of "validated billets," that is; military positions that have been determined to require an incumbent with graduate level education in the applicable academic discipline. The Services examine the duty prerequisites for each billet nominated for validation and determine if the job does, in fact, require an officer with an advanced degree. Requirements for graduate legal education are determined separately.

Other Full Time Education Programs

In addition to the Professional Development Education programs already described there are a variety of other full-time programs tailored to meet the particular needs of the Services. (Health Professions Education programs are briefly discussed in a separate section at the end of this chapter).

Several programs have been designed to permit selected individuals an opportunity to work toward associate, baccalaureate or advanced degrees. These programs benefit the Services in several important ways: they increase the technical qualifications of the individuals in the program; they improve the general educational levels of Service personnel; and they provide career retention and recruiting incentives to outstanding personnel. In addition, to the extent possible, personnel in advanced education programs are later used to satisfy validated requirements and hence reduce the required student load in graduate education for validated billets.

The degree completion programs are managed by the individual Military Departments and each has its own selection criteria. Generally, individuals are

not selected for a program unless the education will enhance their professional development and be of use to the Military Department. All of the programs require an active service obligation payback from the individual.

Short course education provides the Military Services with needed skills in a wide variety of scientific, administrative and other fields. These programs are selected to train personnel in job-oriented skills that can best be acquired through abbreviated courses. Accounting, traffic management and aviation safety are examples of skills involved. Some of this training is conducted in DoD schools, some at civilian institutions.

TABLE VII-10. Training Input, Output and Load Other Full Time Education Programs								
Service Component	FY98 Load	FY99 Load	Input	Output	FY00 Load	Input	Output	FY01 Load
Army								
Active	260	270	735	735	315	775	775	349
Navy								
Active	131	160	2,960	2,960	152	2,959	2,959	151
Reserve	4	3	275	275	3	275	275	3
Marine Corps								
Active	99	128	67	61	110	67	61	110
Air Force								
Active	442	503	10,421	10,477	474	10,389	10,451	413
Reserve	32	42	1,038	1,045	42	1,038	1,045	39
Natl Guard	22	23	587	583	23	587	583	21
DoD								
Active	932	1,061	14,183	14,233	1,051	14,190	14,246	1,023
Res/Gd Tot	58	68	1,900	1,903	68	1,900	1,903	63
Total	990	1,129	16,083	16,136	1,119	16,090	16,149	1,086

Health Professions Education

This subcategory is made up of a wide variety of courses for personnel of all health professions; physicians, dentists, nurses, medical administrators, and so forth. The majority of the courses offered are conducted in military facilities and varies in length from a few days to a full year. Some training is conducted at civilian medical institutions and, in the case of the Army, includes some advanced degree programs. The purpose of Health Professions Education is to expand the skills of military medical personnel and to provide them timely

information on the latest techniques in their fields. In this category, the Army and Navy provide long-term training. The Air Force relies on short courses. Educational programs connected with the acquisition of health professionals are carried in this report under Officer Acquisition Training. The following table shows load data for Health Professions Education Programs.

TABLE VII-11. Training Input, Output and Load Health Profession Education								
	FY98 Load	FY99 Load	Input	Output	Load	Input	Output	Load
Service								
Army	1,713	1,780	898	840	1,914	898	840	1,914
Navy	353	351	360	284	360	354	268	356
Air Force	39	32	1,500	1,500	32	1,500	1,500	32
Total	2,105	2,163	2,758	2,624	2,306	2,752	2,608	2,302

TRAINING MANPOWER

General Description

Manpower associated with the individual training mission in the Department of Defense can be divided into two parts: (1) trainees and students being trained, and (2) military and civilian manpower conducting and supporting the training. These two different classes of manpower are discussed and explained in this chapter.

Trainees and Students

Manpower undergoing training in the Defense training establishment is defined and quantified in three different ways, each of which serves a somewhat different purpose with regard to manpower accounting and resource allocation.

1. Training Loads. These are the "military training student loads" and were detailed by component in Chapters III through VII of this report. They represent the number of military trainees, students and cadets of each Service and component in training during a given fiscal year. Training loads include all military manpower of a given Service or component who are undergoing individual training in a centralized school or training center, regardless of whether the training is conducted by the parent Service, one of the other Services, a DoD school, or by an agency or institution outside the Department of Defense, such as a civilian college or university. Training loads also include all military personnel in training regardless of their assignment status. Some trainees and students are assigned in a Permanent Change of Station (PCS) status to the training activity. Others are attending training in a temporary duty (TDY) or temporary additional duty (TAD) status while remaining assigned to their parent units. Still others are attending training while in transit from one permanent assignment to another.

Since most courses are much shorter than a year in length, the actual number of students and trainees who enter training, and the number who graduate, is considerably greater than the training load. For example, the total programmed training load for Recruit Training in FY 2000 is 39,152 yet about 246,000 persons will enter Recruit Training and about 222,000 will graduate.

2. Training Workloads. The total number of trainees and students undergoing training within DoD includes some trainees and students of foreign nations, DoD civilian employees, and members of other departments and agencies of the U.S. Government, notably the Coast Guard. In addition, many U.S. military students and trainees are trained by a Service other than their own. Consequently, the

cumulative number of students trained (or to be trained) by a given Service, or its training workload, usually differs from its training load. For example, the Marine Corps has a programmed Flight Training load of 484 in FY 2000. However, since the training is conducted by other Services, its Flight Training workload is zero. On the other hand, because the Navy trains many personnel from other Services and Coast Guard, foreign students as well as most of its own students, the Navy's Specialized Skill Training workload is higher than its training load.

Training workload, in conjunction with other applicable considerations, is the major determinant of the resources (manpower, funds, material and facilities) required to conduct training. It, rather than training load, is appropriately used in considering the allocation of resources to a Service or a training activity. Table VIII-1 displays the programmed military training workloads for each of the Services in FY 2000 and 2001.

TABLE VIII-1. Training Workloads (Thousands)				
FY00	Army	Navy	Marine Corps	Air Force
Category				
Recruit	14.7	10.5	9.7	4.2
Officer Acquisition	4.7	4.9	0.4	7.3
Specialized Skill	41.3	24.2	6.5	17.9
Flight	1.2	2.5	0.0	1.7
Prof. Dev. Educ.	2.2	2.3	1.1	5.1
OSUT	10.1	N/A	N/A	N/A
Total	74.2	44.3	17.7	36.2
FY01				
Recruit	16.6	10.5	9.9	4.2
Officer Acquisition	4.7	4.9	0.4	7.1
Specialized Skill	44.2	24.2	6.6	17.2
Flight	1.4	2.5	0.0	2.1
Prof. Dev. Educ.	1.9	2.3	1.1	5.2
OSUT	9.4	N/A	N/A	N/A
Total	78.2	44.4	18.0	35.7

3. Students, Trainees, and Cadets. In the Individuals accounts of the Defense Manpower Requirements Report, military manpower is included for each Service as "Trainees and Students" and (except for the Marine Corps) "Cadets". Conceptually, this manpower represents the number of military trainees, students, cadets and midshipmen programmed to be assigned (PCS as opposed to TDY/TAD) for training on the last day of a given fiscal year. Student, trainee and cadet manpower is similar to training load in that both represent military members of the reporting Service in training status. Nevertheless, there are substantial differences in the way the amount of manpower in these two manpower aggregations is calculated, with

the result that the totals are seldom the same. The major reasons for these differences are:

- Training loads are man-years in training status, whereas trainees, students, and cadets are end strengths, or numbers in training on the last day of the fiscal year. Trainee, student, and cadet numbers are thus affected by the seasonality of enlistment patterns, as described in Chapter III, while the element of seasonality is leveled out in training loads.
- Training loads include students attending training in a temporary duty (TDY or TAD) status as well as those attending en route training in a PCS status. In the Defense Manpower Requirements Report, TDY and TAD students are carried in the categories of their parent units.

Training loads are a more accurate measure of the amount of training that is needed to meet military requirements than are the categorizations trainees, students and cadets.

Manpower in Support of Training

Military and civilian manpower is required to accomplish the individual training mission. This manpower performs all the other tasks necessary to conduct and support individual training conducted in training institutions, i.e., it conducts and supports instruction, operates training bases and facilities, maintains training equipment, produces training aids, provides personal and community services to students, trainees, and other military members, plans and manages training.

ROTC students are not military members in an active duty status and are not included in military manpower training loads. However, ROTC Basic Camp loads are included in the Army Recruit training loads because recruit training instructors and staff support and conduct that training. To be consistent with this treatment of ROTC students, manpower supporting the primary ROTC programs at colleges and universities is not included in Tables VIII-2 through VIII-5.

The following tables summarize manpower in support of training in three general functions: Conduct of Individual Training, Training Base Operating Support, and Management Headquarters. Conduct of Individual Training includes the following types of manpower: instructors, instructional support, school/training center staffs, student supervisors and direct training support such as training aids and literature, audiovisual resources and instructional systems development.

**TABLE VIII-2. DoD Manpower in Support of Training,
Conduct of Individual Training
(End Strength, Thousands)**

	FY97		FY98		FY99		FY00		FY01	
	MIL	CIV	MIL	CIV	MIL	CIV	MIL	CIV	MIL	CIV
Army	21.3	5.5	20.7	5.6	21.4	5.4	21.8	5.4	21.8	5.4
Navy	18.0	2.8	18.1	2.9	18.4	3.1	17.3	2.9	17.2	2.8
Marine Corps	9.1	0.2	8.9	0.2	8.9	0.2	8.9	0.2	8.9	0.2
Air Force	10.9	4.3	10.9	4.1	10.7	4.2	11.1	4.3	11.2	4.1
Total	59.3	12.8	58.6	12.8	59.5	12.9	59.1	12.7	59.1	12.5

**TABLE VIII-3. DoD Manpower in Support of Training,
Base Operating Support
(End Strength, Thousands)**

	FY97		FY98		FY99		FY00		FY01	
	MIL	CIV	MIL	CIV	MIL	CIV	MIL	CIV	MIL	CIV
Army	8.1	11.0	9.4	10.2	8.2	9.7	7.4	9.1	6.8	8.8
Navy	3.4	5.0	2.7	3.9	1.9	2.9	1.4	2.9	1.4	2.8
Marine Corps	2.7	1.3	2.5	1.2	2.5	1.2	2.5	1.2	2.5	1.2
Air Force	5.8	5.2	5.3	4.7	5.8	4.5	4.3	4.4	4.1	4.4
Total	20.0	22.5	19.8	20.0	18.4	18.4	15.6	17.5	14.7	17.2

TABLE VIII-4. DoD Manpower in Support of Training, Management Headquarters (End Strength, Thousands)										
	FY97		FY98		FY99		FY00		FY01	
	MIL	CIV	MIL	CIV	MIL	CIV	MIL	CIV	MIL	CIV
Army	0.3	0.6	0.3	0.7	0.3	0.6	0.3	0.6	0.2	0.5
Navy	0.1	0.4	0.1	0.2	0.1	0.2	0.1	0.2	0.1	0.2
Marine Corps	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Air Force	0.8	0.4	0.7	0.6	0.8	0.5	0.7	0.5	0.7	0.5
Total	1.2	1.4	1.2	1.5	1.2	1.2	1.1	1.2	1.1	1.2

TABLE VIII-5. DoD Manpower in Support of Training, All Functions (End Strength, Thousands)										
	FY97		FY98		FY99		FY00		FY01	
	MIL	CIV	MIL	CIV	MIL	CIV	MIL	CIV	MIL	CIV
Army	29.8	17.2	30.4	16.5	29.9	15.7	29.5	15.0	28.8	14.7
Navy	21.5	7.4	20.9	7.0	20.4	6.3	18.8	6.0	18.6	5.8
Marine Corps	11.8	1.5	11.4	1.4	11.4	1.4	11.4	1.4	11.4	1.4
Air Force	17.5	9.9	17.0	9.4	17.4	9.1	16.2	9.1	16.0	9.0
Total	80.6	36.0	79.6	34.2	79.1	32.5	75.8	31.5	74.9	30.9

The Services' estimates of training attributable manpower include some staff and support manpower that do not contribute to the production of student output and loads. This manpower is reported as training resources in the Future Years Defense Program (FYDP) because they belong to organizations and units with a primary mission of training. The majority of the non-training attributable manpower is that portion of Base Operating Support (BOS) needed to support non-training tenant activities at training installations.

Table VIII-6 shows changes in total military and civilian manpower in support of training between FY 1989 and FY 2000

TABLE VIII-6. Manpower in Support of Training, DoD Total, by General Function (End Strength, Thousands)											
	FY89			FY00			FY01			Percent Change Total Manpower	
	MIL	CIV	TOT	MIL	CIV	TOT	MIL	CIV	TOT	FY00/89	FY01/00
Conduct of Individual Training	80	15	94	59	13	72	59	13	72	-23.6%	-0.3%
Operating Support	34	29	63	16	18	33	15	17	32	-47.0%	-3.6%
Training Headquarters	2	1	3	1	1	2	1	1	2	-17.3%	0.0%
Total	115	45	159	76	31	107	75	31	106	-32.7%	-1.3%

As Table VIII-6 shows, the total military and civilian manpower in support of active training institutions has decreased 33 percent between FY 1989 and FY2000 and is projected to decrease 1.3 percent from FY 2000 to FY 2001.

As shown in Tables VIII-7 and VIII-8, training workloads will be 23 percent lower in FY 2000 than in FY 1989 and projected to be 2.2 percent higher in FY 2001 than in FY 2000.

TABLE VIII-7. Training Workload Trends (Thousands)					
				Percent Change	
	FY89	FY00	FY01	FY00/89	FY01/00
Army	100.4	74.2	78.2	-26.1%	5.4%
Navy	70.8	44.3	44.4	-37.4%	0.1%
Marine Corps	17.1	17.7	18.0	3.4%	1.8%
Air Force	34.2	36.2	35.7	5.8%	-1.4%
Total	222.6	172.4	176.2	-22.5%	2.2%

TABLE VIII-8. Training Manpower and Training Workload Trends (Thousands)					
	FY89	FY00	FY01	Percent Change	
				FY00/89	FY01/00
Manpower in Support of Training	159	107	106	-32.7%	-0.9%
Training Workloads	222.6	172.4	176.2	-22.6%	2.2%

Training Manpower Detailed by Service and Type of Training

Table VIII-9 shows the manpower required to support FY 2000 and FY 2001 training workloads by Service and training activity.

As was noted early in this chapter, training workloads, in conjunction with other factors, are the determinants of the resources required to conduct training. The workload/resource relationship is not a simple one, but depends upon the nature of training and training support involved. For example, Flight Training normally requires a great deal of support manpower for aircraft maintenance and weapons training requires close instructor supervision for safety considerations.

TABLE VIII-9a. Training Manpower by Service and Type of Training (Thousands)										
FY00	Army		Navy		Marine Corps		Air Force		Total	
	MIL	CIV	MIL	CIV	MIL	CIV	MIL	CIV	MIL	CIV
Recruit	2.7	0.0	1.1	0.0	2.9	0.0	0.4	0.0	7.1	0.1
Officer Acquisition	0.7	0.8	0.8	0.7	0.9	0.0	0.9	0.9	3.3	2.4
Specialized Skill	13.5	3.6	12.3	0.9	4.7	0.2	6.4	1.6	37.0	6.2
Flight	0.9	0.2	2.7	0.3	0.0	0.0	1.9	1.3	5.6	1.7
Professional Development	0.6	0.6	0.5	1.0	0.3	0.0	1.5	0.6	2.9	2.2
Army One-Station Unit	3.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0	3.3	0.1
Direct Support	2.9	1.5	0.0	0.5	0.0	0.1	0.7	0.3	3.6	2.4
Base Support	4.5	7.6	1.4	2.4	2.5	1.1	3.7	4.0	12.0	15.1
Management Headquarters	0.3	0.6	0.1	0.2	0.0	0.0	0.7	0.5	1.1	1.2
Total	29.5	15.0	18.8	6.0	11.4	1.4	16.2	9.1	75.8	31.5

**TABLE VIII-9b. Training Manpower by Service
and Type of Training**
(Thousands)

FY01	Army		Navy		Marine Corps		Air Force		Total	
	MIL	CIV	MIL	CIV	MIL	CIV	MIL	CIV	MIL	CIV
Recruit	2.7	0.0	1.1	0.0	2.9	0.0	0.4	0.0	7.1	0.1
Officer Acquisition	0.7	0.9	0.8	0.7	0.9	0.0	0.9	0.8	3.3	2.3
Specialized Skill	13.5	3.5	12.2	0.9	4.7	0.1	6.4	1.6	36.9	6.1
Flight	0.9	0.2	2.7	0.2	0.0	0.0	2.0	1.2	5.6	1.7
Professional Development	0.6	0.6	0.5	1.0	0.3	0.0	1.5	0.5	2.9	2.2
Army One-Station Unit	3.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0	3.3	0.1
Direct Support	2.9	1.6	0.0	0.4	0.0	0.1	0.7	0.3	3.6	2.4
Base Support	3.9	7.2	1.4	2.3	2.5	1.1	3.4	4.1	11.1	14.8
Management Headquarters	0.2	0.5	0.1	0.2	0.0	0.0	0.7	0.5	1.1	1.2
Total	28.8	14.7	18.6	5.8	11.4	1.4	16.0	9.0	74.9	30.9

* Service estimates of training manpower include some staff and support manpower that do not contribute directly to the production of student output and loads but are reported as training resources in the Future Years Defense Program (FYDP) because they belong to larger organizations with a primary training mission.

Manpower data in the six categories of training, i.e., Recruit through One-Station Unit Training, includes instructors, school/training center staffs and student supervisors. Direct training support includes such tasks as training aids and literature, audiovisual resources, and instructional systems development.



TRAINING MANAGEMENT

General Description

Chapters III through VII of this report described and explained the military training student loads required for each military component. These student loads represent patterns and levels of training effort which require manpower and other resources. The purpose of this chapter is to describe the management of individual training resources.

In considering training resources, it is important to distinguish between the training loads required by a Service but conducted in part outside the Service, and the workloads representing training conducted by the Service. As discussed in the previous chapter, the workloads, which represent training conducted by a Service, are the basis for resource requirements (manpower, material, facilities and funds) needed to conduct and support the training that the Service executes.

Management of Individual Training

Detailed management of individual training is carried out by the four Military Services. Each of the Services, except the Marine Corps, has a training commander immediately subordinate to the Service chief who is responsible for most of the individual training conducted within that Service. Some training is managed directly by the Service headquarters. However, the most prevalent pattern of control is through a training command headquarters that manages most Service military schools, training centers and other training facilities.

Staff Responsibilities

Within the Office of the Secretary of Defense (OSD), staff responsibility for individual training and education policies rests with the Under Secretary of Defense (Personnel and Readiness), with a strong influence over the allocation and use of resources being exercised by the Under Secretary of Defense (Comptroller). These two offices work closely together in the staff supervision of DoD individual training and education. The OSD role is generally one of policy formulation, allocation of resources, overview of Service training programs and coordination among the Services.

Within each Service headquarters, with exception of the Marine Corps, a principal staff officer has responsibility for individual training. Other staff members may have primary responsibility for certain types of training, for example, a Service Surgeon General for

professional medical training. Other staff members have collateral responsibilities for the allocation of manpower and funds to the training function.

Primary responsibility on the Army staff for individual training rests with the Deputy Chief of Staff for Operations and Plans and his subordinate, the Director of Training. Within the Navy, the principal staff officer is the Deputy Chief of Naval Operations for Manpower, Personnel, and Training. The Deputy Commander for Training and Education acts as the principal training advisor to the Commandant of Marine Corps, through the Commanding General, Marine Corps Combat Development Command (MCCDC). Within the Air Force, the Director of Personnel Programs, under the Deputy Chief of Staff for Personnel, has staff responsibility for individual training.

Training Commands

Each Service has a command headquarters that manages most of the individual training conducted by that Service:

- The Army's principal training command is Headquarters, Training and Doctrine Command (TRADOC), located at Fort Monroe, Virginia. TRADOC's control is exercised through training installations and school commanders throughout the United States.
- The Chief of Naval Education and Training (CNET), headquartered in Pensacola, Florida, exercises control of aviation education and training through a subordinate functional commander. For all other education and training under CNET's purview, CNET directly controls training centers, schools, and programs throughout the Navy.
- For the Air Force, Headquarters, Air Education and Training Command at Randolph Air Force Base, Texas, directly controls individual training centers and units.
- For the Marine Corps, the Deputy Commander for Training and Education, Quantico, Virginia, also functions as the Commander, Marine Corps Schools and exercises command, operational control, technical direction, and/or coordination for all Marine Corps formal schools and training centers.

The Service-wide training commands are not responsible for all individual training and education conducted. As already noted, the Surgeons General are responsible for most health professional and medical technical training. Other examples include the Service Academies, which are under the direct supervision of the respective Service Chiefs.

The Services' training command commanders and the Marine Corps Deputy Commander for Education and Training are also the senior members of the Interservice Training Review Organization (ITRO). The ITRO was formed in 1972 to facilitate cooperative training efforts among the Services. The committees and working groups of the organization perform the detailed analysis which becomes the basis for decisions

on the feasibility of consolidation of training courses or other cooperative arrangements. A listing of major joint training efforts is provided in Appendix B.

APPENDIX A

DETERMINING TRAINING REQUIREMENTS

The following overview of the methodology for assessing and calculating training requirements is provided as a framework for understanding. As noted, details in calculation may differ to some extent among the Services and among the training categories.

Requirements

All training is accomplished to satisfy the need for personnel with certain types and levels of skills to man the approved or projected force. The Services, over the years, have developed detailed, systematic methods of determining the manpower needed to man and support the forces. The Defense Manpower Requirements Report discusses this process. From these force requirements for manpower the need for trained personnel with specific skills can then be derived. For example, a given force structure establishes the number of trained enlisted personnel needed. The number of authorized positions within that force structure for radar technicians establishes the basic requirement for trained personnel with that skill. This process is repeated periodically for all skills and skill levels for each Service, for both officer and enlisted skills. The total of all personnel in all skills needed to perform all the jobs in the force at a point in time represents the total requirement for trained manpower projected for that date.

Inventory Projections

The requirements identified through this process must be measured against the available assets, in terms of trained personnel on hand in each skill and skill level. From this asset base, estimates are made of how many trained personnel will be available at various points of time in the future. These estimates take into account probable rates of change to the current inventory – through reenlistment, promotion, discharge, death, retirement, or other causes. These estimates are based on the best historical information available, tempered by judgment of how future personnel policies, the state of the economy, behavioral patterns, and other factors (many of them difficult to predict) will affect the probabilities that a trained individual will remain in the Service. A comparison of skill requirements and skill inventory projections, over time, establishes the extent of shortage or surplus likely to exist in each skill area by month and year. Adjusting the inventory may entail retraining personnel who are in surplus skills, but to a much greater degree, adjustment is likely to require the training of new accessions at entry level in shortage skill areas. The process places a demand on the personnel management and training establishments continually to analyze information about

attrition as it occurs, by skill and skill level, in order to produce the right number of trained personnel with the proper skills needed to maintain the balance of the skill inventory. The workload thus placed on the training establishment is detailed by graduates needed from courses of various lengths and is measured in terms of average student load, or "training load."

Average Training Loads

Resources (manpower, money, and material) needed for any particular category of training vary with the number of students undergoing training at any given time. Facilities must be constructed and maintained to accommodate these students in training. The training establishment must maintain a sufficient staff of qualified instructors to conduct instruction for the "load" of students. Students and Trainees, as described in the "Individuals" chapter of the Defense Manpower Requirements Report, must be programmed to account for the fact that these personnel are in formal school training and are not available for duty with operational units. All of these personnel must be paid, housed, and supported. The basis for establishing these resource requirements is the "average training load."

The aggregate training load of courses of instruction within a given training category or sub-category is computed in accordance with the following formula, except as noted:

$$\frac{\text{Entrants} + \text{Graduates}}{2} \times \text{Course Length}^{1/} = \text{Load}$$

^{1/} Training time is expressed as a fraction of a year

Training load data is calculated by class and aggregated by course and training category. Fractions of carryover classes conducted during the year are included as though they were separate classes. However, individuals remaining in class at the end of a period are not counted as graduates, nor are individuals already in a class at the beginning of a period counted as entrants except for purposes of computing training loads for these fractions of courses.

The training load for a category or sub-category of training (e.g., Specialized Skill Training or Functional Training within that category) is the sum of the loads computed for all classes of courses within the category or sub-category. This formula is also used at the course level or training category level when detailed estimates by class are not available.

This method of computation implies "straight-line" attrition, that is, net class attrition occurs at a constant rate during a course. More detailed methods to calculate the impact of attrition for computation of load are used when better information is available. This is particularly true for high cost courses such as within flight training programs.

Since attrition varies for different training programs and is not always spread uniformly throughout the length of a course of training, determining training loads becomes a complex problem in estimation. This process of estimation involves two related factors.

First, across the spectrum of training programs that are within the scope of this report, attrition varies from nearly zero to as high as 28 percent. Most officer Professional Development Education programs have practically no attrition. For FY 2000 and 2001, the Services estimate that about 8 percent of new recruits on a DoD wide basis will not complete Recruit Training because they will not have the mental or physical qualifications, or the motivation, for military life. Attrition rates in Specialized Skill Training vary widely, with the longer and more demanding courses tending to have higher losses. Pilot training is near the top of the scale in attrition. The higher rate of losses is based on lack of aptitude or motivation for flying, accidents and similar causes which are intensified in this type of training. While historical data provide a basis for projecting attrition rates for all types of training there is a considerable possibility for error based on variance in such factors as student quality and motivation.

A second necessary step in evaluating the effect of attrition is to estimate the phasing of attrition for each training program. In some courses, attrition tends to be higher in the early stages of a course when those less skilled or lacking motivation are discovered. In other courses, the bulk of attrition may occur toward the end of the course. The patterns of losses vary widely among types of training and over time. The complexities of the attrition variable make it necessary for the Services to use computer simulations in their training load calculations which take into account the rates and time-phasing of attrition.

An additional variation is introduced into the conceptual process of forecasting requirements and planning training loads as described above by the seasonal and cyclical nature of new accessions to the Services. Inputs to many of the more stable training programs -- Professional Development Education, Flight Training, the Service Academies, and the most advanced portions of Specialized Skill Training -- are readily predictable. Inputs to the training programs which are dependent on new accessions (Recruit Training and Initial Skill Training for graduates of Recruit Training) are considerably more volatile. The volume of inputs to these types of training depends on such intangibles as job opportunities in the civilian economy and the decisions of young people to enlist, delay enlisting, or not enlist. Moreover, enlistments are seasonal in nature, following a long-term pattern of "good" and "bad" recruiting months, where phased requirements may move independently of these seasonal patterns. As a result, training loads for the initial active duty training programs are generally based on a compromise involving the timing of predicted enlistments and the capacity of the training base as well as when the new personnel are needed to fill vacancies in the job structure. Most of the courses in these programs are relatively short, and program adjustments can readily be made.

APPENDIX B

SELECTED MAJOR COURSES/SKILL AREAS TRAINED IN OTHER SERVICES

Sponsoring Service	Major Interservice Course/Skill Area	Other Participating Services
Army	Construction Equipment Operator	Navy Marine Corps
Army	Airborne, Jumpmaster	Navy Marine Corps Air Force
Army	Artillery	Marine Corps
Army	Armor	Marine Corps
Army	Joint Tactical Communications Systems Systems (TRI-TAC)	Navy Air Force Marine Corps
Army	Stinger/Redeye Missile	Navy Air Force Marine Corps
Army	Satellite Communications Systems	Navy Air Force Marine Corps
Army	Tracked Vehicle Repair	Marine Corps Air Force
Army	Postal Operations	Navy Air Force Marine Corps
Army	Biomedical Equipment Specialist (Basic and Advanced)	Navy Coast Guard
Army	Behavioral Science Specialist	Air Force Marine Corps
Army	Medical Laboratory Specialist (Basic)	Navy Coast Guard
Army	Psychiatric Specialist	Navy
Army	Veterinary Specialist (Basic)	Air Force Marine Corps

Sponsoring Service	Major Interservice Course/ Skill Area	Other Participating Services
Army	Laser Microwave Hazards	Navy Air Force
Army	Tropical Medicine	Air Force
Army	Respiratory Specialist	Navy
Army	Occupational Therapy Specialist	Air Force
Army	Advanced Digital Theory	Navy
Army	Shiploading & Stowage	Navy Marine Corps
Army	Ocean Transportation & Marine Terminal Management	Navy Marine Corps
Army	Special Operations Forces Basic Medic	Navy
Army	Advanced Special Operations Combat Medic	Navy
Army	Basic Morse Code	Navy Air Force Marine Corps
Army	Morse Interceptor	Navy
Army	UH-60 Helicopter Maintenance	Air Force
Army	Rotary Wing Aircraft Pilot	Air Force
Army	Nuclear Biological Chemical	Air Force Marine Corps
Army	Ranger	Air Force Navy Marine Corps
Army	Physical Therapy	Navy Coast Guard
Army	Orthopedic Specialist	Air Force
Army	Ammunition Specialist	Marine Corps
Army	Food Service Specialist	Marine Corps

Sponsoring Service	Major Interservice Course/ Skill Area	Other Participating Services
Army	Petroleum Supply Specialist	Marine Corps
Army	Armor Officer Basic & Advanced	Marine Corps
Army	Legal Assistance & Operational Law	Air Force Navy Marine Corps Coast Guard
Army	Hostage Negotiations	Air Force Marine Corps
Army	Military Police Investigation & Military Police Officer	Air Force Navy Marine Corps
Army	Civil Affairs	Air Force Marine Corps
Army	Individual Terrorism Awareness	Navy Marine Corps
Army	Combat Casualty Management	Air Force Marine Corps
Army	Packaging Techniques for HAZMAT	Air Force Navy Marine Corps
Navy	Aviation Maintenance	Marine Corps
Navy	Flight Training	Marine Corps Coast Guard
Navy	Explosive Ordnance Disposal	Army Air Force Marine Corps
Navy	Cryptologic Courses	Army Marine Corps Air Force
Navy	Diving	Army Marine Corps Air Force Coast Guard

Sponsoring Service	Major Interservice Course/ Skill Area	Other Participating Services
Navy	Musician	Army Marine Corps
Navy	Cryptologic Maintenance	Marine Corps Air Force Coast Guard Army
Navy	Teletype Maintenance	Marine Corps
Navy	Joint and Combined Planning and Operation	Army Marine Corps Air Force Coast Guard
Navy	Military Justice	Marine Corps Coast Guard
Navy	Shipboard Firefighting	Marine Corps Coast Guard
Navy	Corrosion Control	Coast Guard
Navy	Damage Control	Coast Guard
Navy	Supply Support	Marine Corps
Navy	Underwater Construction	Army
Navy	Survive, Evade, Resist, Escape (SERE), Code of Conduct	Marine Corps
Navy	Causeway Barge Ferry Training	Army
Navy	Water Survival Training	Air Force Marine Corps
Navy Medical	Clinical Nuclear Medicine	Air Force Army
Navy Medical	Independent Duty Corpsman	Coast Guard
Navy Medical	Optician	Air Force Army
Navy Medical	X-Ray Technician	Coast Guard
Marine Corps	Applications Programmer	Navy Air Force

Sponsoring Service	Major Interservice Course/ Skill Area	Other Participating Services
Marine Corps	Assembler Language Code Systems Control Programming	Air Force Navy
Marine Corps	COBOL Programming Computer	Navy
Marine Corps	Computer Operator	Air Force
Marine Corps	Computer Security Specialist	Navy Air Force
Marine Corps	Entry Level Ada Programming	Navy
Marine Corps	Database Management	Air Force Navy
Marine Corps	Multiple Virtual Storage (MVS) Diagnostics	Air Force
Marine Corps	MVS Fundamentals and Logics	Air Force
Marine Corps	Micro-Computer Repair	Army
Marine Corps	MVS Performance and Tuning	Air Force
Marine Corps	Network Control Specialist	Navy Air Force
Marine Corps	Small Computer Systems Specialist	Navy
Marine Corps	Micro-Computer Repair	Army
Marine Corps	SERE Land "C"	Navy
Air Force	Interservice Space Fundamentals Course	Army Navy
Air Force	Imagery Analysis Apprentice	Army
Air Force	Apprentice Crypto Linguist Spec (Non-Target)	Army Navy
Air Force	Physical Measurement and Calibration Journeyman	Marine Corps Navy
Air Force	Calibration	Navy Marine Corps
Air Force	Comm-Cable & Antenna System Apprentice	Army Marine Corps

Sponsoring Service	Major Interservice Course/ Skill Area	Other Participating Services
Air Force	Comm-Cable System Apprentice	Army Marine Corps
Air Force	Electrical System Apprentice	Army Navy
Air Force	Utilities System Apprentice	Army Navy
Air Force	Uninterruptible Power Supply	Navy
Air Force	Civil Engineering Advanced Electronics	Navy
Air Force	Traffic Management and Accident Investigation	Army Marine Corps Navy
Air Force	Military Working Dog Training Supervisor	Army Marine Corps Navy
Air Force	Meteorological and Oceanographic Analyst/Forecaster	Marine Corps
Air Force	Aerographers Mate	Navy
Air Force	Marine Corps Weather Observer	Marine Corps
Air Force	Romance Crypto Linguist	Marine Corps Navy
Air Force	Electronic Warfare/Signals Intel Voice Interceptor	Army
Air Force	Slavic Crypto Linguist	Marine Corps Navy
Air Force	Far East Crypto Linguist	Army Navy
Air Force	Mideast Crypto Linguist	Army Navy
Air Force	Lateral Analysis and Reporting	Navy Marine Corps
Air Force	Transcriber/Gister	Army

Sponsoring Service	Major Interservice Course/Skill Area	Other Participating Services
Air Force	Fundamentals Military Crypto Analysis	Army Marine Corps
Air Force	Consolidated Intermediate Analysis and Reporting	Marine Corps Navy
Air Force	Wolfers/Rocketeer Subsystem Maintenance	Army Navy
Air Force	Chainwork Maintenance Training Course	Army Navy
Air Force	Fiber Optic Concepts and Local Networking Theory	Navy
Air Force	Defense Sensor Interp & Application Training Program	Army Navy Marine Corps

APPENDIX C

INDIVIDUAL TRAINING WORKLOAD AND TRAINING STAFF ^{1/} AT MAJOR LOCATIONS BY TRAINING CATEGORY FY 1999
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A. Recruit Training

Facility	Workload	Training Staff E/S	
		Military	Civilian
Army ^{2/}			
Fort Benning, GA	12,727	399	0
Fort Jackson, SC ^{3/}	8,893	1,165	10
Fort Knox, KY	1,571	354	11
Fort Sill, OK	2,208	398	0
Fort Leonard Wood, MO ^{3/}	3,520	449	26
Navy			
Great Lakes, IL	8,740	1,073	7
Marine Corps ^{2/}			
Parris Island, SC	4,452	1,183	7
San Diego, CA	4,102	1,086	3
Air Force			
Lackland Air Force Base, TX	4,031	403	52

- 1/ For all tables in Appendix C, Training Staff End Strength (E/S) includes instructors, school/training center staff, and student supervisors. Does not include manpower for training support, training development, management headquarters, and base operating support
- 2/ The Army and Marine Corps include ROTC Basic Camp workload in their Recruit Training and workloads.
- 3/ Army Recruit Training facilities that train female recruits.

B. Officer Acquisition Training

Facility	Workload	Training Staff E/S	
		Military	Civilian
Army			
West Point, NY (USMA)	4,065	540	113
Fort Monmouth, NJ (Prep School)	165	12	18
Ft. Benning, GA (OCS)	127	34	2
Navy			
Annapolis, MD	4,074	279	323
Newport, RI	544	34	34
Pensacola, FL	263	40	6
San Diego, CA (Medical)	7	1	0
Ft. Sam Houston, TX (Medical)	10	5	0
Marine Corps			
OCS, Quantico	195	164	2
Air Force			
Colorado Springs, CO			
Air Force Academy	4,000	857	776
Air Force Academy Prep School	205	30	10
Maxwell AFB, AL (OTS)	295	42	1

C. Specialized Skill Training

Facility	Workload	Training Staff E/S	
		Military	Civilian
Army			
Aberdeen Proving Ground, MD (Ordnance Sch)	2,529	693	163
Fort Benning, GA	2,797	2,050	191
Fort Bliss, TX	1,141	814	120
Fort Eustis, VA	1,951	748	218
Fort Gordon, GA	3,641	900	197
Fort Huachuca, AZ ^{1/}	2,374	1,031	110
Fort Jackson, SC	2,853	815	94
Fort Knox, KY	1,289	2,164	187
Fort Leavenworth, KS	584	87	3
Fort Lee, VA	4,117	773	259
Fort Leonard Wood, MO	3,401	2,036	192
Fort Rucker, AL	853	248	74
Fort Sill, OK	1,798	900	96
DLI-FLC, Monterey, CA	3,191	217	892
OMMCS Redstone, Arsenal, AL	1,667	605	183
Fort Monroe, VA ^{4/}	29	0	0
Navy			
Athens, GA	244	46	15
Bangor, WA	495	389	46
Bethesda, MD (Medical)	144	56	4
Camp Lejeune, NC (Medical)	123	44	0
Camp Pendleton, CA (Medical)	146	38	0
Charleston, SC	2,660	588	0
Dam Neck, VA	1,217	1,209	89
Denver, CO (Medical)	42	7	0
Ft. Walton Beach, FL	130	125	0
Great Lakes, IL	4,970	1,010	49
Great Lakes, IL (Medical)	880	112	1
Groton, CT	1,151	634	14
Groton, CT (Medical)	41	23	1
Gulfport, MS	333	90	21
Houston, TX (Medical)	16	11	0
Indian Head, MD	198	6	16
Ingleside, TX	68	87	6
Jacksonville, FL	291	228	0
Kings Bay, GA	413	297	36
Little Creek, VA	568	132	0
Mayport, FL	146	135	6
Meridian, MS	355	71	15
Newport, RI	764	342	43
Norfolk, VA	846	781	56
Panama City, FL	157	194	12

C. Specialized Skill Training

Facility	Workload	Training Staff E/S	
		Military	Civilian
Navy (continued)			
Pearl Harbor, HI	243	205	21
Pensacola, FL	3,819	1,361	279
Pensacola, FL (Medical))	65	31	6
Port Hueneme, CA	352	106	41
Portsmouth, VA (Medical)	208	49	2
San Diego, CA	1,993	1,435	105
San Diego, CA (Medical	414	112	6
Schenectady, NY	576	511	0
Whidbey Island, WA	99	150	2
Wichita Falls, TX (Medical)	61	37	0
Yorktown, VA (Medical)	41	12	0
Marine Corps			
MCCDC, Quantico, VA	617	1,102	17
MCB, Camp Lejune, NC	1,550	1,202	49
MCRD, Paris Island, SC	57	14	0
MCRD, San Diego, CA	275	48	1
MCAGCC, 29 Palms, CA	1,249	628	74
MCB, Camp Pendleton, CA	666	826	6
Other ^{5/}	3,709	1,025	7
Air Force			
Goodfellow AFB, TX	2,301	698	111
Keesler AFB, MS	5,139	1,052	453
Lackland AFB, TX	3,186	1,201	269
Sheppard AFB, TX (Ops)	5,033	988	388
Sheppard AFB, TX (Med)	1,313	372	29
Vandenberg AFB, CA	445	353	37

1/ Fort Huachuca includes Army Management Structure Code (AMSCO) 321731, 321733 and 321734.

2/ Manpower carried under Fort Leonard Wood, MO

3/ Instructors provided by USAF

4/ Miscellaneous staff training including School of Cadet Command, DCST staff training and training conducted at Vandenberg AFB, CA

5/ Other includes all Marine Corps, detachments, and training groups with Marine Corps

D. Flight Training

Facility	Workload	Training Staff E/S	
		Military	Civilian
Army			
Fort Rucker, AL			
Undergraduate	666	467	140
Advance/Graduate	539	482	77
Navy			
Corpus Christi, TX	416	331	102
Kingsville, TX	198	231	21
Meridian, MS	204	252	19
Pensacola, FL	1,213	337	69
Whiting Field, FL	887	443	45
Marine Corps			
Corpus Christi, TX ^{1/}	0	90	0
Pensacola, FL ^{1/}	0	640	5
Air Force (a)			
Columbus AFB, MS ^{2/}	137	550	34
Vance AFB, OK ^{3/}	262	449	40
Laughlin AFB, TX ^{4/}	270	529	55
Sheppard AFB, TX ^{2/}	212	305	34
Randolph AFB, TX ^{5/}	213	747	66

1/ Workload included in Navy Flight Training

2/ Includes all sources of students (USAF, ANG, AFRC, INTL) for Preflight, T-37, T-38, T-1, and IFF

3/ Includes all sources of students (USAF, ANG, AFRC, INTL) for Preflight, T-37, T-38, T-1, and FWQ

4/ Includes all sources of students (USAF, ANG, AFRC, INTL) for Preflight, T-37, T-38, and T-1

5/ Includes all sources of students (USAF, ANG, AFRC, INTL) for Jet Currency, Flight Screening, IFF, Med Fam, T-37, ATM, Theater Ops, and EWO. Includes Air Force interservice flight training staff assets at Fort Rucker, Corpus Christi, Corry Station Pensacola, and Whiting Field.

E. Professional Development Education

Professional Development Education		Training Staff E/S	
Facility	Workload	Military	Civilian
Army			
Fort Bliss, TX	725	153	13
Fort Leavenworth, KS	947	157	69
Navy			
Monterey, CA	1,361	70	394
Newport, RI	520	108	79
Norfolk, VA	234	51	19
Marine Corps			
MCCDC, Quantico	302	297	38
MCB, Camp Lejuene, NC (SNCO)	288	46	0
MCB, Camp Pendalton, CA	182	46	0
MCB, Camp Butler JA	112	34	0
MCAS, Kaneohe Bay	16	15	0
MCAGCC, 29 Palms, CA (NCO)	61	19	0
Other	901	32	0
Air Force ¹¹			
Noncommissioned Officer Academies			
Tyndall AFB, FL	52	18	
McGuire AFB, NJ	47	18	
Peterson AFB, CO	37	17	
Keesler AFB, MS	58	20	
Lackland AFB, TX	58	20	
Goodfellow AFB, TX	32	12	
Kirtland AFB, NM	38	14	
Robins AFB, GA	24	11	
Kadena Air Base, Japan	41	13	
Hickam AFB, HI	23	7	
Elmendorf AFB, AK	18	9	
Kapaun Air Base, GE	69	18	
ANG McGhee Tyson, TN	84	24	
RAF Upward, UK	111	16	
Airman Leadership School			
Barksdale AFB, LA	17	6	
Beale AFB, CA	11	4	
Cannon AFB, NM	11	4	
Davis-Monthan AFB, AZ	11	4	
Dyess AFB, TX	17	6	
Ellsworth AFB, SD	11	4	

E. Professional Development Education (continued)

E. Professional Development Education (continued)			
Facility	Workload	Training Staff E/S	
		Military	Civilian
Air Force ^{1/}			
Airman Leadership School			
F. E. Warren AFB, WY	9	3	
Fairchild AFB, WA	14	6	
Grand Forks AFB, ND	12	6	
Holloman AFB, NM	11	4	
Langley AFB, VA	17	6	
Luke AFB, AZ	22	6	
MacDill AFB, FL	9	4	
McConnel AFB, KS	5	6	
Minot AFB, ND	11	6	
Moody AFB, GA	11	4	
Mountain Home AFB, ID	11	4	
Nellis AFB, NV	17	6	
Offutt AFB, NE	22	7	
Pope AFB, NC	13	4	
Seymour Johnson AFB, NC	11	4	
Shaw AFB, FL	11	4	
Tyndall AFB, FL	19	4	
Whiteman AFB, MO	11	4	
Altus AFB, OK	6	4	
Andrews AFB, MD	7	6	
Charleston AFB, SC	13	6	
Dover AFB, DE	11	6	
Hurlburt Field, FL	8	7	
Kirtland AFB, NM	7	4	
Little Rock AFB, AR	21	6	
Malmstrom AFB, MT	9	3	
McGuire AFB, NJ	11	7	
Scott AFB, IL	10	3	
Travis AFB, CA	21	8	
Goodfellow AFB, TX	5	3	
Keesler AFB, MS	21	4	
Lackland AFB, TX	24	6	
Randolph AFB, TX	10	4	

E. Professional Development Education (continued)

Facility	Workload	Training Staff E/S	
		Military	Civilian
Air Force ^{1/}			
Airman Leadership School			
Sheppard AFB, TX	10	3	
Edward AFB, CA	31	4	
Eglin AFB, FL	66	6	
Hanscom AFB, MA	8	3	
Hill AFB, UT	30	5	
Kelley AFB, TX	42	5	
McChord AFB, WA	14	6	
McClellan AFB, CA	17	3	
Robins AFB, GA	33	4	
Tinker/Vance AFB, OK	71	6	
Wright-Patterson AFB, OH	32	4	
Patrick AFB, FL	5	3	
Peterson AFB, CO	14	4	
Vandenberg AFB, CA	11	4	
Bolling AFB, DC	7	4	
Fort Meade, MD	8	3	
Maxwell AFB, AL	13	5	
USAF Academy, CO	5	3	
Aviano Air Base, IT	17	7	
Incirlik AFB, TU	8	3	
RAF Lakenheath, UK	27	7	
Howard, Panama Canal	13	4	
Eielson AFB, AK	10	4	
Anderson Air Base, GU	11	3	
Elmendorf AFB, AK	15	5	
Kadena AFB, JA	27	6	
Kapaun Air Base, GE	27	5	
Hickam AFB, HI	19	7	
Yokota Air Base, JA	14	4	
Spangdahlem Air Base, GE	20	6	
Other Professional Development Education			
Gunter Annex, AL	224	59	3
Maxwell AFB, AL	1,179	411	113

^{1/} Air Force - the current manpower standard does not authorize civilians at the NCO Academies or the Airman Leadership Schools.

F. One Station Unit Training (OSUT)

Facility	Workload	Training Staff E/S	
		Military	Civilian
Army			
Fort Benning, GA	5,147	1,074	28
Fort Knox, KY	1,526	963	80
Fort Leonard Wood, MO ^{1/ 2/ 3/}	3,336	768	36
Fort Sill, OK	977	467	18

- 1/ Fort Leonard Wood includes both MP and Chemical schools
- 2/ Facilities open to female soldiers.
- 3/ Includes movement of Military Police and Chemical from Fort McClellan to Fort Leonard Wood