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DEPARTMENT OF DEFENSE
BASE STRUCTURE REPORT
FOR
FISCAL YEAR 1989



FEBRUARY 1988

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**OFFICE OF THE ASSISTANT SECRETARY OF DEFENSE
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BASE STRUCTURE REPORT

FOR

FISCAL YEAR 1989

MARCH 1988

PREPARED BY

OFFICE OF THE ASSISTANT SECRETARY OF DEFENSE

(PRODUCTION AND LOGISTICS)

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CHAPTER ONE

INTRODUCTION

Military installations are vital to the nation's security, and quality facilities greatly enhance the working and living conditions of our military people and their families. The base structure of the Department of Defense (DoD) comprises over 5,500 properties with almost 27 million acres of land, and has an original investment cost of roughly \$66 billion and a replacement value for FY 1989 estimated at \$460 billion. Defense installations and properties range from unmanned navigational aid stations of less than a half acre to the Naval Station at Norfolk, Virginia with over 60,000 employees and Nellis Air Force Base in Nevada with over 3 million acres.

The worldwide military base structure supports our defense population, which consists of an active force of nearly 2.2 million military personnel, 1.7 million guard and reserve members, and 1.2 million civilian people. The investment that this country makes in its defense facilities is an investment in its military people -- an investment that is repaid in the form of improved pride, greater performance, and better combat readiness.

*Keywords: Planning
Programming budgeting, Defense planning, (SDW)*

I. REPORTING REQUIREMENT

The Base Structure Report is prepared by the Department of Defense to (a) provide information on military installations, (b) explain and justify the relationship between the current DoD base structure and the proposed military force structure, and (c) identify base operating support costs and evaluate possible alternatives to reduce such costs.

A written report on DoD base structure is required to be submitted annually by the Secretary of Defense to the Congress under the provisions of Section 115 of Title 10, United States Code. The public law calls for the report to identify, define, and group by mission and by region the types of military bases, installations, and facilities. This Base Structure Report satisfies that requirement for FY 1989. It should be used in conjunction with the following related DoD reports for FY 1989 that contain information on defense forces, funds, equipment, and other resources.

- o Secretary of Defense Annual Report to the Congress.
- o The Defense Manpower Requirements Report.
- o The Military Manpower Training Report.

II. CONTENT AND ORGANIZATION

The Base Structure Report has been prepared to provide an understanding of the scope and purpose of DoD base structure as it is today. The Report identifies military bases, installations, and facilities, and furnishes information on each major, minor, or support installation, as defined by each Military Service, to include its location by the name of the nearest city; an Installation Defense Planning and Programming category, which classifies the installation by major Defense programs; an indicator of the relative size of the installation; assigned number of military and civilian personnel; acreage; and principal unit or mission. The bases identified in this Report are arrayed by Military Service and then by region, i.e., the 50 United States, U. S. Territories and Possessions, and foreign areas.

III. MILITARY SERVICE BASE STRUCTURE CHAPTERS

Each Military Service provides a narrative description of its base structure and the relationship of base structure to force structure; the composition of base operating support costs; programmed expenditures for base operating support and actions taken to reduce annual base operating support costs; and its installations worldwide. Each Service chapter contains the following Sections.

<u>Section</u>	<u>Title</u>
I	Introduction
II	Base Structure Overview
III	Relationship of Base Structure to Force Structure
IV	Base Operating Support Costs
V	Actions to Reduce Base Operating Support Costs
VI	Service Base Structure

Each installation entry includes a category code (1, 2, or 3) that is based upon a classification system developed by the Services based on their own definitions. All bases with more than 300 full-time civilians are included because that is the threshold for congressional notification of base closures in Section 2687 of Title 10, United States Code. For the most part, training and bombing ranges, communication sites, Reserve Centers, outlying landing fields, and other, often unmanned, properties are not included in this Report.

Two categories of population data are depicted for each installation. The authorized full time permanently assigned military and civilian personnel represent the basic installation population. Added to this population are the appropriated fund financed contractor personnel assigned to the installation, the average daily student load, if applicable, and a daily equivalent Reserve Component training load, as appropriate, to result in the "total personnel" at the installation. This latter figure more accurately reflects the installation population workload.

IV. BASE OPERATING SUPPORT COSTS

All base operating support, either directly or indirectly, contributes to the performance of the military mission. This report identifies base operating support costs as those overhead costs (i.e., the general cost of doing business or, conversely, the cost of mission operations not readily assignable to the missions themselves) of providing, operating and maintaining the defense base structure.

The definition of base operating support costs that this report follows provides a reasonable and uniform basis for reporting the support costs of operating defense installations. Base operating support costs refers to the cost of services -- goods and people -- needed to operate and maintain defense installations so that the operational forces can pursue their mission objectives. This includes:

- o Real Property Maintenance Activities - Maintenance and repair, minor construction, operation of utilities, and other engineering support
- o Base Operating Support - Payments to the General Services Administration; administrative and data processing activities; supply operations; maintenance of installed equipment; bachelor housing operations and furnishings; morale, welfare, and recreation activities; and other base services and personnel support
- o Construction - Military construction, including family housing new construction and improvements
- o Family Housing Operation and Maintenance - Family housing management, services, utilities, furniture and equipment, leasing, maintenance, and repair

V. CONCLUSION

Military base structure is dynamic and has evolved over time to its present composition. Changing force structure, wartime scenarios, resource availability, advancing technology, and many other factors have influenced the size of the base structure and the location of the bases. Today, two of the factors -- changing force structure and resource availability -- especially combine to require that the Department have the flexibility to efficiently close and/or realign some bases. This is necessary to save money, and will require some form of legislative relief. In addition, DoD is continuing to seek ways to improve the general management of its base structure. The Department continues to have the objective of an efficient and economic base structure to meet current and projected peacetime and wartime requirements.

SECTION VI. STATISTICAL SUMMARY AND ABBREVIATIONS

The following pages provide a summary of the installations and real property identified in the Military Service chapters as well as an explanation of the terms and abbreviations used in this report.

TABLE I

DEPARTMENT OF DEFENSE REAL PROPERTY SUMMARY — SEPTEMBER 30, 1987

MILITARY DEPARTMENTS	UNITED STATES	U. S. TERRITORIES AND POSSESSIONS	FOREIGN AREAS	DOD TOTAL	
				NUMBER OF PROPERTIES	
ARMY	1,250	15	977	2,242	
NAVY	504	18	63	585	
AIR FORCE	2,027	24	661	2,771	
TOTAL	3,781	57	1,701	5,539	
<u>ACREAGE (MILLIONS OF ACRES)</u>					
ARMY	11.619	.017	.462	12.098	
NAVY	3.635	.082	.245	3.962	
AIR FORCE	9.157	.026	1.743	10.926	
TOTAL	24.411	.125	2.450	26.986	

(NOTE: NAVY FIGURES INCLUDE MARINE CORPS)

SUMMARY OF NUMBER OF DOD INSTALLATIONS

Mission Category (IDPPC)	Fifty States	U.S. Territories and Possessions	Foreign Area	Total
STRATEGIC FORCES				
- STRATEGIC (191)	28	1	2	29
- INTELLIGENCE AND COMMUNICATIONS (193)	3	0	1	4
- GUARD AND RESERVE (195)	8	0	0	8
- RESEARCH AND DEVELOPMENT (196)	2	0	0	2
CENTRAL SUPPORT FORCES				
- GENERAL PURPOSE (202)	75	2	96	173
- COMMUNICATIONS (203)	2	0	2	4
- AIRLIFT/SEALIFT FORCES (204)	14	0	4	18
- GUARD AND RESERVE (205)	99	1	0	100
AUXILIARY FORCES				
- INTELLIGENCE AND COMMUNICATIONS (303)	8	0	1	9
- RESEARCH AND DEVELOPMENT (306)	34	1	0	35
- CENTRAL SUPPLY AND MAINTENANCE (EASTERN TEST RANGE) (307)	2	0	0	2
MISSION SUPPORT FORCES				
- STRATEGIC (401)	2	0	0	2
- GENERAL PURPOSE (402)	36	1	14	51
CENTRAL SUPPORT FORCES				
- CENTRAL SUPPLY AND MAINTENANCE (507)	72	3	10	85
- TRAINING, MEDICAL AND OTHER PERSONNEL (508)	89	1	5	95
- ADMINISTRATION AND ASSOCIATED ACTIVITIES (509)	1	0	0	1
TOTAL DEPARTMENT OF DEFENSE	473	10	135	618

TABLE III

SUMMARY OF BASE OPERATING SUPPORT COSTS (\$ MILLIONS)

MAJOR DEFENSE PROGRAMS	UNITED STATES	U.S. TERRITORIES AND POSSESSIONS	FOREIGN AREAS	DOD TOTAL
STRATEGIC FORCES	2268.9	32.3	30.1	2331.3
GENERAL PURPOSE FORCES	4515.5	58.9	5061.8	9636.2
INTELLIGENCE AND COMMUNICATION	209.6	15.6	107.3	332.5
AIRLIFT/SEALIFT	934.4	0	55.8	990.2
GUARD AND RESERVE FORCES	1053.3	4.2	0	1057.5
RESEARCH AND DEVELOPMENT	828.8	0	0	828.8
CENTRAL SUPPLY AND MAINTENANCE	3264.3	31.2	172.9	3468.4
TRAINING, MEDICAL, OTHER PERSONNEL	3153.2	6.5	71.4	3231.1
ADMINISTRATION AND ASSOCIATED ACTIVITIES	431.1	0	2.8	433.9
SUPPORT TO OTHER NATIONS	0	0	0	0
SUBTOTAL	16659.1	148.7	5502.1	22309.9
CONSTRUCTION	3812.7	21.5	772.5	4606.7
FAMILY HOUSING OPERATION AND MAINTENANCE	1810.6	108.9	963.5	2883.0
TOTAL	22282.4	279.1	7238.1	29799.6

TABLE IV

BASE STRUCTURE REPORT

LIST OF ABBREVIATIONS

ACFT	Aircraft
ACT	Activity
ADMIN	Administration
AF	Air Force
AFB	Air Force Base
AFR	Air Force Reserve
AFRC	Armed Forces Reserve Center
AFS	Air Force Station
AGB	Air Guard Base
AGS	Air Guard Station
AGY	Agency
AMMO	Ammunition
ANG	Air National Guard
APT	Airport
ASW	Anti-Submarine Warfare
BN	Battalion
BOMB	Bombardment
CBT	Combat
CDEC	Combat Development Experimentation Command
CINCPAC	Commander in Chief, Pacific
CIV	Civilian
CMD	Command
CNTL	Control
COMM	Communications
CONST	Construction
CSOC	Consolidated Space Operations Center
CTR	Center
DEV	Development
DIA	Defense Intelligence Agency
DIV	Division
DLA	Defense Logistics Agency
DMA	Defense Mapping Agency
ED	Education
ELEC	Electronic
ENG	Engineering
FAC	Facility
FED	Federal
FLD	Field
FMF	Fleet Marine Force
FORSCOM	Forces Command (Army)
FWD	Forward

GD	Ground
GP	Group
GRND	Ground
HELO	Helicopter
HQ	Headquarters
IAP	International Airport
ICP	Inventory Control Point
INST	Institute
IPAC	Intelligence Command, Pacific
LANT	Atlantic
LOG	Logistics
MAB	Marine Amphibious Brigade
MAC	Military Airlift Command
MAG	Military Airlift Group (Air Force)
MAG	Marine Air Group (Marine Corps)
MAP	Municipal Airport
MAW	Marine Air Wing
MC	Marine Corps
MCAS	Marine Corps Air Station
MCB	Marine Corps Base
MCCES	Marine Corps Communications and Electronics School
MECH	Mechanized
MED	Medical
MEDCOM	Medical Command
MIL	Military
MSL	Missile
NARE	Naval Air Park Facility
NAS	Naval Air Station
NATO	North Atlantic Treaty Organization
NAV	Naval
NSA	National Security Agency
OFF	Office
OPS	Operations
OPNS	Operations
PAC	Pacific
PAVE PAWS	Phased-Spray Radar
PERS	Personnel
PROC	Procurement
PROD	Production
PROF	Professional
PR	Project
PI	Point
PUB	Public

R&D	Research and Development
RAF	Royal Air Force
RC	Reserve Component
RDT&E	Research, Development, Test and Evaluation
REC	Recreation
RECON	Reconnaissance
REG	Regional
RES	Reservation
SCH	School
SPT	Support
SQ	Squadron
STA	Station
STRAT	Strategic
SUB	Submarine
SUP	Supply
SURV	Survival
SYS	System
T&E	Test and Evaluation
TAC	Tactical
TAC	Tactical Air Command (Air Force)
TNG	Training
TRADOC	Training and Doctrine Command (Army)
TRP	Troop
USAF	U.S. Air Force
USAREUR	U.S. Army, Europe
USMA	U.S. Military Academy
USMC	U.S. Marine Corps
WG	Wing
WKS	Works

TABLE V

INSTALLATION DEFENSE PLANNING AND PROGRAMMING (IDPP) CATEGORIES

<u>IDPP #</u>	<u>CATEGORY</u>
Strategic Forces	
101	Strategic
103	Intelligence and Communications
105	Guard and Reserve
106	Research and Development
General Purpose Forces	
202	General Purpose
204	Airlift/Sealift Forces
205	Guard and Reserve
Auxiliary Forces	
303	Intelligence and Communications
306	Research and Development
307	Central Supply and Maintenance
Mission Support Forces	
401	Strategic
402	General Purpose
Central Support Forces	
507	Central Supply and Maintenance
508	Training, Medical and Other Personnel Activities
509	Administration and Associated Activities

CHAPTER TWO

ARMY BASE STRUCTURE

I. INTRODUCTION

The Army Base Structure Chapter to the Manpower Requirements Report for FY 1989 is submitted in compliance with Section 115 of Title 10, United States Code. This chapter is comprised of five basic sections. Section I is the Introduction. Section II, Base Structure Overview, discusses historical data on the base structure and related manpower trends, outlines the factors which have influenced the Army base structure from World War II to the current date, and details the criteria expected to apply to installation planning for the next 20 years. Section III relates the needs of the major activities within each Installation Defense Planning and Programming (IDPP) category to the current base structure. Major changes to the FY 1989 base structure are also described. Section IV gives a breakdown of projected Army Base Operations Costs for FY 1989. Section V summarizes recent major actions taken to reduce Base Operations Costs and outlines criteria which would apply to such actions in the future.

Section IV consists of the listing of the installations, activities, and properties comprising the base structure.

It should be noted that many large installations have multiple missions and that primary missions shown in Section VI are not necessarily all inclusive. For instance, Fort Knox, Kentucky, supports the Armor School, an Army Training Center, and a major combat unit. The following definitions were used to distinguish the various categories of installations:

A major installation is defined as a contiguous parcel of land with facilities and improvements thereon having a command and control organization providing a full range of BASOPS functions in support of assigned missions.

A minor installation is defined as an installation which is under the command of and receives resources support from the commander of another installation which is geographically distant.

Other real property holdings are defined as other DA-controlled parcels of land and improvements thereon noncontiguous to a major or subinstallation such as training areas, test areas, family housing complexes, and other special lands.

II. BASE STRUCTURE OVERVIEW

The mission of the U. S. Army is to organize, train, and equip for prompt and sustained combat coincident with operations for effective prosecution of war. That mission entails a wide variety of functions requiring both general and specialized base structure support.

The Army supports that mission from an essentially fixed base structure which has evolved from past requirements. The current base structure was shaped by the demands of World War II and the Korean War. While the force structure, weapons technology, and tactics have continually changed, the face of the base structure, the inherent land and real property assets of individual installations have remained constant. Within that framework there have been efforts to improve and optimize the base structure to meet the current needs of the Army.

Stationing decisions for Army units and operations are made to optimally balance mission requirements with the base structure available. As a result, the Army has been able to reduce the number of installations by nearly 200 in the last decade.

The Army is basically tied to its existing installations to support its current force structure. Due to aging base structure and constrained land assets, the Army is defining a base structure policy as maintaining the current facilities, correcting deficiencies, and replacing or renovating the deteriorated facilities to provide the best mix of maintenance, construction and renewal. Operationally the Army is innovatively providing for acquiring and sustaining proficiency within the most effective use of existing resources. The Base Structure of the Army today is constantly being reviewed with the objective of maximizing its utilization.

The following factors will govern Army installation planning for the next 20 years:

1. Population Migration - The concentration of the U. S. population is projected to move toward the southern and western states. This will lead to potential conflict for land use between the Army and private interests in those areas. In light of the projected land restrictions and increased real estate costs, future land requirements must be identified and the rights acquired as soon as possible.

2. Socio-Economic and Environment Encroachment - Commercial and environmental interests will increasingly create pressures on our installations to divest real estate or restrict utilization. The Army must recognize this requirement and responsibility and move to emphasize innovative land use and improve future planning.

3. Political Interest - A national consensus exists in favor of Defense economy and efficiency that will drive close scrutiny of base operations. There will be escalating pressure for base closures and realignments.

4. Changes in Overseas Forces - Conventional arms control agreements could result in the removal of U. S. forces from Europe or from other theaters. Similarly, changes in alliances could make facilities in some countries unavailable to Army forces. In addition, the U. S. could decide unilaterally to withdraw forces from various regions of the world. The U. S. strategic lift capability might change and allow some strategic commitments to be met from CONUS. In such instances, significant numbers of U. S. Army troops formerly stationed OCONUS might be moved home. Appropriate facilities would have to be provided.

5. **Technology Impacts** - many Army installations are dependent upon existing technologies. Expanding technologies will impact the infrastructure of the installations as communications systems change, transportation nets such as railroads which formed the major transportation systems for many installations are abandoned, and new weapons and training strategies change facilities requirements.

Emphasis must be placed on continued improvement in planning toward the future organization, physical structure, modernization, and location of Army installations and activities. These considerations will undoubtedly entail significantly increased costs in both the planning and implementation phases of these actions. The continuing decrease in undeveloped land demands sophisticated planning for the acquisition, use, and release of Army property.

The preceding broad factors are mainly, oriented toward retention and/or expansion of the existing Army base structure overall. In the event adjustments are required within the existing structure due to major force structure changes, mission changes, budgetary considerations, or other factors, the following specific criteria would, in varying degrees, be applied to future realignment actions.

1. **MISSION REQUIREMENTS.** The stated or postulated mission requirements of specific activities, within the context of the entire force structure, should be the principal factors which drive choices among stationing alternatives. They are the baseline against which all other factors must be weighed. Mission requirements may be increased by new weapon systems which require more training land/space.

2. **BUDGET/MANPOWER CONSTRAINTS.** These inseparably related factors are the principal limitation to attaining and maintaining a particular base structure at all levels. They can influence decisions on retention of individual structures or retention of entire installations.

3. **COST SAVINGS.** A major objective of the Army is to accomplish the assigned mission at the least cost. Where otherwise comparable alternatives exist the true "least cost" both in terms of dollars and manpower must be selected. Typically, an installation closure will not produce total savings of its annual base operations costs because continuing activities will have to be accommodated elsewhere, in-house, or by other means, such as by contract.

4. **PERSONNEL TURBULENCE.** The adverse impact of military and civilian personnel turbulence must be given consideration because of both the high costs and the adverse effect on morale, productivity, and readiness.

5. **CIVILIAN LABOR MARKET.** Some Army missions involve utilization of a highly specialized and unique civilian work force, characterized by deep roots in the local community and reluctant to relocate with the transfer of the functions they perform. The lack of an adequate labor market thus becomes a factor in evaluating proposed realignment actions.

6. **FACILITIES/HOUSING AVAILABILITY.** Maximum utilization of existing facilities with minimum expenditures for new facilities is a major goal in all realignment actions. This includes both mission related facilities and support facilities on-post and available housing both on-post and off-post. Large capital investments for replacement facilities mitigate against relocation of activities which require highly specialized, high cost facilities or, in the case of major combat units, large land areas.

7. **CAPITAL INVESTED.** This factor is directly related to the preceding factor. Having made a large capital investment in facilities at a particular installation, the Army tends to be tied to that installation for the duration of the useful life of the facilities.

8. **GEOGRAPHIC LOCATION.** The geographic location influences the ability of assigned forces to execute their mission. Weather, terrain, proximity to air and surface transportation, etc., all contribute to retention of installations which enhance operational effectiveness. Likewise, selection of new installations for stationing must take all of these geographically related factors into account.

9. **LAND AREA.** The need for adequate and suitable land area to support major combat units and their supporting forces is a major consideration. Bases must be capable of supporting the readiness and deployment training of the assigned forces as envisioned in the United States strategy. This requirement often determines which bases will be retained in the active inventory.

10. **IMPACT ON OTHER SERVICES/AGENCIES.** The Army provides support to many units and activities of the Department of Defense and other Federal agencies. Inherent in any base realignment action is consideration of the impact on those agencies.

11. **COMMUNITY IMPACT.** Civilian support resources (e.g., community housing, medical facilities, schools, and recreational facilities) are a consideration in developing base realignment actions. Of particular importance is family housing. Adequate support should exist either on or off a gaining installation to avoid a realignment action being counter-productive in terms of morale. Conversely, realignment actions which reduce the Army presence in an area may cause serious impact on civilian communities, particularly those in which the major source of the economic base is the military installation. When possible, realignment actions are designed to minimize the impact on local communities.

12. **ENVIRONMENTAL IMPACT.** All realignment actions must be assessed to determine their impact on the environment.

13. **ENERGY RESOURCE IMPACT.** An initial assessment addressing such factors as energy requirements, availability, and cost must be made to determine the potential energy impact of all installation realignments, reductions, or closures.

14. RESERVE COMPONENTS SUPPORT. The increased emphasis on the utilization of Reserve Component forces to meet future contingency requirements must be considered. These units are generally constituted in areas where there are population resources. Their readiness depends on, among other things, access to adequate local ranges and training areas. This requires that the range facilities and training areas not only be of the proper size and configuration, but also that they be within reasonable commuting distance. Many of our bases, both active and inactive, are used extensively for support of these units both for weekend training and annual training. The impact on these type units is an integral part of any analysis.

15. MOBILIZATION AND CONTINGENCY REQUIREMENTS. The type and number of bases required are determined by the need to be capable of supporting the strategy directed by national policy and the operational and training requirements of the Army. The base structure must provide sufficient flexibility to support various contingencies, to include the expansion of the training base, when required, to provide sufficient trained personnel to meet the contingencies.

16. ENCROACHMENT. Urban and airspace encroachment into vital areas surrounding installations is of continuing concern. Some installations which were originally remote have attracted major population growth and, as a result, continued operations have been threatened through urban expansion. Civilian aviation activity has served to restrict the airspace available for military operations at some installations. Encroachment, therefore, is an element which must be considered in determining the future viability of an installation. It is also possible that major weapons changes may effectively "outgrow" existing installation sizes. For example, ranges now adequate for artillery firing may become too small for weapons which may be introduced in the future.

17. LONG-RANGE PLANS. Redistribution and reconfiguration of Army forces rather than an expansion of force structure is likely to influence base structure in the long term. Requirements for ranges and maintenance infrastructure will undoubtedly change as new weapons and equipment are introduced into tactical units. Changes in the ratio of personnel to vehicles/major equipment and in the number of personnel in units will cause "reconfigurations" of units that create new demands on base structure. Finally, redistribution of units--the arrival of units returning from OCONUS--will also create demands on base structure.

III. RELATIONSHIP OF BASE STRUCTURE TO FORCE STRUCTURE

The Army's major combat mission elements use their portion of the base structure only for training, quartering of personnel, and maintenance of equipment in preparation for the combat mission and then as a sustaining base in the event of actual conflict.

Overseas deployed units should be located in close proximity to the area of their anticipated wartime mission. The precise locations, however, are determined by what the host government can and will make available. Major factors impacting on decisions for overseas base structure support include mission requirements, political considerations, host nation support, and the availability of U. S. funding.

The stationing of divisions and other major tactical units is given priority consideration based on such critical factors as the presence of adequate maneuver and training space and ranges, the availability of housing and support, and restricting environmental impacts. Since stationing choices are of necessity made from existing installations originally acquired to meet less demanding past conditions, these stations involve some compromise of currently forecasted ideal conditions. As noted in Section II, modernized forces are presently "outgrowing" their installations. For those divisions having prepositioned unit equipment in overseas theaters, precise location in CONUS vis-a-vis the primary wartime mission is no longer a major consideration. Strategic airlift can move personnel and their individual equipment east or west with minimal significant time differential. For units scheduled to move by surface transport with full equipment later in a particular deployment scenario, location within the CONUS is still a consideration.

The CONUS logistics base structure, to include installations with research and development as primary missions, is also largely evolutionary. It is what remains of World War II mobilization, created at widely dispersed locations in anticipation of enemy attack against the homeland. Much rationalized and modernized, it is serviceable and capable of performing its mission of supporting deployed forces.

STRATEGIC FORCES (100)

Base Requirements:

The basing of strategic forces is confined primarily to communications type activities which are normally satellited on installations for logistical support.

GENERAL PURPOSE FORCES (200)

Base Requirements:

The Army must train the way it will fight. The battalion task force, the lowest level at which all elements of the combined arms team come together, must regularly practice offensive and defensive tactics deployed on frontages and depths comparable to those expected in wartime. When battalions have demonstrated critical task proficiency, brigade exercises should be conducted so as to bring into play the full range of fire support, operations, and logistical contingencies. Division commanders should deploy critical elements of their commands in order to exercise an appropriate range of combined arms operations in a joint setting.

Units without prepositioned equipment overseas should be located at installations in proximity of, or having easy access to air and surface transportation, the port of embarkation (sea and air) from which they are most likely to deploy, in order that they can respond quickly to early deployment requirements. Units should also be stationed in proximity to the coasts and borders of the Nation to be in position to counter threats to CONUS, yet they must have sufficient land to train and fire their weapons. They should not be stationed near heavily populated areas, industrial complexes, or other strategic targets. The surrounding area should offer sufficient space for dispersal to ensure that the unit itself does not present an inviting military target and is affordable a reasonable degree of survivability. Training areas should provide the force with a wide array of climatological and topographical features in which to train and which represent a cross-section of the world's environments.

Active installations should be located so as to readily accommodate Reserve Component units in the event of mobilization, without necessitating excessive movement and delay from home station to mobilization station. Implicit also in the mobilization stationing requirement is the necessity for providing Reserve Component units with annual training and inactive duty training sites.

In the continental United States, the major active combat units are: 11 divisions (includes four divisions with two active brigades and one Army National Guard roundout brigade), two separate brigades, an air cavalry combat brigade, an infantry (Ranger) regiment, and an armored cavalry regiment. The units are structured for a variety of environments and missions. The goal is to maintain a force which is available for rapid commitment.

In Europe, four divisions, three forward deployed and one special mission brigade, and two armored cavalry regiments retain the high level of readiness necessary to permit an immediate response to any aggression against the NATO alliance.

In the Pacific, the divisions in the Republic of Korea and Hawaii are ready to perform their assigned combat mission.

The Army is currently forming the 6th Infantry Division (Light), in Alaska from the existing 172nd Infantry Brigade. The 6th Infantry Division (LT) will by FY 1989 have two active brigades in Alaska, and one roundout brigade. There is one special mission brigade in Panama, the 193rd Infantry. The above will provide a ready response to any contingency which might arise in these areas.

All ten Army National Guard divisions, 17 combat brigades (five of which roundout active divisions), and four armored cavalry regiments are located in the continental United States. Additionally, one combat brigade is located in Hawaii and one combat brigade is located in Puerto Rico. The Army Reserve has three combat brigades in the United States. Both the Army National Guard and the Army Reserve major combat units provide the Total Army a substantial combat force. The following depicts stationing of Active and Reserve Component divisions:

Active Divisions

Location

1st Infantry (Mechanized) 1/	Fort Riley, Kansas
2d Infantry 3/	Camp Casey, Korea
3rd Infantry (Mechanized) 3/	Wurzburg, Germany
4th Infantry (Mechanized)	Fort Carson, Colorado
5th Infantry (Mechanized) 2/	Fort Polk, Louisiana
6th Infantry (Light) 2/	Fort Wainwright, Alaska
7th Infantry (Light)	Fort Ord, California
8th Infantry (Mechanized) 3/	Bad Kreuznach, Germany
9th Infantry (Motorized)	Fort Lewis, Washington
10th Infantry (Light) 2/	Fort Drum, New York
24th Infantry (Mechanized) 2/	Fort Stewart, Georgia
25th Infantry (Light)	Schofield Barracks, Hawaii
1st Cavalry 2/	Fort Hood, Texas
1st Armored 3/	Ansbach, Germany
2d Armored 1/	Fort Hood, Texas
3rd Armored 3/	Frankfurt, Germany
82d Airborne	Fort Bragg, North Carolina
101st Airborne (Air Assault)	Fort Campbell, Kentucky

Army National Guard Divisions

Location 4/

26th Infantry	Massachusetts/Connecticut
28th Infantry	Pennsylvania
29th Infantry (Light)	Virginia/Maryland
35th Infantry (Mechanized)	Kansas/Nebraska/Missouri/Kentucky
38th Infantry	Indiana/Michigan
40th Infantry	California
42d Infantry	New York
47th Infantry	Minnesota/Iowa Illinois
49th Armored	Texas
50th Armored	New Jersey/Vermont

1/ One brigade deployed forward

2/ Roundout division

3/ Locations shown are division headquarters. Units are dispersed at multiple sites.

4/ First state listed is division headquarters

Nondivisional combat general purpose forces are distributed throughout the base structure with emphasis on providing balanced forces at the major combat unit installations.

The Army must also maintain semiaactive installations which are required primarily for the support of training of the Reserve Components and for mobilization. In addition, there are State-owned/leased installations which are required for support of weekend and annual training and mobilization. Active component installations also perform these functions but are not adequate to satisfy the total requirement. The Army cannot fulfill full mobilization requirements in the time frame envisioned under current strategy unless these installations are maintained. Access to additional acreage for maneuver purposes will be essential to the extensive training required to make the mobilized force fully combat ready.

Terminal and outport functions are under the Military Traffic Management Command (MTMC), which has area command headquarters at Bayonne, New Jersey and Oakland, California. Each area command headquarters commands a military ocean terminal for general cargo at its respective location and military outports at various commercial ports. The DOD transportation mission is accomplished almost exclusively by utilizing commercial resources. The military ocean terminals, which are shared with industry during peacetime, will be returned to military use when needed. Hazards involved in moving ammunition require that separate Government-owned terminals be maintained.

AUXILIARY FORCES (300)

Basing Requirements:

Research, development, testing, and evaluation (RD&E) of Army material, weapons, and support systems are accomplished primarily by the US Army Materiel Command, Strategic Defense Command (SDC), US Army Medical Research and Development Command, and US Army Corps of Engineers. Accomplishment of these missions requires availability of numerous test facility complexes, laboratory and research facilities, and administrative headquarters facilities. These facilities are either operated as RD&E installations/activities or as tenant facilities on other than RD&E installations. Generally, these research and testing facilities require a highly sophisticated equipment inventory and work force. Facilities devoted to testing are usually located in remote areas necessitating maintenance of a constant on-site work force. These facilities are an integral part of the Army's overall material development and acquisition mission and significantly contribute to the attainment of US efforts to maintain a lead in weapon systems technology.

The US Army Information System Command (USAISC) provides Army-wide not-tactical Information Mission Area support. To provide Information Mission support, USAISC requires tenant facilities at most installations. The primary subdisciplines include non-tactical communications, Automation, Records Management, Printing and Publication, and Audio Visual. Additionally, installations are used by USAISC to support the Defense Communications System and Army Command and Control requirements.

MISSION SUPPORT FORCES (400)

Basing Requirements:

To provide adequate command, control, and management of the Army resources, it is essential that necessary administrative space be available. These installations serve as homes for major command headquarters, for units engaged in supervising Reserve Component training and readiness, and for unique specialized functions. They require a highly sophisticated work force not normally found at remote locations and rapid modes of close-in transportation. They are an integral part of the "Total Army" and significantly contribute to the attainment of a combat ready Army.

CENTRAL SUPPORT FORCES (500)

Basing Requirements:

Since 1813, arsenals have been the continuing centers for the preservations of unique skills required for the defense of the United States. Their role has evolved from one of manufacturing, storage, and maintenance of weapons to one of serving as the nuclei from which private industry obtained "know-how" to mass produce a multitude of products used in war. More recently, their manufacturing activities have been limited to production of very small quantities of items where a producer in private industry could not be found. Their primary mission is to support the research and development program by providing the capability to build prototype research and development items and to provide a production base in the event of mobilization. A second major area of production type bases is the Government-owned, contractor-operated (GOCO) plants used in the production of munitions, tanks, aircraft, electronics, and missiles. A number of these are presently in standby status, with others active. The fact that these plants are contractor-operated provides the Army the flexibility to more readily expand or contract our capability consistent with requirements. Continued modernization of these plants is essential to assure a viable capability attuned to prospective needs.

Depot storage and maintenance requirements consists of :

1. Wholesale depots which have the responsibility for the storage, maintenance, and distribution of major items; including storage of go-to-war stocks for Reserve Component forces. These depots may also have the additional requirement for safe storage, maintenance, distribution and, in some cases, demilitarization of explosives, special weapons, and toxic and chemical materiel.

2. Distribution depots which have the responsibility for supporting assigned geographic areas, both CONUS and overseas, for storage and distribution of secondary items. In some instances, they have maintenance activities and may continue to have this mission in the future.

Service schools have the primary mission of replenishing forces with trained personnel in peacetime and maintaining a wartime expansion capability to support mobilization. Driven by improvements in communicative technology and by the need to conduct training relevant to new organizations, tactics, and weapons systems, these schools will aim at establishing centers of excellence for the training and doctrine of all branches.

The initial entry level training centers will develop and administer programs of instruction driven by the same factors discussed above on Service schools.

Medical facilities and activities provide health services to active Army forces and other authorized beneficiaries. Station (community) hospitals provide basic and general ambulatory and inpatient health services. In addition to basic and general health services, Army medical centers provide regional specialty and sub-specialty consultative and referral health services for the Army, as well as other Military Services and Federal agencies. Medical centers also provide the primary capabilities for care of casualties in the event of contingencies or mobilization and the source of graduate, specialized, and technical training for health professionals and technicians that staff Army field forces and station hospitals.

INDIVIDUALS (600)

The Army has no major installations falling into this IDPP category.

IV. BASE OPERATIONS COSTS (BOS) COSTS FOR FY 1989

A summary of the FY 1989 Estimated Base Operations Costs as defined in the introduction follows.

ARMY BASE OPERATING SUPPORT COSTS (\$ MILLIONS)

MAJOR DEFENSE PROGRAMS	UNITED STATES	U.S. TERRITORIES AND POSSESSIONS	FOREIGN AREAS	DOD TOTAL
STRATEGIC FORCES	0.0	0.0	0.0	0.0
GENERAL PURPOSE FORCES	1421.4	9.6	2350.2	3781.2
INTELLIGENCE AND COMMUNICATION	97.7	0.0	0.0	97.7
AIRLIFT/SEALIFT	0.0	0.0	0.0	0.0
GUARD AND RESERVE FORCES	343.0	3.7	0.0	346.7
RESEARCH AND DEVELOPMENT	345.7	0.0	0.0	345.7
CENTRAL SUPPLY AND MAINTENANCE	703.1	1.6	80.6	785.3
TRAINING, MEDICAL, OTHER PERSONNEL	1448.9	0.0	0.0	1448.9
ADMINISTRATION AND ASSOCIATED ACTIVITIES	200.3	0.0	0.0	200.3
SUPPORT TO OTHER NATIONS	0.0	0.0	0.0	0.0
SUBTOTAL	4560.1	14.9	2430.8	7005.8
CONSTRUCTION	1148.7	0.0	402.0	1550.7
FAMILY HOUSING OPERATION AND MAINTENANCE	823.7	0.0	516.0	1339.7
TOTAL	6532.5	14.9	3348.8	9896.2

V. ACTIONS TO REDUCE ANNUAL BASE OPERATIONS COSTS

The Army continues an active program to promote management efficiencies and consolidate or eliminate functions in order to reduce base operations costs. A number of these will affect the FY 1989 budget:

1. ORGANIZATIONAL EFFICIENCY REVIEWS. The Army conducts efficiency reviews of organizations to create the most efficient organization using more efficient methods of performing required work. These studies are conducted on both non-contractible and contractible functions. In the cases of the latter, the results of the efficiency review are tested by using the procurement process to competitively select a contractor whose costs are compared to the government costs.

In FY 86, the Army began the first Army-wide Efficiency Review, using the installation Directorate of Resource Management as the test bed. This study will combine the techniques of the efficiency review with the staffing standards based on efficiently operated organizations. This will serve as the model for future applications on Army-wide functions.

During FY 1986, over 400 spaces were saved through efficiency reviews. In addition, over 1800 spaces were converted to contractor operations where the cost of contracting was less than the cost of continued performance by government employees. These spaces were redirected to higher priority Army missions.

2. PRODUCTIVITY CAPITAL INVESTMENT PROGRAMS. These programs include the Quick Return on Investment Program, Productivity Enhancing Capital Investment Program, and OSD Productivity Investment Funds. Under the Productivity Capital Investment Programs, money is set aside for fast payback capital tools, equipment, and to improve readiness. Modernized equipment and facilities provided through these programs raise organizational productivity and improve the quality of support services. In addition, troops are trained with state-of-the-art equipment leading to a more ready force. Equipment purchased under these programs include loading ramps; weapons training simulators; hand-held radios which assisted in the Grenada incident; and asphalt reclaimers. For every \$1 invested, \$17 is returned in benefits over the economic life of the item purchased. A positive environment is created for Army leaders through opportunities enabling them to obtain modern equipment and facilities; to reapply manpower and dollars toward other priority initiatives; to motivate the work force; and to achieve an efficient and cost effective organization. These achievements will assist the Army in meeting the President's productivity (three percent per year) goal.

3. VALUE ENGINEERING (VE). The Value Engineering Program enhances productivity by eliminating unnecessary functions that contribute to costs of weapon systems, equipments, or processes, but not to performance. VE takes advantage of state-of-the-art technology to produce cost savings for the Army. Value Engineering Incentive clauses are included in all contracts of \$100,000 or more and contractors are encouraged to submit resource conserving Value Engineering Change Proposals (VECPs) to reduce contract costs. The contractor's incentive is that he shares up to 50 percent of the net savings resulting from accepted and implemented VECPs. Value Engineering is playing a significant role in achieving the President's goal to increase productivity

three percent per year. VE Program averages a return on investment of \$15 for each dollar invested.

4. ENERGY CONSERVATION. The Army used approximately 15 percent of the total energy consumed by DOD in FY 87 at a cost of 1.42 billion dollars. In FY 87 the Army reduced facility energy use by 4.1 percent and mobility fuel use by 5.2 percent over FY 85 levels of consumption. These energy conservation efforts resulted in a cost avoidance of 27.8 million dollars.

The Army was the only Service to meet and surpass the FY 75 - FY 85 Presidentially assigned energy reduction goals. This achievement represented a cost avoidance of 3.2 billion dollars for the period. The Army will strive to achieve stated energy goals by Army Installation managers taking advantage of the Army Energy Awareness Program; Energy Engineering Analysis Program (EEAP); Energy Conversion Investment Program (ECIP); Fuel Conversion Program; and Energy Research, Development, Test, and Evaluation (RDT&E) Program.

5. INSTALLATION MANAGEMENT: Initiatives in this area include the Model Installation Program (MIP) and the Graduate Program which are designed to improve efficiency and effectiveness in base operations by reducing administrative and regulatory roadblocks and seeking better ways of doing business. Under the MIP, installations are authorized and encouraged to submit suggestions for improving installation operations. The Army is committed to approving these recommendations unless they are considered illegal or potentially harmful. Under the Model Installation/Graduate Program, HQDA has implemented numerous initiatives directed at applying the MIP management approach Army-wide. The Army Regulation Reduction Program (ARRP) has as its objectives the reduction of Army regulations by at least one-third and to make regulations instruments of policy, eliminating unnecessary detail of implementation. This results in greater authority for the commander to manage the installation. In order to identify better ways to manage resources at installations, the Army began a test of the unified budget concept at two CONUS installations in October 1986. To the extent allowed by statute, financial management restrictions (floors, ceilings, targets, etc) have been removed for the test installations, creating a "colorless money" budget. Installations will be able to determine how to best spend the limited resources to insure mission accomplishments. Implementation of DOD Dir. 4001.1 provides the additional impetus to the concept of pushing responsibility and authority to the level where the work is being accomplished and will significantly affect the operation of installations. Efforts are underway to develop and provide formal training in installation management; under the aegis of the Army Management Staff College. The thought is to enable civilian and military managers to receive training on the Army's management system, better preparing them to operate and maintain installations. The Army has elected to combine the Army Suggestion Program (ASP) with the MIP. To handle the tens of thousands of proposals expected to be submitted, the Army (Office of the Chief of Staff, Director of Management) undertook contractual action to fully automate the transmittal process. The automated process is known as IDEA EXPRESS and is expected to be fully functional by mid 1988.

6. MODEL CONSTRUCTION AGENT PROGRAM. The Model Construction Agent Program is part of the OSD-sponsored Model Installations Program. The Corps of Engineers is an active participant and currently has four organizations

designated as Model Construction Agents. They are: the Tulsa District, the Portland District the Europe Division and the Cold Regions Research Engineering Laboratory. The purpose of the Model Construction Agent Program is to develop innovative proposals intended to free the Corps of Engineers field construction agency commanders from unnecessary restraints and to provide the commander the authority needed to execute his responsibilities. Each of the four model construction agents are intended to be testing grounds for ideas that would bring needed change to any functional areas involved in the execution of both the Military Construction Program (Army and Air Force) and the Civil Works Programs. Ideas that have tested out well will become candidates for Corps-wide export and ultimately will result in Corps of Engineers regulations being changed. To date over 4000 proposals have been submitted that can be approved by the Corps' subordinate (district or division) commander. Approximately 10 percent of all proposals submitted require approval at headquarters (either at the Corps of Engineers, Department of Army, Department of Defense or other Federal Agency). Proposals are being adopted at a 5 to 1 rate. Within the Headquarters, U. S. Army Corps of Engineers, the approval rate is better than 8 to 1.

SECTION VI

ARMY BASE STRUCTURE

SUMMARY OF NUMBER OF ARMY INSTALLATIONS

Mission Category (IDPPC)	Fifty States	U.S. Territories and Possessions	Foreign Areas	Total
INTELLIGENCE AND COMMUNICATIONS (103)	1	0	0	1
GENERAL PURPOSE (202)	19	0	45	64
AIRLIFT/SEALIFT FORCES (204)	3	0	1	4
GUARD AND RESERVE (205)	7	0	0	7
INTELLIGENCE AND COMMUNICATIONS (303)	4	0	1	5
RESEARCH AND DEVELOPMENT (306)	12	1	0	13
GENERAL PURPOSE (402)	7	0	4	11
CENTRAL SUPPLY AND MAINTENANCE (507)	27	0	3	30
TRAINING, MEDICAL AND OTHER PERSONNEL (508)	27	0	0	27
TOTAL ARMY	107	1	54	162

DEPARTMENT OF DEFENSE
 ARMY BASE STRUCTURE
 United States
 FY 1989

Authorized Manpower
 Full-time Permanently
 Assigned

State	Name of Installation	City	IDPPC Code	Mil.	Civ.	Tot.	Total Pers.	Total Acgrege	Major Unit-Activity-Function
ALABAMA									
	ANNISTON ARMY DEPOT	ANNISTON	507	59	4188	4247	4448	15246	LOGISTICS DEPOT
	MCCLELLAN, FORT	ANNISTON	508	9756	1783	11539	14545	41639	MIL POLICE SCHOOL & TNG CTR
	RUCKER, FORT	DALEVILLE	508	7696	3872	11568	14734	61073	AVIATION CENTER & SCHOOL
	REDSTONE ARSENAL	HUNTSVILLE	306	4017	9340	13357	16746	38413	ROCKET-GUIDED MSL, R&D, SCH&CTR
ALASKA									
	RICHARDSON, FORT	ANCHORAGE	202	5357	1518	6875	6931	61467	172ND INFANTRY BRIGADE
	GREELY, FORT	FAIRBANKS	202	487	44	531	576	639085	R&D TEST CENTER (ARTIC TNG CTR)
	WAINWRIGHT, FORT	FAIRBANKS	202	3347	1015	4362	4462	656250	172ND INFANTRY BRIGADE
ARIZONA									
	HUACHUCA, FORT	STERRA VISTA	303	6389	3372	9761	10662	73517	COMM CMD&INTELLIGENCE SCH
	YUMA PROVING GROUND	YUMA	306	348	625	973	1461	1010966	R & D TEST CENTER
ARKANSAS									
	PINE BLUFF ARSENAL	PINE BLUFF	507	115	1989	1204	1204	14939	PRODUCTION

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Authorized Manpower
full-time Permanently
Assigned

State	Name of Installation	City	IDPPC Code	Mil	Civ.	Tot.	Total Pers.	Total Acreage	Major Unit-Activity-Function
CALIFORNIA									
	IRWIN, FORT	BARSTOW	202 1	3496	712	4208	5807	636457	NATIONAL TRAINING CENTER
	TIERRA ARMY DEPOT	HERLONG	507 1	350	381	731	771	36313	LOGISTICS DEPOT
	HUNTER HIGGELL, FORT	JOLON	202 2	3401	686	4087	5346	164636	DIV ING-CDEC EXPERIMENTATION
	AFRC, LOS ALAMITOS	LOS ALAMITOS	205 3	129	443	572	1562	1287	RESERVE COMPONENT TRAINING
	MONTEREY, PRESIDIO OF	MONTEREY	508 2	4894	1060	5954	6077	392	DEFENSE LANGUAGE SCHOOL
	OAKLAND ARMY BASE	OAKLAND	204 1	121	1884	2005	2230	559	HARBOR & PORT
	SACRAMENTO ARMY DEPOT	SACRAMENTO	507 1	363	2802	3165	3457	485	LOGISTICS DEPOT
	SAN FRANCISCO, PRESIDIO OF	SAN FRANCISCO	402 2	2048	2990	5038	5739	177	HOADMIN/LETTERMN ARMY MED CTR
	DIRO, FORT	SEASIDE	202 1	15629	2693	18322	20921	28016	7TH INFANTRY DIVISION (MECH)(-)
	SHARPE ARMY DEPOT	STOCKTON	507 1	55	1130	1185	1465	724	LOGISTICS DEPOT
	DEFENSE DEPOT, TRACY	TRACY	507 2	16	1730	1754	1754	448	LOGISTICS DEPOT (DLA)
COLORADO									
	FITZSIMONS ARMY MEDICAL CENTER	AURORA	508 1	1618	1589	3207	3406	577	HEALTH CARE
	CARSON, FORT	COLORADO SPCS	202 1	19137	2276	21413	22457	137391	4TH INFANTRY DIVISION (MECH)
	ROCKY MOUNTAIN ARSENAL	COMMERCE CITY	507 2	23	236	259	259	17228	PRODUCTION-CHEMICAL
	PUEBLO ARMY DEPOT ACTIVITY	PUEBLO	507 1	10	649	659	703	22654	LOGISTICS DEPOT

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ARMY BASE STRUCTURE
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Full-Time Permanently
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State	Name of Installation	City	IDPPC Code	Mil.	Civ.	Tot.	Total Pers.	Total Acreage	Major Unit-Activity-Function
DIST OF COLUMBIA									
	MCNAIR, FORT LESLIE J	WASHINGTON	508	2022	5150	7172	7195	89	NATIONAL DEFENSE UNIVERSITY
	WALTER REED ARMY MEDICAL CTR	WASHINGTON	508	3078	3134	6212	6295	113	HEALTH CARE
GEORGIA									
	MCPHERSON, FORT	ATLANTA	402	24675	5119	29794	33136	505	FORSCKM HQ
	GORDON, FORT	AUGUSTA	508	13243	3420	16663	19278	55588	SIGNAL CENTER & SCHOOL
	RENNING, FORT	COLUMBUS	508	1407	2763	4170	4461	169285	THE INFANTRY CENTER & SCHOOL
	GILLEM, FORT	FOREST PARK	402	354	4571	4925	5186	1507	SECOND ARMY HQ
	STEWART, FORT	HINESVILLE	202	14498	3762	18170	31199	284369	24TH INFANTRY DIV (MECH) (-)
	HUNTER ARMY AIRFIELD	SAVANNAH	202	3553	524	4077	4227	5651	24TH INFANTRY DIVISION TNG
HAWAII									
	PONAHUOLA TRAINING AREA	HILO	202	61	73	134	508	109893	DIVISION TRAINING
	DEPUSSY, FORT	HONOLULU	205	•	547	547	1028	73	ARMY RESERVE HQ
	SCHOFIELD BARRACKS MIL RES	HONOLULU	202	13154	948	14102	14684	13777	25TH INFANTRY DIVISION (-)
	SHAFTER, FORT	HONOLULU	402	1137	2779	3916	3983	170	HEADQUARTERS & ADMIN
	TRIPLER ARMY MEDICAL CENTER	HONOLULU	508	1343	935	2273	2297	367	HEALTH CARE
	KUNIA FIELD STATION	WAIHANA	303	361	•	361	379	89	COMMUNICATIONS

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State	Name of Installation	City	IDPPC Code	Cat	Mil.	Civ.	Tot.	Total Pers.	Total Acreage	Major Unit-Activity-Function
ILLINOIS										
	ST LOUIS AREA SUPPORT CTR	GRANITE CITY	402	1	710	7879	8589	8763	895	COMMUNITY SUPPORT
	SHERIDAN, FORT	HIGHLAND PARK	508	1	1515	1573	3088	3345	695	RECRUITING COMMAND HQ
	POCK ISLAND ARSENAL	ROCK ISLAND	507	1	318	3321	3639	4612	907	RED, PRODUCTION-TANK COMPONENTS
	SAVANNA ARMY DEPOT ACTIVITY	SAVANNA	507	1	110	203	313	350	13062	LOGISTICS DEPOT
INDIANA										
	HARRISON, FT BENJAMIN	INDIANAPOLIS	508	1	4047	4561	9408	9946	2501	US ARMY INST OF PERS&RES MGT
KANSAS										
	PILLY, FORT	JUNCTION CITY	202	1	15227	2090	17317	21124	100979	1ST INFANTRY DIV (MECH) (-)
	COLEAVENWORTH, FORT	LEAVENWORTH	508	1	4332	2563	6895	6935	6995	CMD & GENERAL STAFF COLLEGE
KENTUCKY										
	CAMBERLET, FORT	CLARKSVILLE, TN	202	1	21097	2662	23759	24317	105397	101ST AIRBORNE DIVISION
	PLYMOUTHGRASS ARMY DEPOT ACT	LEXINGTON	507	1	122	1771	1893	2543	780	LOGISTICS DEPOT
	KNOX, FORT	LOUISVILLE	508	1	20215	4878	25093	30517	109220	US ARMY TRAINING CENTER

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State	Name of Installation	City	IDPPC Code	Mil.	Civ.	Total	Total Pers.	Total Acreege	Major Unit-Activity-Function
LOUISIANA	POIK FORT	LEESVILLE	202	14582	2771	17353	19329	198325	5TH INFANTRY DIV (MECH) (-)
MARYLAND	ABERDEEN PROVING GROUND	ABERDEEN	306	7319	7311	14630	15940	72518	R&D TEST CTR, ORDNANCE SCHEDULE
	HARRY DIAMOND LABORATORIES	ADELPHI	306	3	656	659	659	137	R&D ACTIVITIES
	MEADE GEORGE G. FORT	BALTIMORE	492	7469	18633	26102	27761	13457	HEADQUARTERS & ADMIN, HSA
	DMA HYDRO/TOPOGRAPHIC CTR	BROOKMONT	507	161	3441	3602	3602	40	PROD OF MAPS & CHARTS (DMA)
	CORBITCHIE, FORT	CASCADE	103	1282	1305	2587	2709	638	COMMUNICATIONS
	DRYDEN, FORT	FREDERICK	306	799	2637	3436	4398	1151	R&D ACTIVITIES
MASSACHUSETTS	DEVENS, FORT	AYER	508	5935	1756	7691	10572	9380	INTELLIGENCE TRAINING
	SOUTH BOSTON SUPPORT ACTIVITY	BOSTON	402	195	1690	1885	1985	14	RESERVE COMPONENT THG-DLA SUP
	USA NATICK RSCH & DEV CTR	NATICK	306	159	1065	1224	1228	81	R&D ACTIVITIES
	USA MAT & MECH RESEARCH CTR	WATERTOWN	306	15	664	680	681	48	R&D ACTIVITIES

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ARMY BASE STRUCTURE
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Authorized Manpower
Full-Time Permanently
Assigned

State	Name of Installation	City	DDPC Code	Mil	Civ.	Tot.	Total Pers.	Total Acreage	Major Unit-Activity-Function
MICHIGAN									
	DFIROT ARSENAL	WARREN	306	2	1248	5157	6405	6615	261 R&D, PRODUCTION-TANKS
	DFIROT ARSENAL TANK PLANT	WARREN	507	1	4	103	107	2184	80 PRODUCTION-TANKS (C)
MISSOURI									
	WOOD, FORT LEONARD	JEFFERSON CITY	508	1	15867	4794	20661	23868	62911 US ARMY TRAINING CENTER
NEW JERSEY									
	MIL OCEAN TERMINAL-BAYONNE	BAYONNE	204	1	256	2639	2895	3428	679 HARBOR & PORT
	PICATINNY ARSENAL	DOVER	306	1	178	5379	5557	5758	6491 R&D HEADQUARTERS
	MONMOUTH, FORT	RED BANK	306	1	2884	8383	11267	11807	637 R&D HEADQUARTERS
	COPIX, FORT	TRENTON	508	1	10921	2143	13064	17125	31110 US ARMY TRAINING CENTER
NEW MEXICO									
	WHITE SANDS MISSILE RANGE	WHITE SANDS	306	1	1323	3945	5268	7029	1746720 R&D WEAPONS TEST CENTER
NEW YORK									
	HAMILTON, FORT	BROOKLYN	508	2	374	279	653	898	177 ADMIN & LOGISTICAL SUPPORT
	SENECA ARMY DEPOT	ROMULUS	507	1	617	942	1559	1732	10661 LOGISTICS DEPOT
	DRUM, FORT	WATERTOWN	205	1	10008	1528	11536	11545	107265 RC & ACTIVE ARMY TNG (I)
	WATERVLIET ARSENAL	WATERVLIET	507	2	10	2072	2082	2115	140 R&D, PROD-ARTILLERY COMPONENTS
	WEST POINT MILITARY RES	WEST POINT	508	1	6925	2236	9161	9782	15975 USMA-OFF ACQUISITION TNG

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ARMY BASE STRUCTURE
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Full-Time Permanently
Assigned

State	Name of Installation	City	IDPPC Code	Cat	Mil.	Civ.	Tot.	Total Pers.	Total Acreage	Major Unit-Activity-Function
NORTH CAROLINA										
	BRAGG. FORT	FAYETTEVILLE	202	1	40546	4209	44755	49409	130696	82ND AIRBORNE DIVISION
	MIL OCEAN TERMINAL-SUNNY POINT	SOUTHPORT	204	2	13	274	287	395	16324	HARBOR & PORT
OHIO										
	DEF CONSTRUCTION SUPPLY CTR	COLUMBUS	507	2	40	3358	3398	3398	566	ICP & LOGISTICS DEPOT (DLA)
OKLAHOMA										
	CJ SILL. FORT	LAWTON	508	1	19780	3359	23139	25924	94221	US ARMY FLD ARTILLERY CTR&SCH
OREGON										
	HMATILLA ARMY DEPOT ACTIVITY	HERMISTON	507	3	9	263	272	278	19729	STORAGE DEPOT
PENNSYLVANIA										
	INDJANTOWN GAP. FORT	ANNVILLE	205	2	218	215	433	5937	15052	RC & ACTIVE ARMY TNG (I)
	CARLISLE BARRACKS	CARLISLE	508	2	603	618	1221	1249	403	US ARMY WAR COLLEGE
	LETTERKENNY ARMY DEPOT	CHAMBERSBURG	507	1	120	4147	4267	4446	19511	LOGISTICS DEPOT
	NEW CUMBERLAND ARMY DEPOT	NEW CUMBERLAND	507	2	201	3047	3248	3851	832	LOGISTICS DEPOT
	DEFENSE PERSONNEL SUPPORT CTR	PHILADELPHIA	507	2	125	5174	5299	5299	86	PROC&SUP.CLOTHING FACTORY(DLA)
	TOBYHANNA ARMY DEPOT	TOBYHANNA	507	2	41	3727	3768	3883	1293	LOGISTICS DEPOT

DEPARTMENT OF DEFENSE
ARMY BASE STRUCTURE
United States
FY 1989

Authorized Manpower
Full-Time Permanently
Assigned

State	Name of Installation	City	IDPPC Code	Mil.	Civ.	Tot.	Total Pers.	Total Acreage	Major Unit-Activity-Function
SOUTH CAROLINA									
	JACKSON, FORT	COLUMBIA	508 1	14288	2881	17169	18323	52537	US ARMY TRAINING CENTER
TENNESSEE									
	DEFENSE DEPOT, MEMPHIS	MEMPHIS	507 2	16	2086	2102	2102	642	LOGISTICS DEPOT (DLA)
TEXAS									
	BLISS, FORT	EL PASO	508 1	17536	4675	22211	26271	118218	AIR DEFENSE CENTER & SCHOOL
	HOOD, FORT	KILLEEN	202 1	37613	4129	41742	42859	216946	1ST CAVALRY DIV&2D ARMORED DIV
	SAM HOUSTON, FORT	SAN ANTONIO	508 1	11853	6964	18817	20480	3159	MEDICAL TRAINING HQ
	RED RIVER ARMY DEPOT	TEXARKANA	507 2	67	5276	5343	5632	19081	LOGISTICS DEPOT
UTAH									
	DUGWAY PROVING GROUND	DUGWAY	306 1	266	934	1200	1614	802731	R&D TEST CENTER
	DEFENSE DEPOT, OGDEN	OGDEN	507 2	10	1670	1680	1680	1326	LOGISTICS DEPOT (DLA)
	TOOELE ARMY DEPOT	TOOELE	507 1	63	3523	3586	3790	44087	LOGISTICS DEPOT
VIRGINIA									
	RELVOIR, FORT	ALEXANDRIA	508 1	6330	5485	11815	12250	8656	US ARMY ENGINEER CENTER & SCH
	CAMERON STATION	ALEXANDRIA	507 2	266	2552	2818	2870	168	HQ DEFENSE LOGISTICS AGENCY
	ARLINGTON HALL STATION	ARLINGTON	303 1	1281	2593	3874	3885	87	HQ USAINSCOM ADMIN, DIA
	MYER, FORT	ARLINGTON	202 2	2795	199	2994	3064	256	ADMIN & LOGISTICAL SUPPORT

DEPARTMENT OF DEFENSE
 ARMY BASE STRUCTURE
 United States
 FY 1989

State	Name of Installation	City	IDPPC Code	Authorized Manpower Full-Time Permanently Assigned		Total Pers.	Total Acreage	Major Unit-Activity-Function
				Mil.	Civ.			
	PICKETT, FORT	BLACKSTONE	205 2	46	213	259	6898	45160 RC & ACTIVE ARMY TNG (I)
	A.P. HILL, FORT	BOWLING GREEN	205 3	35	28	63	2898	76205 RC & ACTIVE ARMY TNG (I)
	MONROE, FORT	HAMPTON	508 1	1174	1957	3041	3081	1069 TRADOC HEADQUARTERS
	FUSTIS, FORT	NEWPORT NEWS	508 1	8799	2956	11755	13168	8323 TRANSPORTATION CENTER & SCHOOL
	LEE, FORT	PETERSBURG	508 1	9569	3700	13269	14233	5633 US ARMY QUARTERMASTER CTR&SCH
	OFF GENERAL SUPPLY CTR, RICH.	RICHMOND	507 2	37	3201	3238	3238	647 ICP & LOGISTICS DEPOT (DLA)
	VINT HILL FARMS STATION	WARRENTON	303 3	616	581	1197	8062	707 COMM & INTELLIGENCE ACT
WASHINGTON								
	LEWIS, FORT	TACOMA	202 1	23688	4333	28021	33475	86451 9TH INFANTRY DIVISION
	YAKIMA FIRING CENTER	YAKIMA	202 3	60	91	151	1697	261452 DIVISION TRAINING
WISCONSIN								
	MCCOY, FORT	SPARTA	205 3	99	954	1053	8315	59779 RC & ACTIVE ARMY TNG (I)

DEPARTMENT OF DEFENSE
ARMY BASE STRUCTURE
United States Territories and Possessions
FY 1989

Authorized Manpower
Full-Time Permanently
Assigned

Territory	Name of Installation	City	IDPPC Code	Mil.	Civ.	Tot.	Total Pers.	Total Acreege	Major Unit-Activity-Function
TRUST TERR OF PAC ISL	KWAJALEIN MISSILE RANGE	KWAJALEIN	306	3	.	.	.	3568	NATIONAL TEST RANGE

DEPARTMENT OF DEFENSE
ARMY BASE STRUCTURE
Used by U.S. Forces in Foreign Areas
FY 1989

Country	Name of Installation	City	IDPPC Code	Cat	Mil.	Civ.	Tot.	Total Pers.	Total Acreage	Major Unit-Activity-Function
BELGIUM	CHIEVRES AIR BASE	ATH	402	3	121	•	121	121	1009	NATO SHAPE SUPPORT GROUP
GERMANY, FEDERAL REP OF										
US Army Base, 7th Army Tng Cmd			202	•	4622	3676	8298	8298	•	7TH ARMY TRAINING COMMAND
US Army Base, 7th Army Tng Cmd										
US Army Base, Ansbach			202	•	7007	1353	8360	8360	•	1ST ARMORED DIVISION
US Army Base, Ansbach										
US Army Base, Aschaffenburg			202	•	4227	649	4876	4876	•	3RD INFANTRY DIVISION (MECH)
US Army Base, Aschaffenburg										
US Army Base, Augsburg			202	•	5965	1427	7392	7392	•	VII CORPS ARTILLERY
US Army Base, Augsburg										
US Army Base, Bad Kreuznach			202	•	7225	2097	9322	9322	•	8TH INFANTRY DIVISION (MECH)
US Army Base, Bad Kreuznach										
US Army Base, Bad Teelz			202	•	580	337	917	917	•	US ARMY SPECIAL FORCES
US Army Base, Bad Teelz										
US Army Base, Bamberg			202	•	7520	689	8209	8209	•	1ST ARMORED DIVISION
US Army Base, Bamberg										

Authorized Manpower
Full-Time Permanently
Assigned

DEPARTMENT OF DEFENSE
 ARMY BASE STRUCTURE
 Used by U.S. Forces in Foreign Areas
 FY 1989

Authorized Manpower
 Full-Time Permanently
 Assigned

Country	Name of Installation	City	IDPPC Code	Mil.	Civ.	Tot.	Total Pers.	Total Acreage	Major Unit-Activity-Function
US	Army Base, Baumholder US Army Base, Baumholder	•	202	9233	1709	10942	10942	•	8TH INFANTRY DIVISION (MECH)
US	Army Base, Berlin US Army Base, Berlin	•	202	4662	173	4835	4835	•	BERLIN BRIGADE
US	Army Base, Darmstadt US Army Base, Darmstadt	•	202	8426	1134	9560	9560	•	32ND AIR DEFENSE COMMAND
US	Army Base, Frankfurt US Army Base, Frankfurt	•	202	10352	7373	17725	17725	•	HQ. V CORPS
US	Army Base, Fulda US Army Base, Fulda	•	202	4133	754	4887	4887	•	11TH ARMORED CAVALRY REGIMENT
US	Army Base, Garmisch US Army Base, Garmisch	•	202	77	494	571	571	•	US ARMED FORCES REC CTR
US	Army Base, Giessen US Army Base, Giessen	•	202	12700	1719	14419	14419	•	42ND FIELD ARTILLERY
US	Army Base, Goepingen US Army Base, Goepingen	•	202	4637	651	5288	5288	•	1ST INFANTRY DIVISION (FWD)
US	Army Base, Hanau US Army Base, Hanau	•	202	14642	1704	16346	16346	•	3RD ARMORED DIVISION

DEPARTMENT OF DEFENSE
ARMY BASE STRUCTURE
Used by U.S. Forces in Foreign Areas
FY 1989

Country	Name of Installation	City	IDPPC Code	Cat	Mil.	Civ.	Tot.	Total Pers.	Total Acreage	Major Unit-Activity-Function
US Army Base, US Army Base, Heidelberg	Heidelberg		202		4154	4721	8875	8875		HEADQUARTERS. USAREUR
US Army Base, US Army Base, Heilbronn	Heilbronn		202		3683	791	4474	4474		237TH ENGINEER BATTALION
US Army Base, US Army Base, Kaiserslautern	Kaiserslautern		202		7228	6528	13756	13756		HQ, 21ST SUPPORT COMMAND
US Army Base, US Army Base, Karlsruhe	Karlsruhe		202		4088	2559	6647	6647		18TH ENGINEER BRIGADE
US Army Base, US Army Base, Mainz	Mainz		202		5102	1125	6227	6227		8TH INFANTRY DIVISION (MECH)
US Army Base, US Army Base, Mannheim	Mannheim		202		5150	3139	8289	8289		8TH INFANTRY DIVISION (MECH)
US Army Base, US Army Base, Munich	Munich		202		1566	1262	2828	2828		66TH MILITARY INTELLIGENCE GP
US Army Base, US Army Base, Neu Ulm	Neu Ulm		202		3877	794	4771	4771		1ST INFANTRY DIVISION (FWD)
US Army Base, US Army Base, Norddeutschland	Norddeutschland		202		6134	1532	7666	7666		2ND ARMORED DIVISION (FWD)

DEPARTMENT OF DEFENSE
ARMY BASE STRUCTURE
Used by U.S. Forces in Foreign Areas
FY 1989

Country	Name of Installation	City	IDPPC Code	Cat	Authorized Manpower Full-Time Permanently Assigned		Total Acreege	Major Unit-Activity-Function	
					Mil.	Civ.			
US	Army Base, Nuernberg US Army Base, Nuernberg	•	202	•	13668	2484	16152	•	1ST ARMORED DIVISION
US	Army Base, Pirmasens US Army Base, Pirmasens	•	202	•	3285	1569	4854	•	59TH ORDNANCE BRIGADE
US	Army Base, Rheinberg US Army Base, Rheinberg	•	202	•	1922	•	1922	•	11TH AVIATION GROUP
US	Army Base, Schweinfurt US Army Base, Schweinfurt	•	202	•	6849	853	7702	•	3RD INFANTRY DIVISION (MECH)
US	Army Base, Stuttgart US Army Base, Stuttgart	•	202	•	12943	9203	22146	•	HQ EUCOM & HQ VII CORPS
US	Army Base, Wiesbaden US Army Base, Wiesbaden	•	202	•	2546	1367	3913	•	4TH INFANTRY DIVISION
US	Army Base, Wildflecken US Army Base, Wildflecken	•	202	•	2068	474	2542	•	3RD INFANTRY DIVISION (MFCH)
US	Army Base, Worms US Army Base, Worms	•	202	•	1519	906	2425	•	5TH SIGNAL COMMAND
US	Army Base, Wuereburg US Army Base, Wuereburg	•	202	•	12884	2321	15205	•	3RD INFANTRY DIVISION (MECH)

DEPARTMENT OF DEFENSE
ARMY BASE STRUCTURE
Used by U.S. Forces in Foreign Areas
FY 1989

Authorized Manpower
Full-Time Permanently
Assigned

Country	Name of Installation	City	IDPPC Code	Cat	Mil.	Civ.	Tot.	Total Pers.	Total Acreage	Major Unit-Activity-Function
US	Army Base, Zweibruecken		202	*	1503	2746	4249	4249	*	60TH ORDNANCE GROUP (AMMO)
	US Army Base, Zweibruecken									
ITALY										
	CAMP DARBY	PISA	202	2	299	*	299	299	159	8TH SUPPORT GROUP (SETAF)
	CAMP FDERLE	VICENZA	402	1	1884	*	1884	1884	139	HEADQUARTERS. SETAF
JAPAN										
	NAHA PORT	NAHA, OKINAWA	204	2	28	163	191	191	227	PORT FACILITIES
	SAGAMI GENERAL DEPOT	SAGAMIHARA	507	2	87	686	773	831	530	LOGISTICS DEPOT
	ZAMA, CAMP	ZAMA/SAGAMIHARA	402	1	871	2223	3094	3094	584	HQ US FORCES. JAPAN/IX CORPS
KOREA, REPUBLIC OF										
	CAMP GREAVES	BAEKYON-NI	202	2	561	5	566	566	1829	INFANTRY BATTALION
	CAMP COLBERN	HASONGGOK	202	2	395	6	401	401	76	SIGNAL BATTALION (-)
	CAMP HOWZE	KUMCHON-NI	202	2	751	8	759	759	157	INFANTRY BATTALION(M):BGE HQ
	CAMP MERCER	PUCHON	202	2	561	*	561	561	8	ENGINEER BATTALION
	CAMP HUMPHREYS	PYONGTAEK	202	2	3715	21	3736	3736	1351	COMBAT SERVICE SUPPORT:ENCR BN
	YONGSAN GARRISON	SEOUL	402	2	6991	205	7196	7196	1628	HQ. EIGHTH U S ARMY
	CAMP WALKER	TAEGU	202	2	1670	22	1692	1692	191	COMBAT SERVICE SUPPORT

DEPARTMENT OF DEFENSE
ARMY BASE STRUCTURE
Used by U.S. Forces in Foreign Areas
FY 1989

Country	Name of Installation	City	IDPPC Code	Authorized Manpower Full-Time Permanently Assigned			Total Pers.	Total Acreage	Major Unit-Activity-Function
				Cat	Mil.	Civ.				Tot.
	CAMP CASEY	TONGDUCHON	202 1	6078	32	6110	6110	821 HEADQUARTERS & ADMINISTRATION	
	CAMP RED CLOUD	UIJONG-BU	202 2	1371	34	1405	1405	202 HQ & ADMIN SUPPORT	
	CAMP CARROLL	WAEGWAN	507 2	1336	5	1341	1341	744 LOGISTICS DEPOT	
PANAMA									
	DEFENSE COMPLEX, PANAMA		202 1	10000	5997	15997	16877	24143 SUPPORT OF ARMY IN PANAMA	
TURKEY									
	DIOGENES STATION	SINOP	303 3	292	*	292	292	382 COMMUNICATIONS	
UNITED KINGDOM									
	BURTONWOOD ARMY DEPOT	WARRINGTON	507 3	44	*	44	44	134 DEPOT, TECHNICAL SITE	

CHAPTER THREE

NAVY BASE STRUCTURE

I. INTRODUCTION

The Navy Base Structure Chapter to the Manpower Requirements Report for FY 1989 is submitted in compliance with Section 115 of Title 10, United States Code. The Navy Chapter consists of five sections in addition to the Introduction. Section II, Base Structure Overview, discusses factors affecting the number and capabilities of Navy Shore Bases. Section III relates major Navy bases to the forces supported within the framework of the Installation Defense Planning and Programming (IDPP) categories. Section IV, Base Operations Costs, provides a summary table by major defense programs of those costs included in this category. Section V discusses the Navy's continuing process for appraising base operations costs. Section VI is a listing of installations defined as major, minor or support activities which have plant accountability for land, structures, buildings or utilities. Major activities (Cat Code 1) are defined as: homeport locations of the operating forces with a minimum assigned strength (or equivalent) of a battlegroup, DESRON, SUBRON, PHIBRON, or 6 or more fleet air or land-based squadrons and activities that provide depot-level maintenance to the operating forces. Minor activities (Cat Code 2) are defined as: RDT&E activities, training activities, hospitals, homeport locations of the operating forces with a lesser assigned strength than of a major activity. Support activities (Cat Code 3) are defined as all other naval activities with plant accountability which support a minimum of 300 DOD civilians.

Most bases listed in Section VI have multiple missions. Only primary missions are shown. Personnel assigned to ships and aircraft squadrons which are homeported or assigned at a given base are included in Section VI, personnel data.

II. BASE STRUCTURE OVERVIEW

As a nation with global interests and responsibilities in a formal alliance structure, the United States requires a strong, vital, and well-supported Navy to execute its national military strategy. During peacetime operations, the Navy must satisfy a variety of national commitments and respond to frequent demands for forward presence. Those demands require global mobility and flexibility, and an overseas basing structure for support. Sister services are integrated with Navy and Marine Corps operations. Allies are a most important part of the strategy through a system of treaties, multilateral agreements, and other bilateral commitments. National policy gives direction to the Global Maritime Elements of United States National Military Strategy, comprising the Maritime Strategy. Based on deterrence, that strategy is global, forward, and cedes no vital area by default as we operate in conjunction with our sister services and allies. In the event of a crisis, the Navy, which has been the nation's principal military instrument for crisis response since 1946, protects American interests overseas and provides a broad range of escalation control. Naval forces are the lead element of the forward movement which demonstrates United States and allied will and determination. In time of global conventional war, the Navy provides a credible deterrent, but aggressively seizes and presses home the strategic initiative if deterrence fails. Vital resupply lines are protected, naval warfare is conducted far forward, and maritime power is projected against targets at sea and on land.

These demands, coupled with the growing challenge posed by Soviet maritime forces, drive our naval force planning and dictate requirements that our forces must be able to meet. The forces must be large enough to support our alliance system in peace and war. They must also be capable of operating effectively in forward areas, most likely against heavy Soviet opposition.

Our base structure is integral to the peace-keeping and war-fighting capability. The breadth of our locations is global. The depth must be adequate to accommodate the full range of logistics required to operate and maintain the platforms, weapons, and sensor systems needed for maritime superiority.

Following the Vietnam War, the size of the Fleet was reduced and subsequent budget cutbacks forced the slowdown of base modernization. Some naval bases were closed. Others were scaled down and real estate excessed to achieve an economical base posture for the smaller Fleet. Even with the reduced base structure, the amount of military construction funded each year has not kept pace with the aging of the facilities. Congressional cuts of over 20 percent for the last three years, FYs 1986-1988, have set back the increased military construction budget requests needed to maintain our shore establishment. The average age of Navy facilities is 41 years with the Navy's shipyards having an average facilities age of 55 years. At the current rate of investment of approximately 500 million dollars per

year for the replacement and modernization component of the Navy's MILCON program, there will be a constant increase in the number of facilities which have exceeded their economic life.

Since the end of the Vietnam War, turmoil in the Persian Gulf region, Southwest Asia, the Caribbean, Central America, and South America has increased our defense commitments instead of permitting them to decrease to match our reduced Fleet size. During this same period, the Soviet fleet has increased in size and sophistication of weaponry. The stronger Soviet fleet is being used to expand their sphere of political influence through logistic support of destabilization and revolutionary political movements in non-communist countries.

These factors support the need to rebuild the strength of our naval forces and base structure. It is recognized that this must be accomplished with limited financial resources. Effective naval strength can only be attained and maintained at the most economical cost if the basing is carefully structured and adequately capitalized for renewal to support the needed forces. The Navy continuously reviews its base structure to ensure the leanest adequate combination of bases.

III. RELATIONSHIP OF BASE STRUCTURE TO FORCE STRUCTURE

Rebuilding the nation's maritime strength requires changing and strengthening the base structure to support the growing fleet. The base structure is critical to a stronger Navy. Changes to the base structure support the following six goals for our general purpose naval forces:

1. Improve readiness and sustainability;
2. Meet global responsibilities - achieve a 600-ship fleet with optimum force modernization completed by the year 2000;
3. Expand and improve power projection forces, including aircraft carrier battle groups, battleships, amphibious assault ships, and cruise missile forces;
4. Upgrade anti-submarine warfare capabilities;
5. Improve capabilities to intercept bombers and cruise missiles; and
6. As a complement to the enlarged fleet, modernize and expand our support and mine warfare forces.

In moving toward these goals, and in the context of our Maritime Strategy, the Navy reviewed its base structure and its effectiveness in supporting the needed force structure. A principal concern was that homeporting in the continental U.S. and Hawaii was not optimum in the contexts of military strategy or operations. The second concern was how to accommodate the 130 additional ships coming into the fleet as we build to the 600 ship, 15 Carrier Battlegroup force level. With Norfolk and San Diego each having in excess of 100 ships assigned at the start of President Reagan's administration, adding the new ships to these locations would have concentrated more than 50 percent of our entire fleet in only two ports. These concerns resulted in development of the Strategic Homeporting Plan.

The Strategic Homeporting Plan is based upon several principles:

1. Dispersal of forces to maximize survivability. This complicates warfare targeting by the enemy, whether terrorist or conventional, and reduces the losses of capital ships from a relatively simple but sharply focused attack.
2. Homeporting in more diverse geographical locations to provide opportunity to train and operate in a variety of areas. There is a growing consensus that if a US-Soviet conflict occurred, the bulk of the combat at sea is likely to take place in the Aleutian/Northwest Pacific Theater and in the northerly sea lanes of communication (SLOCs) of the Atlantic. Homeporting in the Northwest United States would enhance our responsiveness in the Northern Pacific. Defending Iceland and controlling the

northern flank is vital to our NATO commitments. Homeporting in the Gulf of Mexico is needed to protect our SLOCs supporting transshipment of vital raw materials to the U. S. and significant amounts of initial mount-out and resupply provisions of ammunition, fuel, and equipment to the European Theater. A physical presence in the Gulf will also enhance our responsiveness to potential Caribbean/Central American conflicts. The geographical dispersion of active forces also increases the opportunity for collocated Reserve Ships to train as part of an integrated total force.

3. Collocation of ships to form balanced battlegroups which are prepared to undertake the full spectrum of naval warfare missions upon leaving the harbor. No time is lost gathering ships. Carriers and battleships are not exposed without proper escort.

4. Maintenance of an adequate industrial base by homeporting ships near additional locations with existing private sector industrial capacity. This permits taking advantage of that capacity during peacetime and to surge to wartime production levels more rapidly.

5. Development of additional logistic support complexes to support our expanding Navy and to sustain our forward Maritime Strategy. While maximizing the use of existing base infrastructure, new dispersed bases must be provided to permit implementation of the other principles of the Strategic Homeporting Plan.

The types, number, and location of aircraft rework facilities, weapons ranges, and other support bases remain the same. Specialized education and training complexes support recruit training, specialized skill training, officer acquisition training, and undergraduate flight training. Fleet training is provided at selected operation bases. Initial skill training is provided in proximity to acquisition training. No new bases or major real estate expansions have been identified for these functions.

A brief discussion of the missions and structure changes by Installation Defense Planning and Programming Category follows. A listing of the major activities within these categories is provided in Section VI.

STRATEGIC FORCES (100)

The Submarine Base, Bangor, Washington, became fully operational on 1 July 1981. The Submarine Base, Kings Bay, Georgia, is supporting a full squadron of submarines and is the site for an East Coast Trident Base with an initial operating capability (IOC) of December 1989.

GENERAL PURPOSE FORCES (200)

The Fleet aircraft basing concept retains the minimum number

of bases for programmed aircraft and collocates carrier-based tactical and carrier-based anti-submarine warfare (ASW) aircraft. No new air bases are planned; however, the Naval Air Station at Fallon, Nevada is being expanded to accommodate air training at supersonic air speeds and to construct facilities for air strike training. Air bases receiving the F/A-18 aircraft and other air warfare weapon systems are being modernized through construction of new facilities but are not being expanded in acreage.

The Reserve Air Stations are being modernized for the Ready Reserve Air Squadrons who are now receiving "state-of-the-art" weapon systems. This is in contrast to the former policy of providing them "secondhand" systems discarded by the regular Navy.

AUXILIARY FORCES (300)

The Navy Command and Control System provides the means to exercise operational direction of naval forces. It ensures that the National Command Authorities, unified commanders, naval component commanders, and subordinate naval commanders are able to receive sufficient, accurate, and timely information on which to base their decisions and have the means to communicate their decisions to the forces. No major changes in base structure have been identified for these bases. Emphasis is on modernization of the sensor systems to attain needed security, sensitivity, and immunity to electronic countermeasures.

MISSION SUPPORT FORCES (400)

Implementation of the Strategic Homeporting Plan is planned in two parts:

1. Adjusting the mix of ships in our traditional ports of Norfolk, Charleston, Mayport, Newport, San Diego, San Francisco, and Pearl Harbor to attain the proper types of escorts for our Battleship Surface Action Groups (BB SAGs) and Carrier Battle Groups (CVBGs).

2. The Navy is developing new homeports for a BB SAG in the Northeast at Staten Island, New York City, a CVBG in the Northwest at Everett Washington, a BB SAG and CVBG along the Gulf Coast, and finally a second BB SAG centered at Hunters Point in San Francisco.

Cruise missile forces are being introduced to distribute offensive striking power throughout the fleet. The Harpoon is designed for anti-ship strikes. The Tomahawk has the range to reach both ships and shore targets beyond the horizon. These systems are being deployed at existing bases but require modernization of maintenance and storage facilities.

Amphibious assault forces are receiving the Landing Craft, Air Cushioned (LCAC) vehicle and the MV-22 tilt rotor aircraft

which will improve their ship-to-shore mobility. These forces are also receiving the LHD-1 multipurpose amphibious assault ship and the LSD-41 Cargo Variant ship to provide increased lift and dock-loading capability.

Advanced base planning is underway to support the attack submarine community in replacing the SSN-688 class submarine with the SSN-21. This new weapon system will be deployed at four homeports.

The new weapon systems for the amphibious and the submarine communities are being deployed at existing bases. These systems require modernization of logistic support ranging from the waterfront facilities for the ships and hangars for the aircraft to weapons supply and maintenance facilities.

CENTRAL SUPPORT FORCES (500)

The Naval Medical Command, through a network of regional medical and dental centers, associated hospitals, and dispensaries, provides medical care in support of the fleet and to other qualified beneficiaries. Renewed emphasis has been placed on wartime medical readiness resulting in readiness being the driving factor in determining the size and composition of the medical care system. Medical readiness improvements are providing two San Clemente class tankers which are being converted into floating general hospitals with 1,000 beds and 12 operating rooms each.

The Naval Education and Training Command provides trained personnel to man and support the fleet. This includes recruit training, officer acquisition training, specialized skill training, flight training, and professional development education. The average age of the Training Command's facilities is 37 years. In the training function, which is characterized by high technological change of weapon systems used by the trainees in these facilities, modernization of the bases is required more frequently than in other support functions. This is being accomplished, as funding is provided, by modernizing facilities on existing bases. Under the auspices of the Navy's Air Installation Compatibility Use Zone (AICUZ) Program, a study completed in October 1987 for the NAS Whiting Field Pensacola, Florida, complex developed a long-range plan for a system of landing fields, airports, and air space to support Naval aviation training through the year 2000.

INDIVIDUAL (600)

None.

IV. BASE OPERATIONS SUPPORT (BOS) COSTS FOR FY 1989

A summary of the estimated FY 1989 Base Operations Support Costs follows.

NAVY
BASE OPERATING SUPPORT COSTS

\$ Millions

<u>Major Defense Program</u>	<u>Fifty States</u>	<u>US Territories/ Possessions</u>	<u>Foreign/ Overseas</u>	<u>Total</u>
Strategic Forces	143.5	--	--	143.5
General Purpose Forces	1213.1	49.3	429.5	1691.9
Intelligence & Communication	55.7	15.6	38.1	109.4
Airlift/Sealift	--	--	--	--
Guard & Reserve Forces	220.4	--	--	220.4
Research & Development	259.4	--	--	259.4
Central Supply & Maintenance	1371.3	27.9	46.4	1445.6
Training, Medical & Other General Personnel Activities	638.2	4.4	39.4	682.0
Administration & Associated Activities	138.5	--	2.8	141.3
Support to Other Nations	--	--	--	--
Subtotal	4040.1	97.2	556.2	4693.5
Construction	1377.3	17.2	73.9	1468.4
Family Housing O&M	347.1	89.4	76.3	512.8
Total	5764.5	203.8	706.4	6674.7

V. ACTIONS TO REDUCE BASE OPERATIONS SUPPORT (BOS) COSTS

Base Operations Support (BOS) costs are directly related to the size of the shore bases which in turn is driven by the size of the operating forces. There is also a direct relationship between BOS funding levels and a shore base's readiness, ie. its ability to support the operating forces.

Navy has developed a new initiative to improve the readiness of our shore establishment by arresting its deteriorating physical condition. This new initiative is called Shore Facilities Life Extension Program (Shore FLEP). It is a new concept of programming and executing Maintenance of Real Property (MRP) and Replacement/Modernization MILCON that ties facility condition to mission readiness. The accurate measurement of shore station readiness has also been enhanced through an expansion of the Navy's Base Readiness Reporting System, OPNAVINST 3501.167B.

Other major programs to improve shore base management and thereby reduce BOS costs are as follows.

1. Study in-house commercial activities with a view towards conversion to contract where economically justified. Since FY 1979, studies have been conducted on approximately 22,000 positions. Of those, about 50% were converted to contract. Of the 11,000 positions remaining in-house, a reduction of 1,925 people has been achieved, or an average reduction of 17 percent.

2. Develop excellent installations through the Model Installations Program (MIP). The goal of the program is to provide the base commander with a vehicle to identify and test the removal of regulatory obstacles in an effort to ensure a better place for our people to live and work. During FY 1987, this program was expanded to include all shore activities through the Model Installations Extension Program (MIEP). As of 30 September 1987, 1,136 MIP initiatives had been submitted with an approval rate of 85%. During the first year of the new program, 274 MIEP initiatives were submitted with an approval rate of over 90%.

3. Reduce costs through application of more energy efficient facilities and systems throughout the support establishment and operating forces. The Navy-wide goal is to reduce facility energy consumption per square foot by 12% (measured from FY 1985 baseline) at Navy Shore Bases by the end of FY 1995.

SECTION VI

NAVY BASE STRUCTURE

SUMMARY OF NUMBER OF NAVY INSTALLATIONS

Mission Category (IDPPC)	Fifty States	U.S. Territories and Possessions	Foreign Areas	Total
GENERAL PURPOSE (202)	16	2	7	25
GUARD AND RESERVE (205)	6	0	0	6
INTELLIGENCE AND COMMUNICATIONS (303)	3	0	0	3
RESEARCH AND DEVELOPMENT (306)	16	0	0	16
GENERAL PURPOSE (402)	23	1	6	30
CENTRAL SUPPLY AND MAINTENANCE (507)	34	3	7	44
TRAINING, MEDICAL AND OTHER PERSONNEL (508)	41	1	5	47
TOTAL NAVY	139	7	25	171

DEPARTMENT OF DEFENSE
NAVY BASE STRUCTURE
United States
FY 1989

Authorized Manpower
Full-Time Permanently
Assigned

State	Name of Installation	City	IDPPC Code	Mil.	Civ.	Tot.	Total Pers.	Total Acreage	Major Unit-Activity-Function
ALASKA									
	NAVAL AIR STATION, ADAK	ADAK	202 2	1303	353	1656	1717	52180	PATROL AIRCRAFT
CALIFORNIA									
	NAS, ALAMEDA	ALAMEDA	202 1	11264	5403	16667	18981	2616	SUPPORT AIRCRAFT, NARF
	NAVAL HOSPITAL, C PENDLETON	CAMP PENDLETON	508 2	848	410	1258	1323	187	HEALTH CARE
	NAVAL WEAPONS CTR, CHINA LAKE	CHINA LAKE	306 3	955	5317	6272	8806	1127266	AIR WARFARE&MISSILE SYSTEMS
	NAVAL WEAPONS STA, CONCORD	CONCORD	507 3	2620	1182	3802	3912	13023	WEAPONS PRODUCTION
	NAVAL AIR FACILITY, EL CENTRO	EL CENTRO	202 2	334	99	433	647	63137	FLEET AIR TRAINING SUPPORT
	NAS, LEMOORE	LEMOORE	202 1	5419	779	6198	6618	39173	ATTACK AIRCRAFT
	LONG BEACH NAVAL SHIPYARD	LONG BEACH	507 1	3175	6143	9319	9438	350	SHIP ALTERATION&REPAIR
	NAVAL HOSPITAL, LONG BEACH	LONG BEACH	508 2	888	293	1181	1257	65	HEALTH CARE
	NAVSTA, LONG BEACH	LONG BEACH	402 1	14590	407	14997	15697	1351	FLEET&SHORE ESTABLISHMENT SPT
	NAS, MOFFETT FIELD	MOFFETT FIELD	202 1	5993	3479	9472	16123	3919	AREA COORDINATOR
	NAVAL POSTGRADUATE SCHOOL	MONTEREY	508 2	2118	941	3059	3081	619	PROFESSIONAL DEVELOPMENT TNG
	NAV MEDCOM NW REG	OAKLAND	508 2	1484	667	2151	2225	191	HEALTH CARE
	NAV PUBLIC WKS CTR, S FRAN	OAKLAND	507 3	12	1381	1393	1683	696	FACILITIES SUPPORT
	NAVAL SUPPLY CTR, OAKLAND	OAKLAND	507 3	1660	3331	4991	5489	1133	SUPPLY SUPPORT
	NAV CONST BN CTR, PT HUENEME	PORT HUENEME	402 3	4558	4303	8861	9275	2407	CONSTRUCTION FORCE SUPPORT
	PACIFIC MISSILE TEST CENTER	PT MUGU	306 1	2421	4217	6638	9220	27093	RDT&E AIR LAUNCHED WEAPONS

DEPARTMENT OF DEFENSE
NAVY BASE STRUCTURE
United States
FY 1989

State	Name of Installation	City	IDPPC Code	Mil.	Civ.	Tot.	Authorized Manpower		Total Acreeage	Major Unit-Activity-Function
							Full-Time	Permanently Assigned		
	FLEET ASW TRAINING CTR. PAC	SAN DIEGO	508 2	2595	113	2708	2832	37	ASW TRAINING	
	FLEET COMBAT TRAINING CTR. PAC	SAN DIEGO	508 2	737	331	1068	1223	91	SPECIALIZED TRAINING	
	NAS. MIRAMAR	SAN DIEGO	202 1	13174	1039	14213	17787	23420	FIGHTER & ATTACK AIRCRAFT	
	NAS. NORTH ISLAND	SAN DIEGO	202 1	17585	7096	24681	25233	47864	EARLY WARNING ASW AIRCFT. NARF	
	NAV ELECTRONIC SYSTEM ENG CTR. SAN DIEGO	SAN DIEGO	306 2	42	669	711	1017	3	RED-ELECTRONICS	
	NAV PUBLIC WKS CTR. SAN DIEGO	SAN DIEGO	507 3	30	2259	2289	2758	2092	FACILITIES SUPPORT	
	NAV SUB BASE, SAN DIEGO	SAN DIEGO	402 1	6335	425	6760	7130	314	SUBMARINE FORCE SUPPORT	
	NAVAL AMPHIP BASE. CORONADO	SAN DIEGO	402 2	4794	295	5089	5135	1095	AMPHIBIOUS WARFARE TRAINING	
	NAVAL HOSPITAL. SAN DIEGO	SAN DIEGO	508 2	3258	1105	4363	4520	121	HEALTH CARE	
	NAVAL OCEAN SYSTEMS CENTER	SAN DIEGO	306 2	382	3543	3925	4948	3090	OCEAN SYS R & D	
	NAVAL STATION. SAN DIEGO	SAN DIEGO	402 1	34658	2278	36936	37167	1510	OPERATING BASE	
	NAVAL SUPPLY CTR. SAN DIEGO	SAN DIEGO	507 3	469	2480	2949	3102	849	SUPPLY DEPOT	
	NAVAL TRAINING CTR. SAN DIEGO	SAN DIEGO	508 2	14820	715	15535	15942	546	RECRUIT & SKILL TRAINING	
	NAVAL STATION. TREASURE IS	SAN FRANCISCO	402 2	3134	423	3557	3562	1931	FLEET SHORE ESTABLISHMENT SPI	
	NAVAL WEAPONS STA. SEAL BEACH	SEAL BEACH	507 3	361	2433	2794	3170	13900	ORDNANCE SUPPORT	
	NAVAL COMM STA. STOCKTON	STOCKTON	303 3	274	793	1067	1122	2788	COMMUNICATIONS	
	MARE ISLAND NAVAL SHIPYARD	VALLEJO	507 2	175	10234	10409	10411	5621	SHIP ALTERATION & REPAIR	
	NAVAL STATION. MARE ISLAND	VALLEJO	402 2	2244	359	2603	2768	500	LOGISTIC SUPPORT	

DEPARTMENT OF DEFENSE
NAVY BASE STRUCTURE
United States
FY 1989

Authorized Manpower
Full-Time Permanently
Assigned

State	Name of Installation	City	IDPPC Code	Mil	Civ.	Tot.	Total Pers.	Total Acreege	Major Unit-Activity-Function
CONNECTICUT									
	NAVAL SUB BASE. NEW LONDON	GROTON	402 1	13072	1270	14342	14889	1394	SUBMARINE FORCES SUPPORT
DIST OF COLUMBIA									
	HO NAVY DISTRICT WASHINGTON	WASHINGTON	402 3	2143	4151	6294	7477	573	ADMINISTRATIVE/LOGISTICS
	NAVAL RESEARCH LABORATORY	WASHINGTON	306 3	156	3786	3942	5741	1161	PHYSICAL SCIENCES RESEARCH
	NAVAL SECURITY STA. WASHINGTON	WASHINGTON	303 3	477	462	939	976	38	COMMUNICATIONS
FLORIDA									
	NAS. CECIL FIELD	CECIL FIELD	202 1	9788	680	10468	11467	20194	ATTACK & ASW AIRCRAFT
	NAS JACKSONVILLE	JACKSONVILLE	202 1	7560	4913	12473	14751	12376	PATROL & ASW AIRCRAFT, NARF
	NAVAL HOSPITAL, JACKSONVILLE	JACKSONVILLE	508 2	979	249	1228	1335	74	HEALTH CARE
	NAVAL SUPPLY CENTER	JACKSONVILLE	507 3	29	732	761	815	180	SUPPLY SUPPORT
	NAS. KEY WEST	KEY WEST	202 2	15753	739	16492	18103	18615	RECONNAISSANCE AIRCRAFT
	NAVAL STATION, MAYPORT	MAYPORT	402 1	18627	729	19356	20764	818	OPERATING BASE
	NAS. WHITTING FIELD	MILTON	508 2	2650	278	2928	3807	11326	FLIGHT TRAINING
	NAVAL TRAINING CENTER, ORLANDO	ORLANDO	508 2	14398	2158	16556	16826	2057	RECRUIT & SKILL TRAINING
	NAV COASTAL SYSTEMS CENTER	PANAMA CITY	306 3	807	1288	2095	2323	1112	COASTAL REGION WARFARE
	NAS. PENSACOLA	PENSACOLA	508 1	7543	6099	13642	14199	7512	FLIGHT TRAINING, NARF
	NAV ED&TC PRO MGMT SUP ACT	PENSACOLA	508 2	375	813	1188	1471	983	TRAINING PROGRAM DEVELOPMENT
	NAV PUBLIC WKS CTR, PENSACOLA	PENSACOLA	507 3	10	763	773	948	279	FACILITIES SUPPORT

DEPARTMENT OF DEFENSE
NAVY BASE STRUCTURE
United States
FY 1984

State	Name of Installation	City	IDRPC Code	Cat	Authorized Manpower Full-Time Permanently Assigned		Total Pers.	Total Acreege	Major Unit-Activity-Function
					Mil.	Civ. Tot.			
	NAVAL HOSPITAL, PENSACOLA	PENSACOLA	508 2	2	722	248	970	999	42 HEALTH CARE
	NAVAL TECH TNG CTR. CORRY STA	PENSACOLA	508 2	2	2886	196	3082	3190	431 TECHNICAL TRAINING
GEORGIA									
	NAVY SUPPLY CORPS SCHOOL	ATHENS	508 2	2	267	62	329	375	58 SKILL TRAINING
	NAVAL SUB BASE, KINGS BAY	KINGS BAY	402 1	1	2198	717	2915	3876	16273 SUBMARINE BASE
	NAS, ATLANTA	MARIETTA	205 2	2	866	161	1027	2770	165 RESERVE AIR TRAINING
HAWAII									
	NAS, BARBERS POINT	BARBERS POINT	202 1	1	4627	271	4898	5172	4076 PATROL AIRCRAFT
	NAVAL MAGAZINE, LUALUALEI	LUALUALEI	507 3	3	683	326	1009	1174	12142 ORDNANCE SUPPORT
	NAV PUB WRKS CTR, PEARL HARBOR	PEARL HARBOR	507 3	3	64	1299	1363	1450	2083 FACILITIES SUPPORT
	NAVAL STATION, PEARL HARBOR	PEARL HARBOR	402 1	1	11807	1431	13238	13558	5846 OPERATING BASE
	NAVAL SUB BASE, PEARL HARBOR	PEARL HARBOR	402 1	1	4825	294	5119	5246	105 SUBMARINE FORCES SUPPORT
	NAVAL SUPPLY CTR, PEARL HARBOR	PEARL HARBOR	507 3	3	159	875	1034	1111	838 SUPPLY SUPPORT
	PEARL HARBOR NAVAL SHIPYARD	PEARL HARBOR	507 2	2	259	5621	6880	6901	160 SHIP ALTERATION & REPAIR
ILLINOIS									
	NAS, GLENVIEW	GLENVIEW	205 2	2	1595	342	1937	4642	1407 RESERVE AIR TRAINING
	NAVAL HOSPITAL, G LAKES	GREAT LAKES	508 2	2	4773	387	5160	5273	85 HEALTH CARE
	NAVAL TNG CTR, G LAKES	GREAT LAKES	508 2	2	20694	1044	21738	20030	1018 RECRUIT & SKILL TRAINING
	NAVY PUBLIC WRKS CTR, G LAKES	GREAT LAKES	507 3	3	20	630	650	836	508 FACILITIES SUPPORT

DEPARTMENT OF DEFENSE
NAVY BASE STRUCTURE
United States
FY 1989

Authorized Manpower
Full-Time Permanently
Assigned

State	Name of Installation	City	IDPPC Code	Mil.	Civ.	Tot.	Total Pers.	Total Acreage	Major Unit-Activity-Function
INDIANA									
	NAV WEAPONS SUPPORT CTR, CRANE CRANE		507	2	56	4341	4397	4578	62509 WEAPONS SYSTEM & ORDNANCE SPT
	NAVAL AVIONICS CENTER	INDIANAPOLIS	306	2	23	3219	3242	3242	185 AVIONICS REPAIR
KENTUCKY									
	NAV ORDNANCE STA. LOUISVILLE	LOUISVILLE	507	3	12	2358	2370	2613	150 ORDNANCE SUPPORT
LOUISIANA									
	NAS, NEW ORLEANS	NEW ORLEANS	205	2	4808	597	5405	14421	4921 RESERVE AIR TRAINING
	NAVAL SUPPORT ACT, NEW ORLEANS	NEW ORLEANS	402	2	2946	1662	4608	5613	246 FLEET&SHORE ESTABLISHMENT SPT
MAINE									
	NAS, BRUNSWICK	BRUNSWICK	202	1	3485	498	3983	4371	8742 PATROL AIRCRAFT
MARYLAND									
	US NAVAL ACADEMY	ANNAPOLIS	508	2	5726	2778	8504	9592	1747 OFFICER ACQUISITION TRAINING
	D W TAYLOR NAV SHIP R&D CTR	BETHESDA	306	2	39	2845	2884	3054	327 R&D-SHIP TECHNOLOGY
	NAVAL MEDICAL COMMAND-NCR	BETHESDA	508	2	2935	2481	5416	5788	242 HEALTH CARE
	NAV ORDNANCE STA, INDIAN HEAD	INDIAN HEAD	507	3	544	2784	3428	3644	3410 SOLID PROPELLENTS
	NAVY AIR TEST CTR, PAX RIVER	PATUXANT RIVER	506	2	3304	3494	6798	9417	7127 T&E AIRCRAFT SYSTEMS
	NAV SURFACE WEAPONS CTR, WH OAK	SILVER SPRING	306	3	43	2015	2058	2238	733 R&D-NAVAL WEAPONS
	NAVAL ELECTRONIC SYS ENGR ACT	ST INIGOES	306	3	70	310	300	1947	969 T&E ELECTRONICS SYSTEMS

DEPARTMENT OF DEFENSE
NAVY BASE STRUCTURE
United States
FY 1989

State	Name of Installation	City	IDPPC Code	Mil.	Civ.	Tot.	Total Pers.	Total Acreage	Major Unit-Activity-Function
MASSACHUSETTS									
	NAS. SOUTH WEYMOUTH	SOUTH WEYMOUTH	205 2	891	190	1081	1406	2250	RESERVE AIR TRAINING
MISSISSIPPI									
	NAVAL OCEANOGRAPHIC OFFICE	BAY ST LOUIS	303 2	81	1402	1483	1775	1	NAVAL OCEANOGRAPHIC ACTIVITIES
	NAV CONST BN CTR. GULFPORT	GULFPORT	402 3	4216	667	4883	5494	4502	CONSTRUCTION FORCE SUPPORT
	NAS. MERIDIAN	MERIDIAN	508 2	2908	427	3335	3775	13507	FLIGHT TRAINING
NEVADA									
	NAS. FALLON	FALLON	202 2	1168	274	1442	2443	141059	ATTACK AIRCRAFT TRAINING
NEW HAMPSHIRE									
	PORTSMOUTH NAVAL SHIPYARD	PORTSMOUTH	507 1	1309	8470	9779	11284	297	SHIP CONSTRUCTION & REPAIR
NEW JERSEY									
	NAVAL WEAPONS STA. EARLE	COLTS NECK	507 1	1521	785	2306	2526	11158	ORDNANCE SUPPORT
	NAVAL AIR ENG CTR. LAKEHURST	LAKEHURST	306 2	1196	2697	3893	4346	7412	AIRCRAFT LAUNCH/RECOVERY SYS
	NAVAL AIR PROPULSION CENTER	TRENTON	306 2	10	728	738	747	72	ENGINE T&E ACTIVITIES

NEVADA

NAS. FALLON

NEW HAMPSHIRE

NEW JERSEY

DEPARTMENT OF DEFENSE
NAVY BASE STRUCTURE
United States
FY 1989

Authorized Manpower
Full-Time Permanently
Assigned

State	Name of Installation	City	IDPPC Code	Mil.	Civ.	Tot.	Total Pers.	Total Acreage	Major Unit-Activity-Function
NEW YORK									
	NAVAL STATION, NEW YORK	BROOKLYN	402 2	2502	1407	3909	3974	141	FLEET&SHORE ESTABLISHMENT SPT
NORTH CAROLINA									
	NAVAL HOSPITAL, CAMP LEJEUNE	CAMP LEJEUNE	508 2	1726	302	2028	2126	166	HEALTH CARE
OHIO									
	NAVY FINANCE CTR, CLEVELAND	CLEVELAND	402 3	120	1553	1673	1679	36	ADMINISTRATIVE SUPPORT--FINANCE
PENNSYLVANIA									
	NAVY SHIPS PARTS CONTROL CTR	MECHANICSBURG	507 3	186	7991	8177	8355	857	INVENTORY CONTROL POINT
	NAV STA, PHILADELPHIA	PHILADELPHIA	402 2	1333	1666	2999	3417	522	FLEET&SHORE ESTABLISHMENT SPT
	NAVAL HOSPITAL, PHILADELPHIA	PHILADELPHIA	508 2	629	238	867	952	48	HEALTH CARE
	NAVY AVIATION SUPPLY OFFICE	PHILADELPHIA	507 3	124	6500	6624	6983	135	NAVAL AVIATION SUPPLY&DLA ICP
	PHILADELPHIA NAVAL SHIPYARD	PHILADELPHIA	507 1	9220	11205	20425	21432	904	SHIP BUILDING & REPAIR
	NAVAL AIR DEVELOPMENT CENTER	WARMINSTER	306 3	243	2745	2988	3556	921	AIRCRAFT TECHNOLOGY
	NAS, WILLOW GROVE	WILLOW GROVE	205 2	3339	704	4043	7310	967	RESERVE AIR TRAINING

DEPARTMENT OF DEFENSE
NAVY BASE STRUCTURE
United States
FY 1989

Authorized Manpower
Full-Time Permanently
Assigned

State	Name of Installation	City	IDPPC Code	Mil.	Civ.	Tot.	Total Pers.	Total Acreege	Major Unit-Activity-Function
RHODE ISLAND									
	NAV EDUCATION & TRAINING CTR	NEWPORT	508 2	5486	1033	6519	7589	1199	OFF INDOCTRINATION & SKILL TNG
	NAVAL HOSPITAL, NEWPORT	NEWPORT	508 2	389	154	543	553	41	HEALTH CARE
	NAVAL UNDERWATER SYST CTR	NEWPORT	306 2	204	3939	4143	5255	371	UNDERSEA WARFARE R&D
	NAVAL WAR COLLEGE	NEWPORT	508 2	663	252	915	1018	23	PROFESSIONAL DEVELOPMENT TNG
SOUTH CAROLINA									
	NAVAL HOSPITAL, BEAUFORT	BEAUFORT	508 2	469	166	635	687	127	HEALTH CARE
	CHARLESTON NAVAL SHIPYARD	CHARLESTON	507 1	91	8868	8959	9058	1923	SHIP/SUB REPAIR
	FPM SUBMARINE TRAINING CENTER	CHARLESTON	508 2	399	15	414	418	8	SKILL TRAINING
	FLEET AND MINE WARFARE TNG CTR	CHARLESTON	508 2	203	8	211	261	9	SKILL TRAINING
	NAVAL HOSPITAL, CHARLESTON	CHARLESTON	508 2	848	227	1075	1155	24	HEALTH CARE
	NAVAL STATION, CHARLESTON	CHARLESTON	402 1	3759	1185	4944	4944	882	OPERATING BASE
	NAVAL SUPPLY CTR, CHARLESTON	CHARLESTON	507 3	148	1366	1514	1638	197	SUPPLY SUPPORT
	NAVAL WEAPONS STA., CHARLESTON	CHARLESTON	507 3	3706	1564	5270	6134	17480	WEAPONS SYSTEMS SUPPORT
TENNESSEE									
	NAS, MEMPHIS	MILLINGTON	508 2	11530	942	12472	13814	3499	SKILL TRAINING
	NAVAL HOSPITAL, MILLINGTON	MILLINGTON	508 2	522	122	644	660	38	HEALTH CARE

DEPARTMENT OF DEFENSE
NAVY BASE STRUCTURE
United States
FY 1989

Authorized Manpower
Full-Time Permanently
Assigned

State	Name of Installation	City	IDPPC Code	Mil.	Civ.	Tot.	Total Pers.	Total Acreage	Major Unit-Activity-Function
TEXAS									
	NAS. CHASE FIELD	BEEVILLE	508	2	1542	413	1955	2299	9633 FLIGHT TRAINING
	NAS. CORPUS CHRISTI	CORPUS CHRISTI	508	2	1621	4816	6437	7263	4400 FLIGHT TRAINING
	NAVAL HOSPITAL CORP CHRISTI	CORPUS CHRISTI	508	2	301	86	387	405	32 HEALTH CARE
	NAS. DALLAS	DALLAS	205	2	1527	438	1965	8289	799 RESERVE AIR TRAINING
	NAS. KINGSVILLE	KINGSVILLE	508	2	1277	351	1628	2248	5582 FLIGHT TRAINING
VIRGINIA									
	NAVAL SURFACE WEAPONS CTR	DAHLGREN	306	2	432	3231	3663	3989	4320 RD&E-ORDNANCE TECHNOLOGY
	FLEET ASW TRAINING CTR, LANT	NORFOLK	508	2	240	9	249	286	5 ASW TRAINING
	NAS. NORFOLK	NORFOLK	202	1	10101	7088	17189	18489	1386 EARLY WARNING&ASW AIRCFT.NARF
	NAV PUBLIC WKS CTR, NORFOLK	NORFOLK	507	3	14	1965	1979	2321	169 FACILITIES SUPPORT
	NAVAL AMPHIB BASE-LITTLE CREEK	NORFOLK	402	1	10732	940	11672	13240	11808 AMPHIBIOUS WARFARE SUPPORT
	NAVAL MEDICAL CLINIC	NORFOLK	508	2	232	308	540	543	14 HEALTH CARE
	NAVAL STATION, NORFOLK	NORFOLK	402	1	55598	4066	59664	60313	181 OPERATING BASE
	NAVAL SUPPLY CTR, NORFOLK	NORFOLK	507	3	316	4780	5096	5503	1605 SUPPLY SUPPORT
	NAVAL HOSPITAL, PORTSMOUTH	PORTSMOUTH	508	2	2363	631	2994	3356	110 HEALTH CARE
	NORFOLK NAVAL SHIPYARD	PORTSMOUTH	507	2	798	14406	15204	17283	1340 SHIP ALTERATIONS & REPAIR
	FLEET COMBAT TRAINING CTR, LANT	VIRGINIA BEACH	508	2	5342	596	5938	6112	1038 SPECIALIZED TRAINING
	NAS. OCEANA	VIRGINIA BEACH	202	1	9899	836	10735	11303	15100 FIGHTER & ATTACK AIRCRAFT

DEPARTMENT OF DEFENSE
NAVY BASE STRUCTURE
United States
FY 1989

State	Name of Installation	City	IDPPC Code	Cat	Authorized Manpower			Total Pers.	Total Acreege	Major Unit-Activity-Function
					Mil.	Civ.	Tot.			
	NAVAL WEAPONS STA, YORKTOWN	YORKTOWN	507	3	936	2091	3027	3376	10624	ORDNANCE SUPPORT
WASHINGTON										
	NAVAL HOSPITAL, BREMERTON	BREMERTON	508	2	595	220	815	849	48	HEALTH CARE
	NAVAL STRATEGIC WEAPON FAC PAC	BREMERTON	507	3	122	371	493	813	0	ORDNANCE SUPPORT
	NAVAL SUBMARINE BASE, BANGOR	BREMERTON	402	1	5448	1960	7408	9322	6691	SUBMARINE BASE
	NAVAL SUPPLY CTR, PUGET SOUND	BREMERTON	507	3	75	861	936	993	263	SUPPLY SUPPORT
	PUGET SOUND NAVAL SHIPYARD	BREMERTON	507	1	4546	12718	17264	17839	1392	SHIP ALTERATION & REPAIR
	NAV UNDERSEA WARFARE ENGR STA	KEYPORT	507	3	275	3478	3753	5137	4939	UNDERWATER WEAPONS SUPPORT
	NAS, WHIDBEY ISLAND	OAK HARBOR	202	1	7660	781	8441	10414	70998	ATTACK&ELEC WARFARE AIRCRAFT
	NAVAL STATION, PUGET SOUND	SEATTLE	402	2	627	671	1298	1718	271	FLEET&SHORE ESTABLISHMENT SPT

DEPARTMENT OF DEFENSE
 NAVY BASE STRUCTURE
 United States Territories and Possessions
 FY 1989

Territory	Name of Installation	City	IDPPC Code	Cat	Authorized Manpower			Total Pers.	Total Acreage	Major Unit-Activity-Function
					Mil.	Civ.	Tot.			
GUAM										
	NAS, AGANA	AGANA, GUAM	202	2	1615	191	1806	1837	2434	PATROL ELEC WARFARE AIRCRAFT
	NAV PUBLIC WKS CTR, GUAM	AGANA, GUAM	507	3	12	1399	1411	1416	2092	FACILITIES SUPPORT
	NAVAL HOSPITAL, GUAM	AGANA, GUAM	508	2	495	112	607	617	87	HEALTH CARE
	NAVAL SHIP REPAIR FAC, GUAM	AGANA, GUAM	507	1	114	1038	1152	1174	183	FLEET MAINTENANCE
	NAVAL STATION, GUAM	AGANA, GUAM	402	1	509	515	1024	1294	4779	FLEET SUPPORT
	NAVAL SUPPLY DEPOT, GUAM	AGANA, GUAM	507	3	91	458	549	506	1585	SUPPLY SUPPORT
PUERTO RICO										
	NAVAL STATION, ROOSEVELT ROADS	ROOSEVELT RDS	202	2	2671	1289	3960	5004	32161	OPERATING BASE

DEPARTMENT OF DEFENSE
NAVY BASE STRUCTURE
Used by U.S. Forces in Foreign Areas
FY 1989

Country	Name of Installation	City	IDPPC Code	Cat	Authorized Manpower Full-Time Permanently Assigned		Tot.	Total Pers.	Total Acreage	Major Unit-Activity-Function
					Mil.	Civ.				
BERMUDA										
	NAVAL AIR STATION, BERMUDA	BERMUDA	262	2	1191	354	1455	1677		1453 PATROL AIRCRAFT
CUBA										
	NAVAL STATION, GUANTANAMO BAY	GUANTANAMO BAY	262	2	2484	1019	3503	3711		28817 OPERATING BASE
DIEGO GARCIA										
	NAVAL SUPPORT FACILITY	DIEGO GARCIA	402	3	1555	51	1606	3259		7000 SUPPORT ACTIVITIES
ICELAND										
	NAVAL STATION, KEFLAVIK	KEFLAVIK	202	1	4379	1040	5419	5445		23339 FLT SUPPORT/PATROL AIRCRAFT
ITALY										
	NAVAL HOSPITAL, NAPLES	NAPLES	508	2	229	78	307	312		5 HEALTH CARE
	NAVAL SUPPORT ACTIVITY, NAPLES	NAPLES	402	3	3027	1309	4336	4672		172 FLEET SUPPORT
	NAVAL AIR STATION, SIGONELLA	SIGONELLA	202	1	3493	589	3992	4890		651 PATROL/FLEET AIRCRAFT

DEPARTMENT OF DEFENSE
NAVY BASE STRUCTURE
Used by U.S. Forces in Foreign Areas
FY 1989

Authorized Manpower
Full-Time Permanently
Assigned

Country	Name of Installation	City	IDPPC Code	Mil.	Civ.	Tot.	Total Pers.	Total Acreage	Major Unit-Activity-Function
JAPAN									
	NAVAL AIR FACILITY, ATSUGI	ATSUGI	202	2	1012	739	1751	1863	1771 RECONNAISSANCE AIRCRAFT
	NAVAL HOSPITAL, OKINAWA	CHATAN, OKINAWA	508	2	643	108	751	751	HEALTH CARE
	NAVAL FLEET ACTIVITIES, SASEBO	SASEBO	507	2	1400	733	2133	2476	8386 ORDNANCE SUPPORT
	NAV SHIP REPAIR FAC, YOKOSUKA	YOKOSUKA	507	1	96	1746	1842	1869	FLEET MAINTENANCE
	NAVAL FLEET ACTIVITY, YOKOSUKA	YOKOSUKA	402	1	9269	329	9598	9601	3400 FLEET SUPPORT
	NAVAL HOSPITAL, YOKOSUKA	YOKOSUKA	508	2	371	46	417	417	HEALTH CARE
	NAVAL SUPPLY DEPOT, YOKOSUKA	YOKOSUKA	507	3	166	1000	1166	1307	905 SUPPLY SUPPORT
	NAVY PUBLIC WKS CTR, YOKOSUKA	YOKOSUKA	507	3	42	1144	1186	1587	187 FACILITIES SUPPORT
PANAMA									
	NAVAL STATION, PANAMA CANAL	RODMAN	402	3	575	386	961	1183	3166 LOGISTIC SUPPORT
PHILIPPINES									
	NAV PUBLIC WKS CTR	SUBIC BAY	507	3	15	2705	2720	3219	1484 FACILITIES SUPPORT
	NAV SHIP REPAIR FAC	SUBIC BAY	507	1	136	4827	4963	4963	0 FLEET MAINTENANCE
	NAVAL AIR STATION, CUBI POINT	SUBIC BAY	202	2	3517	754	4271	4340	ATTACK/ASW AIRCRAFT
	NAVAL HOSPITAL, SUBIC BAY	SUBIC BAY	508	2	315	218	533	533	HEALTH CARE
	NAVAL STATION, SUBIC BAY	SUBIC BAY	402	1	3313	1232	4545	4556	0 OPERATING BASE

DEPARTMENT OF DEFENSE
 NAVY BASE STRUCTURE
 Used by U.S. Forces in Foreign Areas
 FY 1989

Country	Name of Installation	City	IDPPC Code	Cat	Authorized Manpower Full-Time Permanently Assigned		Total Pers.	Total Acreege	Major Unit-Activity-Function
					Mil.	Civ.			
	NAVAL SUPPLY DEPOT, SUBIC BAY	SUBIC BAY	507	3	139	955	1094	1262	0 SUPPLY SUPPORT
SPAIN									
	NAVAL HOSPITAL, ROTA	ROTA	508	2	163	38	201	214	8 HEALTH CARE
	NAVAL STATION, ROTA	ROTA	202	2	4313	1360	5673	6711	6776 OPERATING/AIR BASE
UNITED KINGDOM									
	NAVAL ACTIVITIES, U K	LONDON	402	3	824	395	1219	1415	38 FLEET, SHOPS ESTAB. SUPPORT

Chapter Four

Air Force Base Structure (U)

I. INTRODUCTION

The Air Force Base Structure Chapter to the DOD Base Structure Report for FY 1989 is submitted in accordance with Section 115, Title 10, United States Code. Section I describes the criteria and rationale for classifying all Air Force facilities into one of four categories: major installations, minor installations, support sites and other activities. Section II, Base Structure Overview, discusses historical data on base structure and describes the criteria used by the Air Force to determine the Air Force base structure. Section III relates the needs of the major activities within each Installation Defense Planning and Programming Category (IDPPC) to the current base structure. Major changes to the FY 1989 force structure and their impact on the base structure are also described in Section III. Section IV details projected Air Force base operating costs for FY 1989. Section V summarizes major actions taken and alternatives being pursued to reduce base operating costs. Finally, Section VI contains a numerical summary of all Air Force facilities and by name listing of major and minor Air Force installations.

During 1986 the Air Force reclassified all facilities into one of four categories: major installations, minor installations, support sites, and other activities.

The primary reason for the reclassification effort was to update and describe accurately the Air Force's actual installation posture. The previous system categorized all Air Force properties as either major or minor installations. Clearly, many of those properties were not "installations" and should not have been reported as such. With the Air Force's broad spectrum of roles, missions and organizations of varying sizes, two categories did not accurately describe the Air Force structure. The four new categories are explained below.

1. A major installation is a self-supporting center of operations for Air Force combat, combat support, or training. To qualify as a major installation, an activity must satisfy all of the following criteria:

- a) Be operated by an Active, Guard, or Reserve unit of group size or larger.
- b) Have all the organic support to accomplish the unit mission. For example, a major flying organization has the organic maintenance to support its aircraft and the organic base support structure to manage resources and maintain facilities.

- c) Have real property accountability through ownership, lease, permit, or other written agreement for all real estate and facilities necessary to conduct the unit's assigned mission. Agreements with foreign governments, or Federal, State or local agencies, which give the Air Force jurisdiction over real property meet this requirement. In the case of Guard or Reserve units at civil airports, shared use agreements (as opposed to joint use agreements where the military owns the runway) normally do not give the Air Force exclusive control over runways, taxiways, etc., and therefore, do not meet the criteria to be major installations.

2. Minor installations are facilities operated by Active, Guard, or Reserve units of at least squadron size that do not satisfy all the criteria for a major installation. Examples of minor installations are Guard or Reserve squadron flying operations that are located at civilian controlled airfields. These are smaller operations compared to active organizations where the Air Force owns and controls the runways and requires larger support operations for a permanent base population.

3. A support site is a detached piece of real property operated by the Active, Reserve, or Guard component that provides general support to the Air Force mission as opposed to supporting a particular installation. Examples of support sites are missile tracking sites; radar bomb scoring sites; Air Force-owned, contractor-operated plants; and radio relay sites.

4. The fourth classification category is called other activities. These are Air Force units that have little or no real property accountability over the real estate they occupy. Examples include Active, Guard or Reserve Air Force units that are located on installations belonging to other services or leased office space that supports recruiting detachments, Office of Special Investigations Detachments, etc.

In conclusion, the Air Force classification system is designed to accurately describe Air Force installation posture. Major installations are self-supporting centers of operations. Minor installations are smaller operations with squadron or larger presence. Support sites are detached entities that provide generalized support to the Air Force mission. Finally, other activities are Air Force functions that have little or no real property accountability. To place these categories in FY 89 context, the Air Force possesses a total of 258 installations: 140 major and 118 minor. The remaining properties are smaller and/or non-self supporting. Many have limited acreage and no personnel assigned.

II. BASE STRUCTURE OVERVIEW

The Air Force base posture has been carefully structured to support the assigned forces. Since forces are a dynamic element, their supporting base posture is also dynamic. As forces evolve, base requirements change and realignments in the base posture are required. The factors used to determine whether or not a base would be a suitable realignment or closure candidate vary widely from operational to physical requirements. Ultimately, however, all base realignments must be carefully weighed against the overall mission requirements of the Air Force and flexibility to meet future basing needs.

Historical Data

The Air Force strives to maintain an optimum base structure to support the currently assigned and projected forces. For example, between 1960 and 1980 force structure declined. As a result the Air Force has reduced Continental United States (CONUS) major installations by 40% and overseas major installations by 62%. The Air Force has also reduced minor installations and support facilities by 26%. Although force structure has grown since 1980, base structure has remained relatively constant. Other management actions, such as mission transfers to the Guard and Reserve, have also contributed to what has been a declining number of installations. As Air Force base requirements are evaluated, the most effective installations are selected for retention based upon specific considerations and criteria.

MAJOR CONSIDERATIONS AND CRITERIA:

In determining the effectiveness of an installation, major consideration must be given to operational and training requirements, force deployment, use of multi-mission bases, and future flexibility.

These considerations have evolved into a broad set of criteria which are used by the Air Force in developing and evaluating base realignment proposals. They are geographic location, facilities availability and condition, community services available to support Air Force activities/population, potential to accommodate future force requirements, existing or future encroachment which might impact Air Force operations, budgeting considerations inherent in the proposed realignment action, possible adverse environmental impact, and mission degradation as a result of force turbulence.

Air National Guard and Air Force Reserve units must also consider demographics in making basing decisions. The local and surrounding communities must have a population base large enough to support recruiting of full and part-time personnel.

Major considerations and criteria cannot be weighed independently in reaching basing decisions; rather, they have to be evaluated as a whole to achieve an optimum balance. The relationships between each of the four major considerations and the resultant criteria are discussed next.

MAJOR CONSIDERATIONS:

Operational and Training Requirements: Since the Air Force base posture exists to support the missions of the assigned forces, the ability of each base to meet its assigned forces' unique operational and training requirements are of paramount importance. Each force element, such as strategic offense, tactical fighter, strategic airlift, or training, places unique demands on airspace, ranges, training routes, lines of communication, and facilities.

The current base posture reflects a force beddown in which the forces' operational and training requirements are best supported. The entry of new weapon systems into the Air Force inventory may, however, require changes to that base posture. Other factors such as a revised threat assessment, loss of training areas, and encroachment may also require force realignment. In each case, the Air Force continually seeks to optimize its base posture consistent with its overall force requirements. These requirements will be summarized in Section III under the appropriate Installation Defense Planning and Programming Category (IDPPC).

Force Deployment: The Air Force's force structure is based on national strategy. This strategy determines not only potential geographical areas in which U.S. forces would be used, but also which forces would be deployed or employed from the CONUS. The number and type of bases required to support these forces, both overseas and in the CONUS, directly relate to our ability to meet our strategic goals.

Use of Multi-Mission Bases: A major expense of each installation is the cost of resources required to "open the door," i.e., the fixed base operating support resources such as facilities, manpower, and materials required because of the mere existence of the installation. These costs (such as road repair and facilities upkeep) are relatively insensitive to changes in the assigned mission. Variable base operating support resources are adjusted to support requirements of the assigned missions. When missions are compatible and facilities are available, collocating two or more missions can often reduce costs. For example, a support mission (logistics depot) may coexist with a major operational unit (tactical fighter wing). Additionally, missions fulfilled by a relatively small number of personnel and equipment may be accommodated most economically on bases which have major missions.

Although consolidation of missions may yield economies, the Air Force must also consider the compatibility of assigned missions. Collocations which create competition for scarce resources (such as gunnery range availability) may save support dollars but could increase operational costs or adversely affect combat readiness.

Future Flexibility: Realignment actions which result in base closures limit future flexibility to meet programmed and unprogrammed force adjustments. Consequently, bases selected for closure should generally be those with the least flexibility to absorb future requirements. If flexibility were the sole determinant, bases which have constraints such as airspace limitations, encroachment by civilian activities, limited real estate, inadequate community services, and poor facilities should logically be considered for closure prior to bases which have the potential to accommodate additional or new missions.

Special Overseas Political Considerations: USAF posture overseas may often be a result of host nation requirements which dictate less than an optimum basing solution. Because of these political restrictions, the USAF is not always free to operate, expand, or contract its overseas operations in a totally unrestricted manner. This of course impacts on the USAF's ability to carry out certain aspects of its mission.

CRITERIA: (Developed from the above major considerations)

Geographic Location: The geographic location of an installation influences the ability of assigned forces to execute their missions. Geographic factors include weather, availability of training areas, proximity to employment/deployment routes, airspace availability, and transportation networks. For each mission, there are optimum geographic locations which provide maximum operational effectiveness. See Section III for additional discussion.

Facility Availability: A goal in realignment actions is maximum use of existing facilities and minimum expenditure for new facilities. Mission related facilities as well as support facilities must be considered. An operational flying activity, for example, will require a runway complex (with specific width, length and load-bearing capacity), adequate ramp space for aircraft parking, and a maintenance complex capable of supporting the assigned aircraft (e.g., proper size docks and hangars, sufficient communications, electronics, and avionics maintenance space, etc.). As newer, high performance supersonic aircraft are added to the Active, Guard, and Reserve inventories, the Air Force's need for airspace and ranges must be balanced against civil aviation's need for airspace and environmental concerns. Conversely, for administrative and headquarters activities, the proper amount of administrative

space is essential. For non-flying training activities, classroom and student housing are key factors. For all actions, availability of housing (bachelor and family) for any increase in population is a significant element.

Certain unique facility requirements are generated by intelligence, communications, logistics, and research and development activities. For example, laboratories, which must be shielded from electronic emissions are expensive and time consuming to construct. Relocation to installations which do not have facilities available to accommodate these functions may not be feasible due to the cost and time for reconstruction. Also, due to mission requirements, these facilities must often be duplicated and operational prior to shutting down the current activity. This creates a temporary, expensive, redundant requirement not only for facilities and equipment, but manpower as well. Similar circumstances exist in relocating some flying support functions, such as aerial port facilities, which require large terminal complexes to receive and process cargo and passengers.

Facility requirements for small missions are many times satisfied with minimum modifications to existing bases. This is particularly true if the unit's equipment has no special storage or maintenance requirements. Requirements for administrative space can be met in various ways, such as conversion of excess space in other functional areas.

The overall condition of the real property facilities at the base is an important element in the selection process. Relocating an activity to another base may be more appropriate if that activity is currently on an installation where most mission and support functions are housed in substandard and deteriorated facilities which would soon have to be replaced even if the activity remained in place. It is generally more economical to construct a few additional facilities at a more modern base and consolidate missions rather than to replace the substandard facilities and continue base operating costs at two bases.

An additional consideration is the extent a base's facilities support other activities or installations in the area. If a base provides hospital, housing and other support functions for surrounding installations, it may not be possible to completely close the base. As a result, savings from the realignment may be significantly less than at a base where all activities can be shut down and facilities declared excess.

Community Service: Civilian resources (e.g., community housing, medical facilities, schools, and recreational facilities) are a consideration in developing base realignment

actions. When possible, base realignment actions should take maximum advantage of existing civilian resources which can be used to support the assigned personnel. Of particular importance is family housing. Areas which have a residual capability to house Air Force families adequately not only negate the cost of providing government housing but also facilitate rapid completion of the proposed realignment actions. Conversely, areas in which community support facilities are limited place greater emphasis on the base housing and facilities. Adequate facilities, both on and off a base, are important in terms of morale. The contribution of the civilian community in this area is very important.

Future Force Requirements: Future force requirements must be responsive to changes in national policy and threat assessments. Since these requirements cannot be predicted with certainty and are subject to unprogrammed changes, flexibility must be maintained within the existing base posture. This entails developing reasonable assumptions on what force changes might occur and determining how the various basing options could support these changes. Future fighter systems, for example, will have an increasing requirement for training in the supersonic regimes of flight. Closing a base with good access to supersonic flying airspace would thus be shortsighted.

Although flexibility is a subjective consideration, some instances do lend themselves to objective analysis. For example, for pilot production, capacity at each undergraduate pilot training base can be determined. Based on the required levels of pilot production, the degree of flexibility (unused production capacity) within the system can be determined and the system's surge capacity can be calculated. As a result, the degree of flexibility in the system can be predicted and controlled. Workload versus base capacity can similarly be determined for other training and support activities.

Unfortunately, most potential changes are not the result of clearcut workloads and are difficult to quantify. For example, the flexibility of the base system to accommodate redeployment of forward deployed tactical units to the CONUS depends on many variables. Among these are type of unit, activity levels of the units, as well as a determination as to whether they are to be retained as active duty forces or transferred to Guard or Reserve status. In these instances, the underlying assumptions are subjective. Subjectivity notwithstanding, it is important that base realignment alternatives be weighed in terms of their potential to meet unprogrammed force changes.

Encroachment: Urban and airspace encroachment into vital areas surrounding installations is of continuing concern. Some installations which were originally built well away from

population centers have subsequently attracted major growth and, as a result, are now pressured by line of sight intrusion, noise complaints, and encroachment into accident potential zones. The potential of air traffic congestion must also be considered in basing programs. Increased civil and private air activity has reduced airspace available for military operations. Encroachment, therefore, is an important element in determining the continued viability of an installation and future base realignment actions.

A program to protect installations from encroachment is in progress. Under Air Installation Compatible Use Zone (AICUZ) guidance, planning data is provided to an intergovernmental/interagency forum to reduce encroachment through comprehensive planning, zoning, real property rights, acquisitions and similar activities. However, in areas where encroachment has become a major problem, its impact must be considered in developing future plans.

Budget: High cost, single mission installations with limited real estate and outmoded, functionally inefficient facilities are prime candidates for closure. Significant annual savings may result from the closure of such bases. However, the relative cost-effectiveness must be determined on a case-by-case basis. Closing a base by eliminating the mission or function generally results in significant annual savings. Retaining and consolidating missions can result in savings by "economies of scale." These savings are offset in part or whole, however, by the costs to move a unit's personnel and in facilities needed to consolidate. Initial and annual savings must be weighed against the one-time construction and relocation costs of the various options. Cost savings from closure of a multimission base usually result in a longer period of amortization because costs are incurred to move the primary unit and all other units to new beddown locations. Consolidations which minimize the investment in new facilities while maximizing the annual savings may be considered. Again, large outlays in construction or equipment funds are generally not cost-effective and options which depend on such outlays are generally avoided unless no other suitable alternative exists.

Environment: All proposed federal actions must be analyzed to determine the significance of potential environmental impacts. The analysis may find the proposed action has no significant effect on the human environment and qualifies for a categorical exclusion and therefore needs no further study. Alternatively, it may reveal the proposed action requires either an environmental assessment or the more extensive environmental impact statement. Each of these documents is prepared in accordance with strict national, presidential, and departmental regulations. When completed, they provide additional data to aid in the decision making process.

Mission Degradation: Realignment actions, by their very nature, result in turbulence both in personnel and in mission effectiveness. The degree of turbulence is a consideration if the resulting mission degradation is of such proportion as to be significant. Certain activities cannot be allowed to "stand down" and, as a result, realignments of these activities require extraordinary measures to permit virtually instantaneous relocation. Also, work force composition is a consideration in that a highly specialized or unique work force of civilians may complicate relocation. These factors must be considered in evaluating realignment actions.

III. RELATIONSHIP OF BASE STRUCTURE TO FORCE STRUCTURE

Force programming is dynamic and subject to many variables and revisions. Basing is closely tied to force posture and, thus, is also dynamic. Changes occur in response to altered assessments of the existing threat, force level and composition changes, revised deployment concepts and strategy, the continuing impact of resource management efforts, and national political adjustments. Each change in force posture has the potential to cause additional base adjustments in training and logistical support areas. Thus, Air Force base structure may only be defined within the context of existing circumstances. A substantial change in these circumstances, e.g., a decision to reduce overseas forces, would require adjustments in the existing CONUS base structure. Timing of the introduction or expansion of a weapon system influences base selection, as do changes in force size and deployment concepts. In addition, base requirements for USAF weapon and support systems vary greatly due to differing weapon characteristics, operational support, and training requirements.

The ability to attain and maintain an operational posture which will insure national security and support legitimate international commitments continues to be a prime objective in Air Force deployment decisions. Base selection and development must not only support employment plans for major weapon systems (along with their required combat support capabilities), they must also provide for training requirements generated by those systems. This development must also consider related test and development activities, adequate personnel, logistics and communications support.

The Air Force places considerable emphasis on attaining maximum economies in the base support area, thereby enabling a greater proportion of the defense dollar to be expended on direct combat capability. Review of the base structure is continually ongoing to identify installations whose closure might result in resource savings without impacting combat capability.

Since each mission category has its own unique operational and training requirements which dictate the Air Force base structure, each will be discussed separately. Specific major and minor installations falling into each mission category, generally referred to as the IDPPC, are listed in Section VI.

STRATEGIC FORCES (100)

Basing Requirements - Strategic Offense

In the basing of strategic offensive forces, careful consideration is given to geographic locations which maximize survivability of the force. For example, USAF Inter-Continental Ballistic Missiles (ICBMs) require sufficient area for adequate dispersal of launch sites. If Soviet submarine launched missiles are postulated to be the most critical threat against our bombers and tankers, then inland bases provide the greatest survivability due to the longer flight time of the missiles. This does not imply that only inland bases should be considered for strategic offensive forces. Flying weather, airspace congestion, runway and pavements, maintenance and support facilities, and munitions storage capacity are all factors in basing decisions. A coastal base's force survivability can be enhanced through reposturing and dispersal to achieve the time needed to launch the force safely and effectively.

Other operational requirements such as targeting, ranging and bomber/tanker mating must be considered when determining force beddown locations. Lateral support supplied to other commands, such as tactical aircraft contingency and overseas deployment refueling requirements, is also a necessary consideration. Some overseas basing also enhances strategic operational effectiveness.

- Coming Force Structure Actions and Their Impact on Base Structure

The Administration has committed the United States to a program of strategic force modernization, including modernization of the ICBM force and deployment of the B-1B and Advanced Technology Bomber. In keeping that commitment, the Air Force is deploying 50 Peacekeeper missiles in Minuteman III silos at F. E. Warren AFB, WY and continues to study survivable basing options for additional missiles. Further, the Air Force is in the initial stages of developing and deploying a Small ICBM. Basing studies for this system are also underway.

Lastly, the Air Force is continuing to plan and program for the development of the Strategic Training Range Complex in the northwestern United States.

- Basing Requirements - Strategic Defense

For strategic defensive systems, factors such as enemy weapon system performance, likely targets, and routes of attack are considered in basing decisions. Also considered are assessments of warning time available, speed of reaction, and the probable time to intercept, identify, and destroy the enemy vehicle. After consideration of all factors involved, a determination is made of the most effective deployment area. In general, this analysis dictates peripheral coverage of the Continental United States for both radar and interceptor aircraft basing, with forward deployed and over-the-horizon radars providing early attack warning.

- Coming Force Structure Actions and Their Impact on Base Structure

The Air Force initiative to upgrade and streamline the Air Defense force structure is continuing. The modernization effort to replace aging air defense F-106 and F-4C aircraft with more capable F-105s and F-4Es is progressing on schedule. Additionally, the Air Force has announced selection of the modified F-16A as winner of the follow-on air defense interceptor competition. It will sustain the fleet well into the next century.

The Air Force is moving ahead with the deployment of the Over-the-Horizon Backscatter radar system. Construction of the East Coast system is nearly complete, with one sector fully operational. Site selection is in its final stage for the Central and Alaskan radars and construction will soon begin on the West Coast system.

- Basing requirements - Space Operations

Air Force Space Command, a component of US Space Command, manages and operates assigned space assets. These missions require a decentralized facility structure that provides coverage for attack warning, surveillance and satellite control.

- Coming Force Structure actions and their Impact on Base Structure

Falcon AFB, which is just east of Colorado Springs and home of the 2nd Space Wing along with with Onizuka AFB near Sunnyvale, CA, are expanding to assume a greater role in satellite control and space shuttle missions.

GENERAL PURPOSE FORCES (200)

- Basing Requirements - Tactical

The nature of the tactical mission and its inherent equipment complexity require considerable training facilities in the CONUS. Accessibility of weapons ranges, proximity to training airspace (to include supersonic capability) and suitable weather to conduct the large volume of training are necessary. CONUS units conduct the initial weapon system training for all US Tactical Air Forces and also provide a ready source of deployable forces for contingency response. This world-wide deployment tasking places some additional constraints on basing posture since forces should be conveniently aligned to airlift and tanker support. In addition, tactical forces which directly support the Army, such as tactical air control units, should be located as close as possible to support peacetime Army training requirements.

Tactical forces overseas are based according to strategic, tactical, and security policy considerations in addition to the usual CONUS basing criteria. Each base must be capable of efficient peacetime operation and be prepared to meet the mission requirements it is tasked to conduct in combat or contingency situations. Each type of mission has its own peculiar basing requirements according to current strategies and contingency plans. The need for combat dispersal must be considered along with a requirement to receive forces from the CONUS in time of crisis. The overseas base structure must maintain a capability to respond to changing tactical and strategic situations. The overseas base structure requires cooperation of host governments, hence basing requirements must be set in the context of international security policy.

- Coming Force Structure Actions and Their Impact on Base Structure

The Air Force will continue to modernize the fighter force as it brings additional new F-15 and F-16 aircraft into the active inventory. The results of this effort will be aimed at the Air Reserve Forces where increasing numbers of older F-16s will be retired and replaced with F-4Es and F-16s from the active forces. As a part of this overall effort, the Air National Guard has been given a dedicated training capability in the F-16 for the first time. This capability will be expanded as the ANG acquires more F-16 assets.

- Basing Requirements - Mobility

Beddown locations for airlift units are normally determined by wartime tasking, peacetime operations and training requirements.

Units primarily tasked to support intertheater airlift are normally located along the east and west coasts of the United States in proximity to major transportation hubs. This basing strategy maximizes efficient use of available airlift assets and expedites unit and cargo movement through the DOD transportation system. Forces primarily tasked to support intratheater airlift requirements and close support of combat forces are located in proximity to the units of types of forces they will support. These airlift units require extensive training areas for low-level flying and restricted airspace for practicing aerial delivery of paratroopers and equipment. Collocating airlift with supported units enhances integration and builds cohesiveness.

- Coming Force Structure Actions and Their Impact on Base Structure

Airlift force structure changes are designed to modernize and realign the force and to expand the role of the Air Reserve Forces in the airlift mission. The Air Force will transfer the final C-5A aircraft to the Air National Guard and Air Force Reserve units, continuing the expansion of their role in strategic airlift. The active duty force will continue its modernization with the delivery of the last C-5B. Light and heavy-lift helicopter capability will be reduced as older, less capable systems are retired.

Special operations forces will be strengthened by the introduction of additional MH-53 Pave Low helicopters and MC-130H Combat Talon aircraft into the inventory. Additional changes will also be made as a result of the FY 87 Defense Authorization Bill which directed the formation of a Unified Special Operations Command (USSOCOM) which was established on 13 Apr 87.

AUXILIARY FORCES (300)

- Basing Requirements

Air Force Systems Command (AFSC) is responsible for the research, development, production, and procurement actions necessary to acquire aerospace weapon systems and support systems essential to the Air Force mission. AFSC delivers complete and operable systems to users such as Strategic Air Command, Tactical Air Command, and Military Airlift Command. To accomplish its mission, AFSC must have extensive test facility complexes for aircraft, missiles and associated components. These complexes require runways, large areas of

restricted airspace, numerous range and tracking facilities, and access to environmental testing facilities. Facilities for administration of test programs and the correlation of basic and applied research during weapons development are also required.

The Air Force Communication Command (AFCC) mission is to provide the Air Force and the Department of Defense with communications, data automation, electronic and engineering installation, and air traffic control. For this tasking, AFCC requires facilities which permit ready access with related commercial facilities. Other locations in relatively remote areas act as communications links.

- Coming Force Structure Actions and Their Impact on Base Structure

There are no major force structure changes.

MISSION SUPPORT FORCES (400)

- Basing Requirements

Extensive facilities are required for mission support functions to properly sustain Air Force mission equipment and personnel. For example, medium range aircraft require refueling stops on transoceanic flights. These installations must have runways of sufficient length and weight bearing capacities to support transient aircraft and must have adequate billeting and other services available for transient personnel.

- Coming Force Structure Actions and Their Impact on Base Structure

There are no major force structure changes.

CENTRAL SUPPORT FORCES (500)

The mission of the Air Force Logistics Command (AFLC) is to provide responsive, effective, and economical support to meet the wide variety of missions assigned to the United States Air Force. To accomplish these tasks effectively, logistic support installations must be adjacent to transportation network terminals and facilities to enable rapid support. Extensive warehousing, open storage and aircraft maintenance facilities, plus facilities for automated requisitioning, procurement, and associated data storage activities are essential.

Air Training Command (ATC) requires the availability of extensive classroom, library and study facilities. Secure training facilities are required when training is being conducted on classified systems.

The locations of flying activities within areas of favorable flying weather and adjacent to unrestricted areas of airspace is essential for undergraduate pilot training (UPT) bases. Three parallel runways are highly desirable for main training bases with auxiliary fields within a short distance from the main base.

- Coming Force Structure Actions and Their Impact on Base Structure

There are no major force structure changes.

IV. BASE OPERATING COSTS FOR FY 1989

A summary of the estimated FY 1989 cost (\$ million) for Air Force Base Operating Support follows.

Base operating costs identified in this section are not limited to those major and minor installations described in Section VI, but include all Air Force property listed in the real property inventory.

Base operating costs as defined here include military family housing and military construction costs as well as the recurring operating costs such as utilities, facilities maintenance and other support activities. Users are cautioned that military family housing, military construction, and recurring operating costs vary among bases. Therefore, base operating costs, defined as these are, would not be suitable for comparisons among bases.

Additional details related to Air Force management of base operating support functions can be obtained from the Air Force study entitled, Air Force Management of Base Operating Support Functions. This study describes the relationship of Air Force base operating support functions to the Air Force combat capability and outlines how the Air Force is organized to conduct base operating support activities.

V. ACTIONS TO ENHANCE EFFICIENCIES AND REDUCE COSTS

The Air Force continues an active program to promote management efficiencies and to consolidate and eliminate missions and activities in order to reduce base operating costs.

1. The Air Force has signed a joint procurement agreement with the Federal Aviation Administration (FAA) to purchase three-dimensional radar replacements for Joint Surveillance System (JSS) sites. This 3-D Radar Replacement Program will enable the Air Force to transfer ownership of 8 military-only JSS sites to the FAA resulting in savings of 1017 manpower spaces and a cost avoidance of \$35 million per year. While waiting

for implementation of this program, the Air Force is pursuing other cost-savings measures. A minimally-attended, contract-maintained FPS-117 radar was installed at Gibbsboro AFS, NJ in January 1985 which allowed reallocation of 85 manpower spaces. Additionally, the JSS site at North Truro AFS, MA was transferred to the FAA in July 1985 resulting in another 85 manpower spaces available for reallocation. The Air Force has requested that the FAA investigate the feasibility of assuming ownership of additional military radar sites prior to installation of the 3-D Radar Replacement. An agreement has already been signed for the take over of three sites.

2. The Air Force continues to participate in the Department of Defense Model Installation Program (MIP). The goal is to ensure excellent places for our people to live and work. MIP provides installation commanders a vehicle to identify and remove regulatory obstacles that block pursuit of better ways of providing base-level support. Since it began in January 1984, the MIP has generated more than 18,000 initiatives. HQ USAF has approved eighty-six percent for testing and over 1400 issues for Air Force-wide implementation.

The Air Force expanded the Model Installation Program to all Air Force installations effective 1 Jan 87. As an adjunct test, the Air Force began testing "unified installation budget" concept at two installations on 1 Oct 86. The purpose of the test is to determine if installation commanders can use resources more wisely if they are given greater spending flexibility.

3. The Air Force has been an active participant in the Defense Regional Interservice Support (DRIS) program. This program is designed to promote interservice, interdepartmental and interagency support within the Department of Defense and among participating Executive Agencies. It also seeks to improve effectiveness and economy in operations by eliminating duplicate support services without jeopardizing mission accomplishment. The Air Force has 15 active Joint Interservice Resource Study Groups (JIRSG) world-wide which conduct studies of support functions within their geographical areas to determine if interservice support can be expanded, duplicate functions eliminated, or support services improved. The JIRSGs are also tasked by OSD to interface with A-76 Commercial Activities managers to share information and good ideas so as to provide base services more effectively and at less cost to DOD.

4. The Air Force continues to survey its land holdings under the guidelines of Executive Order 12512 to identify unused, underused or not optimally used property which can be declared excess to Air Force requirements. From previous years' surveys, 620 acres have been identified as excess. However, the Air Force must comply with environmental documentation

requirements prior to formal excessing to the General Services Administration. In FY 1987, ten properties were surveyed; no new land was identified as excess. Sixteen more surveys are scheduled for FY 1988.

AIR FORCE BASE OPERATING SUPPORT COSTS (\$ MILLIONS)

MAJOR DEFENSE PROGRAMS	UNITED STATES	U.S. TERRITORIES AND POSSESSIONS	FOREIGN AREAS	DOD TOTAL
STRATEGIC FORCES	2125.4	32.3	30.1	2187.8
GENERAL PURPOSE FORCES	1284.2	0.0	2096.3	3380.5
INTELLIGENCE AND COMMUNICATION	56.2	0.0	69.2	125.4
AIRLIFT/SEALIFT	934.4	0.0	55.8	990.2
GUARD AND RESERVE FORCES	469.6	0.5	0.0	470.1
RESEARCH AND DEVELOPMENT	223.7	0.0	0.0	223.7
CENTRAL SUPPLY AND MAINTENANCE	1107.5	1.7	45.0	1154.2
TRAINING, MEDICAL, OTHER PERSONNEL	938.3	2.1	32.0	972.4
ADMINISTRATION AND ASSOCIATED ACTIVITIES	86.1	0.0	0.0	86.1
SUPPORT TO OTHER NATIONS	0.0	0.0	0.0	0.0
SUBTOTAL	7225.4	36.6	2328.4	9590.4
CONSTRUCTION	1014.5	4.3	281.8	1300.6
FAMILY HOUSING OPERATION AND MAINTENANCE	536.4	19.5	366.9	922.8
TOTAL	8776.3	60.4	2977.1	11813.8

SECTION VI

AIR FORCE BASE STRUCTURE

SUMMARY OF NUMBER OF AIR FORCE INSTALLATIONS

Mission Category (IDFPC)	Fifty States	U.S. Territories and Possessions	Foreign Area	Total
STRATEGIC (101)	26	1	2	29
INTELLIGENCE AND COMMUNICATIONS (103)	2	0	1	3
GUARD AND RESERVE (105)	8	0	0	8
RESEARCH AND DEVELOPMENT (106)	2	0	0	2
GENERAL PURPOSE (202)	28	0	41	69
COMMUNICATIONS (203)	2	0	2	4
AIRLIFT/SEALIFT FORCES (204)	11	0	3	14
GUARD AND RESERVE (205)	86	1	0	87
INTELLIGENCE AND COMMUNICATIONS (303)	1	0	0	1
RESEARCH AND DEVELOPMENT (306)	6	0	0	6
CENTRAL SUPPLY AND MAINTENANCE (EASTERN TEST RANGE) (307)	2	0	0	2
STRATEGIC (401)	2	0	0	2
GENERAL PURPOSE (402)	1	0	3	4
CENTRAL SUPPLY AND MAINTENANCE (507)	9	0	0	9
TRAINING, MEDICAL AND OTHER PERSONNEL (508)	18	0	0	18
ADMINISTRATION AND ASSOCIATED ACTIVITIES (509)	1	0	0	1
TOTAL AIR FORCE	205	2	52	259

DEPARTMENT OF DEFENSE
AIR FORCE BASE STRUCTURE
United States
FY 1989

Authorized Manpower
Full-Time Permanently
Assigned

State	Name of Installation	City	IDPPC Code	Mil.	Civ.	Tot.	Total Pers.	Total Acgrege	Major Unit-Activity-Function
ALABAMA									
	ABSTON AFS	ABSTON	203	2	0	0	0	31	COMMUNICATIONS
	BIRMINGHAM MAP AFS	BIRMINGHAM	205	2	4	343	351	86	117 TAC RECON WING (ANG)
	HALL AFS	DOTHAN	203	2	4	321	329	18	COMMUNICATIONS (ANG)
	DANIELLY FIELD AFS	MONTGOMERY	205	2	1	45	48	42	187 TAC FIGHTER GROUP (ANG)
	GUNTER AFB	MONTGOMERY	508	1	1479	984	2463	368	AF DATA SYSTEMS DESIGN CENTER
	MAXWELL AFB	MONTGOMERY	508	1	2454	1627	4081	3541	AIR UNIVERSITY
ALASKA									
	WHEATLAND AFB	ALEUTIANS	303	1	615	28	643	735	5073 AIR BASE GROUP
	ANCHORAGE TAP AFS	ANCHORAGE	205	2	5	5	5	129	176 COMPOSITE GROUP (ANG)
	ELMENDORF AFB	ANCHORAGE	202	1	6449	1430	7879	13166	21 TAC FIGHTER WING
	CLEAF AFS	ANDERSON	101	2	116	425	541	34558	AIRFIELD, MISSILE WARNING
	GALENA AIRPORT AFS	GALENA	202	2	313	15	328	182	FORWARD FIGHTER BASE
	KING SALMON AIRPORT AFS	NAKNEK	202	2	275	19	294	162	FORWARD FIGHTER BASE
	EIELSON AFB	NORTH POLE	202	1	3544	478	4022	54392	343 TAC FIGHTER WING

DEPARTMENT OF DEFENSE
AIR FORCE BASE STRUCTURE
United States
FY 1989

Authorized Manpower
Full-Time Permanently
Assigned

State	Name of Installation	City	IDPPC Code	Cat	Mil.	Civ.	Tot.	Total Pers.	Total Acreage	Major Unit-Activity-Function
ARIZONA										
	WILLIAMS AFB	CHANDLER	508	1	2558	678	3236	3857	4762	82 FLYING TRAINING WING
	GILA BEND AFS	GILA BEND	202	2	177	87	264	308	2674411	AUXILIARY TRAINING FIELD
	LUKE AFB	LITCHFIELD PARK	202	1	5677	1245	6922	7295	5396	832 AIR DIVISION
	PHOENIX SKY HARBOR IAP AGS	PHOENIX	105	2	2	301	303	306	51	161 AIR REFUELING GROUP (ANG)
	DAVIS MONTHAN AFB	TUCSON	202	1	5272	1370	6642	6914	11651	836 AIR DIVISION
	TUCSON IAP AGS	TUCSON	205	2	20	779	799	804	50	162 TAC FIGHTER GROUP (ANG)
ARKANSAS										
	IRA EAKER (BLYTHEVILLE) AFB	BLYTHEVILLE	101	1	2944	318	3262	3397	3915	97 BOMBARDMENT WING
	FORT SMITH MAP AGS	FORT SMITH	205	2	2	279	281	284	98	188 TAC FIGHTER GROUP (ANG)
	LITTLE ROCK AFB	JACKSONVILLE	204	1	4927	947	5874	6549	11548	314 TACTICAL AIRLIFT WING
CALIFORNIA										
	GEORGE AFB	ADELANTO	202	1	5559	549	6108	6308	61663	35 TACTICAL FIGHTER WING
	LOS ANGELES AFB	EL SEGUNDO	306	1	2040	1546	3586	4152	194	SPACE DIVISION
	TRAVIS AFB	FAIRFIELD	204	1	8400	2222	10622	11206	7621	60 MILITARY AIRLIFT WING
	FRESNO AIR TERMINAL AGS	FRESNO	205	2	3	382	385	388	139	144 FIGHTER INTERCEPT WING (ANG)
	VANDENBERG AFB	LOMPOC	106	1	3705	1427	5132	8453	98947	SPACE & MISSILE TEST CENTER
	BEALE AFB	MARYSVILLE	101	1	4228	463	4691	5020	22944	9 STRATEGIC RECON WING
	CASTLE AFB	MERCED	101	1	5304	386	5690	5973	3257	93 BOMBARDMENT WING

DEPARTMENT OF DEFENSE
AIR FORCE BASE STRUCTURE
United States
FY 1989

State	Name of Installation	City	IDPPC Code	Cat	Authorized Manpower Full-Time Permanently Assigned		Total Pers.	Total Acreege	Major Unit-Activity-Function
					Mil.	Civ.			
	NORTH HIGHLANDS AFB	NORTH HIGHLANDS	205	2	4	39	43	43	9 COMMUNICATIONS (ANG)
	ONTARIO IAP AFB	ONTARIO	205	2	1	23	24	110	51 COMMUNICATIONS (ANG)
	WETHER AFB	RANCHO CORDOVA	508	1	3607	1105	4712	5071	5845 323 FLYING TRAINING WING
	EDWARDS AFB	ROSAMOND	306	1	4485	2480	6965	8803	307970 AF FLIGHT TEST CENTER
	MCCLELLIAN AFB	SACRAMENTO	507	1	3934	13340	17274	19557	3845 AIR LOGISTICS CENTER
	NORTON AFB	SAN BERNARDINO	204	1	5908	2815	8723	9267	2339 63 MILITARY AIRLIFT WING
	MARCH AFB	SUNNYMEAD	101	1	4003	1337	5340	5796	7379 22 AIR REFUELING WING
	ONIZUKA AFB	SUNNYVALE	306	1	824	243	1067	1488	26 R&D ACTIVITIES
	VAN NUYS AIRPORT AFB	VAN NUYS	205	2	2	389	391	396	88 146 TAC AIRLIFT WING (ANG)
CO									
UT									
	COLORADO								
	RUCKLEY AFB	AURORA	205	1	647	724	1371	1488	7113 140 TAC FIGHTER WING (ANG)
	CHEYENNE MOUNTAIN COMPLEX	COLORADO SPGS	101	1	1543	349	1892	2256	519 COMMUNICATIONS, CMD & CONTROL
	PETERSON AFB	COLORADO SPGS	401	1	1694	1041	2735	3153	1156 1 SPACE WING
	US AIR FORCE ACADEMY	COLORADO SPGS	508	1	2544	1830	4374	5026	19268 OFFICER ACQUISITION TRAINING
	LOWRY AFB	DENVER	508	1	3996	4222	8218	8719	5527 TECHNICAL TRAINING CENTER
	FALCON AFB	ELLCOTT	401	1	1464	276	1740	1833	640 2 SPACE WING, CSOC

DEPARTMENT OF DEFENSE
AIR FORCE BASE STRUCTURE
United States
FY 1989

Authorized Manpower
Full-Time Permanently
Assigned

State	Name of Installation	City	IDPPC Code	Mil.	Civ.	Tot.	Total Pers.	Total Acreage	Major Unit-Activity-Function
CONNECTICUT									
	ORANGE AFS	NEW HAVEN	205	2	1	44	45	29	AIRCRAFT CONTROL/WARNING (ANG)
	BRADLEY IAP AFS	WINDSOR LOCKS	205	2	2	293	298	160	103 TAC FIGHTER GROUP (ANG)
DELAWARE									
	DOVER AFB	DOVER	204	1	5032	1412	6444	3734	436 MILITARY AIRLIFT WING
	GREATER WILMINGTON APT AFS	NEWPORT	205	2	1	245	249	37	166 TAC AIRLIFT GROUP (ANG)
DIST OF COLUMBIA									
	BOLLING AFB	WASHINGTON	509	1	3328	1151	4479	4821	611 AIR FORCE DISTRICT WASH
FLORIDA									
	AVON PARK AFS	AVON PARK	202	2	228	80	308	106210	RANGE/AUXILIARY AIRFIELD
	JACKSONVILLE IAP AFS	CALLAHAN	205	2	2	364	366	369	332 125 FIGHTER INTERCEPT GP (ANG)
	PATRICK AFB	COCOA BEACH	307	1	3656	1299	4955	8722	AF EASTERN TEST RANGE
	DUKE FIELD	CRESTVIEW	202	2	336	346	682	686	1348 919 SPECIAL OPS GROUP (AFR)
	HOMESTEAD AFB	HOMESTEAD	202	1	4617	1015	5632	5803	3382 31 TACTICAL FIGHTER WING
	HURLBURT FIELD	MARY ESTHER	202	1	5808	442	6250	6503	6633 23RD AIR FORCE
	TYNDALL AFB	PANAMA CITY	202	1	4469	1057	5526	5958	29000 AIR DEFENSE WEAPONS CENTER
	CAPE CANAVERAL AFS	PORT CANAVERAL	307	2	390	268	658	3079	15435 EASTERN TEST RANGE
	MACDILL AFB	TAMPA	202	1	6350	952	7302	7446	6767 66 TACTICAL TRAINING WING

DEPARTMENT OF DEFENSE
 AIR FORCE BASE STRUCTURE
 United States
 FY 1989

Authorized Manpower
 Full-Time Permanently
 Assigned

State	Name of Installation	City	IDPPC Code	Mil.	Civ.	Tot.	Total Pers.	Total Acreege	Major Unit-Activity-Function
ARIZONA	EGLIN AFB	VALPARISO	306 1	9042	3780	12822	14655	455817	ARMAMENT DEVELOPMENT&TEST CTR
GEORGIA									
	WCCOLLUM AGS	KENNESAW	205 2	1	46	47	47	13	AIRCRAFT CONTROL/WARNING (ANG)
	DOBBS ARB	MARIETTA	205 1	143	1166	1309	1411	1901	94 TAC AIRLIFT WG (AFR) + ANG
	SAVANNAH IAP AGS	SAVANNAH	205 2	2	54	56	59	232	165 TAC AIRLIFT GROUP (ANG)
	MOODY AFB	VALDOSTA	202 1	3113	450	3563	3736	6052	347 TACTICAL FIGHTER WING
	ROBINS AFB	WARNER ROBINS	507 1	4088	15386	19474	26259	8790	AIR LOGISTICS CENTER
HAWAII									
	HICKAM AFB	HONOLULU(APOSF)	402 1	4908	2197	7105	7323	7818	HQ PACAF
	KOKEE AFS	KEKAHA	106 2	1	65	66	67	11	SPACE TRACKING
	WHEELER AFB	WAHIAWA (APOSF)	202 1	1116	265	1381	1441	1391	22 TACTICAL AIR SUPPORT SOD
IDAH0									
	BOISE AIR TERMINAL ACS	BOISE	205 2	•	493	493	497	1994	24 TAC RECON GROUF (ANG)
	MOUNTAIN HOME AFB	MOUNTAIN HOME	202 1	3793	528	4321	4559	118579	366 TACTICAL FIGHTER WING

DEPARTMENT OF DEFENSE
AIR FORCE BASE STRUCTURE
United States
FY 1989

Authorized Manpower
Full-time Permanently
Assigned

State	Name of Installation	City	(DPPC Code	Mil.	Civ.	Tot.	Total Pers.	Total Acreege	Major Unit-Activity-Function
ILLINOIS									
	GREATER PEORIA APT AGS	BARTONVILLE	205	2	1	248	249	252	137 182 TAC AIR SUPPORT GROUP (ANG)
	SCOTT AFB	BELLEVILLE	204	1	7337	3173	10510	15676	3170 HO MAC
	O'HARE IAP ARS	CHICAGO	205	2	*	374	374	407	391 928 TAC AIRLIFT GROUP (AFR)
	CHANUTE AFB	RANTOUL	508	1	2665	1140	3805	4475	2174 TECHNICAL TRAINING CENTER
	CAPITAL MAP AGS	SPRINGFIELD	205	2	2	351	353	357	91 183 TAC FIGHTER GROUP (ANG)
INDIANA									
	GRISSOM AFB	BUNKER HILL	101	1	2467	747	3214	3374	3180 305 AIR REFUELING WING
	CO FT WAYNE MAP AGS	FORT WAYNE	205	2	4	364	368	372	87 122 TAC FIGHTER WING (ANG)
	HULMAN REGIONAL APT AGS	TERRE HAUTE	205	2	2	306	308	311	279 181 TAC FIGHTER GROUP (ANG)
IOWA									
	DES MOINES IAP AGS	DES MOINES	205	2	2	328	330	334	113 132 TAC FIGHTER WING (ANG)
	STOUX CITY MAP AGS	SERGEANT BLUFF	205	2	1	281	282	285	90 185 TAC FIGHTER GROUP (ANG)
KANSAS									
	FORBES FIELD AGS	PAULINE	105	2	2	373	375	378	200 190 AIR REFUELING GROUP (ANG)
	MCCONNELL AFB	WICHITA	101	1	3193	1274	4467	4628	41555 384 AIR REFUELING WING

DEPARTMENT OF DEFENSE
AIR FORCE BASE STRUCTURE
United States
FY 1989

Authorized Manpower
Full-Time Permanently
Assigned

State	Name of Installation	City	IDPPC Code	Cat	Mil.	Civ.	Tot.	Total Pers.	Total Acreage	Major Unit-Activity-Function
KENTUCKY	STANDIFORD FIELD AFS	LOUISVILLE	205	2	3	327	330	334	65	123 TAC RECON WING (ANG)
LOUISIANA	ENGLAND AFB	ALEXANDRIA	202	1	3145	444	3589	3700	28614	23 TACTICAL FIGHTER WING
	BARKSDALE AFB	BOSSIER CITY	101	1	6209	1184	7393	7856	22382	2 BOMBARDMENT WING
	HAMMOND AFS	HAMMOND	205	2	.	25	25	25	14	COMMUNICATIONS (ANG)
MAINE	BANGOR AFS	BANGOR	105	2	43	401	444	447	301	101 AIR REFUELING WING (ANG)
	COLLING AFB	LIMESTONE	101	1	3510	511	4021	4174	11116	42 BOMBARDMENT WING
	SOUTH PORTLAND AFS	SOUTH PORTLAND	205	2	2	37	39	40	12	COMMUNICATIONS (ANG)
MARYLAND	MARTIN STATE AFS	BALTIMORE	205	2	2	464	466	471	78	135 TAG + 175 TFG (ANG)
	ANDREWS AFB	CAMP SPRINGS	204	1	7453	3206	10659	11534	7507	89 MILITARY AIRLIFT WING
MASSACHUSETTS	HANSCOM AFB	BEDFORD	306	1	2199	2775	4974	5257	1075	ELECTRONICS SYSTEMS DIV (AFSC)
	CAPE COD AFS	BOURNE	103	2	103	10	113	202	101	PAVE PAWS
	WESTOVER AFB	CHICOPEE	205	1	11	915	926	993	2850	439 AIRLIFT WING (AFR)
	OTTIS AFB	FALMOUTH	205	1	3	698	701	743	3860	102 FIGHTER INTERCEPT WING (ANG)

DEPARTMENT OF DEFENSE
AIR FORCE BASE STRUCTURE
United States
FY 1989

State	Name of Installation	City	IDPPC Code	Authorized Manpower Full-Time Permanently Assigned		Total Pers.	Total Acreege	Major Unit-Activity-Function				
				Mil.	Civ.							
WELLESLEY AFS	WELLESLEY AFS	WELLESLEY	205 2	.	39	39	7	COMMUNICATIONS (ANG)				
								291	293	296	134	194 TAC FIGHTER GROUP (ANG)
								2	64	65	8	COMMUNICATIONS (ANG)
MICHIGAN	W K KELLOGG REGIONAL APT AGS	BATTLE CREEK	205 2	1	240	241	81	110 TAC AIR SUPPORT GROUP (ANG)				
								3504	3896	4047	5317	410 BOMBARDMENT WING
								81	1478	1578	3701	127 TAC FIGHTER WING (ANG) + AFR
								3243	3600	3747	5223	379 BOMBARDMENT WING
MINNESOTA	DULUTH AFS	DULUTH	205 2	1	398	399	735	148 FIGHTER INTERCEPT GP (ANG)				
								25	701	736	300	133 TAC AIRLIFT WING (ANG) + AFR
								5945	8185	8935	3546	TECHNICAL TRAINING CENTER
MISSISSIPPI	KEESLER AFB	BILOXI	508 1	2366	514	2880	5467	14 FLYING TRAINING WING				
								1	289	294	84	172 MILITARY AIRLIFT GROUP (ANG)
								1	104	105	206	TRAINING SITE (ANG)
								4	334	342	64	186 TAC RECON GROUP (ANG)

DEPARTMENT OF DEFENSE
AIR FORCE BASE STRUCTURE
United States
FY 1989

Authorized Manpower
Full-Time Permanently
Assigned

State	Name of Installation	City	IDPPC Code	Cat	Mil	Civ	Tot	Total Pers.	Total Acreage	Major Unit-Activity-Function
MISSOURI:										
	RICHARDS GEBRARD AFS	BELTON	205	2	6	347	353	649	2629	442 TACTICAL FIGHTER WING (AFR)
	ROSECRANS MEMORIAL APT AGS	ELWOOD	205	2	1	278	279	281	295	139 TAC AIRLIFT GROUP (ANG)
	WHITEMAN AFB	KNOB HUSTER	101	1	3039	450	3489	3623	24928	351 STRATEGIC MISSILE WING
	LAMPERT ST LOUIS IAP AGS	ST ANN	205	2	31	408	439	444	354	131 TAC FIGHTER WING (ANG)
	DMA AFROSPACE CTR	ST LOUIS	597	2	50	3266	3316	3338	64	PRODUCTION-AEROSPACE MAPS(DMA)
	JEFFERSON BARRACKS AGS	ST LOUIS	205	2	2	57	59	60	135	AIRCRAFT CONTROL/WARNING (ANG)
MONTANA:										
	GREAT FALLS IAP AGS	GREAT FALLS	205	2	2	368	370	374	139	120 FIGHTER INTERCEPT GP (ANG)
	WAINSWORTH AFB	GREAT FALLS	101	1	4170	500	4670	4854	29118	341 STRATEGIC MISSILE WING
NEBRASKA:										
	OFFUTT AFB	BELLEVUE	101	1	12705	1534	14539	15650	3884	55 STRATEGIC RECON WING, HO SAC
	LINCOLN MUNICIPAL AIRPORT AGS	LINCOLN	205	2	1	333	334	338	175	155 TAC RECON GROUP (ANG)
NEVADA:										
	INDIAN SPRINGS AFS	INDIAN SPRINGS	202	2	12	46	57	64	2300	AUXILIARY FIELD/RANGE
	NELLIS AFB	LAS VEGAS	202	1	9023	1000	10023	11051	3124302	USAF TAC FIGHTER WEAPONS CNTR
	RENO CANNON IAP AGS	RENO	205	2	2	0	2	6	123	152 TAC RECON GROUP (ANG)

DEPARTMENT OF DEFENSE
AIR FORCE BASE STRUCTURE
United States
FY 1989

Authorized Manpower
Full-time Permanently
Assigned

State	Name of Installation	City	IOPPC Code	Mil	Civ.	Tot.	Total Pers.	Total Acage	Major Unit-Activity-Function
NEW HAMPSHIRE									
	PEASE AFB	NEWINGTON	101 1	7241	726	7967	8218	4272	509 BOMBARDMENT WING
NEW JERSEY									
	ATLANTIC CITY MAP AGS	PLEASANTVILLE	205 2	1	346	347	350	286	177 FIGHTER INTERCEPT GP (ANG)
	MCCUIRE AFB	WRIGHTSTOWN	204 1	5281	2082	7363	8006	6758	438 MILITARY AIRLIFT WING
NEW MEXICO									
	HOLLOWAN AFB	ALAMOGORDO	202 1	5456	1044	6500	8029	55273	49 TACTICAL FIGHTER WING
	KIRTLAND AFB	ALBUQUERQUE	204 1	5244	3351	8595	9413	43881	1550 CBT CREW TRAINING WING
	CANNON AFB	CLOVIS	202 1	3693	432	4125	4317	26658	27 TACTICAL FIGHTER WING
NEW YORK									
	STEWART IAP AGS	NEW WINDSOR	205 2	1	563	564	568	328	105 MILITARY AIRLIFT GROUP (ANG)
	NIAGARA FALLS IAP AFS	NIAGARA FALLS	205 2	4	746	750	762	985	914 TAC AIRLIFT GROUP (AFR)
	PLATTSBURGH AFB	PLATTSBURGH	101 1	3855	410	4265	4366	4880	300 BOMBARDMENT WING
	GRIFFISS AFB	ROME	101 1	3932	2736	6668	6837	5444	416 BOMBARDMENT WING
	ROSLYN AGS	ROSLYN	205 2	2	46	48	49	50	COMMUNICATIONS (ANG)
	SCHENECTADY AIRPORT AGS	SCHENECTADY	205 2	1	243	244	247	106	109 TAC AIRLIFT GROUP (ANG)
	HANLOCK FIELD AGS	SYRACUSE	202 2	5	409	414	418	718	174 TAC FIGHTER WING (ANG)
	SUFFOLK COUNTY AIRPORT AGS	WESTHAMPTON BCH	205 2	0	241	241	243	70	106 RESCUE/RECOVERY GROUP (ANG)

DEPARTMENT OF DEFENSE
AIR FORCE BASE STRUCTURE
United States
FY 1989

Authorized Manpower
Full-Time Permanently
Assigned

State	Name of Installation	City	IDPPC Code	Mil	Civ	Total	Total Pers	Total Acreage	Major Unit-Activity-Function
NORTH CAROLINA									
	RADIN AFS	RADIN	205 2	1	23	24	24	21	COMMUNICATIONS (AMG)
	CHARLOTTE/DOUGLAS IAP AGS	CHARLOTTE	205 2	1	321	322	326	69	145 TAC AIRLIFT GROUP (AMG)
	POPE AFB	FAYETTEVILLE	204 1	8784	402	9166	9434	1858	317 TACTICAL AIRLIFT WING
	SEYMOUR JOHNSON AFB	GOLDSBORO	202 1	4567	617	5184	5505	50730	4 TACTICAL FIGHTER WING
NORTH DAKOTA									
	GRAND FORKS AFB	EMERADO	101 1	5271	489	5769	5993	23100	321 STRAT MSL WG & 319 BOMB WG
	HECTOR FIELD AGS	FARGO	205 7	6	376	382	386	133	119 FIGHTER INTERCEPT GP (AMG)
	MINOT AFB	MINOT	101 1	5191	501	5692	5899	22731	91 STRAT MSL WG & 5 BOMB WG
	CAVALIER AFS	MOUNTAIN	103 2	26	8	34	256	650	ELECTRONICS STATION
OHIO									
	GENTLE AFS	DAYTON	507 2	32	2515	2547	2547	165	DEF ELECTRONICS SUPPLY CTR (DLA)
	WRIGHT-PATTERSON AFB	FAIRBORN	507 1	4376	7705	12081	14409	8312	LOGISTICS COMMAND HQ
	NEWARK AFB	HEATH	507 1	48	2508	2556	2629	69	LOGISTICS
	PICKERBACKER AFB	LOCKBOURNE	105 1	9	5927	5936	5959	2327	160 AIR REFUELING GP (AMG) + AFB
	MAHNSFIELD LAHM MAP AGS	MAHNSFIELD	205 2	247	*	247	250	210	179 TAC AIRLIFT GROUP (AMG)
	CAMP PEPPY AGS	PORT CLINTON	205 2	*	35	35	35	32	COMMUNICATIONS (AMG)
	SPRINGFIELD BECKLEY MAP AGS	SPRINGFIELD	205 2	6	324	330	334	113	170 TAC FIGHTER GROUP (AMG)
	TOLEDO EXPRESS APT AGS	SWANTON	205 2	2	281	283	286	79	180 TAC FIGHTER GROUP (AMG)

DEPARTMENT OF DEFENSE
AIR FORCE BASE STRUCTURE
United States
FY 1989

State	Name of Installation	City	IDPPC Code	Cat	Mil.	Civ.	Tot.	Total Pers.	Total Acreege	Major Unit-Activity-Function
	YOUNGSTOWN MAP ARS	VIENNA	205 2	2	367	359	377	395	910	TAC AIRLIFT GROUP (AFR)
OKLAHOMA										
	ALTUS AFB	ALTUS	508 1	3663	595	4258	4568	4405	443	MILITARY AIRLIFT TNG WG
	VANCE AFB	ENID	508 1	810	118	928	2931	4259	71	FLYING TRAINING WING
	TINKER AFB	MIDWEST CITY	507 1	7279	18044	25323	30309	4766		AIR LOGISTICS CENTER
	WILL ROGERS WORLD APT AGS	OKLAHOMA CITY	205 2	2	261	263	266	71	137	TAC AIRLIFT WING (ANG)
	TULSA IAP AGS	TULSA	205 2	3	292	295	298	78	138	TAC FIGHTER GROUP (ANG)
OREGON										
	KINGSLEY FIELD AGS	KLAMATH FALLS	205 2	1	371	372	372	121	114	FIGHTER TNG SQ (ANG)
	PORTLAND IAP AGS	PORTLAND	205 2	5	708	713	720	394	142	FTR INTERCEPT GP (ANG)+AFR
PENNSYLVANIA										
	GREATER PITTSBURGH IAP AGS	CORAOPOLIS	105 2	23	869	892	935	596	171	AIR REFUELING WG (ANG) + AFR
	WILLOW GROVE ARS	HATBORO	205 2		257	257	279	162	913	TAC AIRLIFT GROUP (AFR)
	HARRISBURG OLMSTED IAP AGS	MIDDLETOWN	205 2	1	303	304	308	72	193	SPECIAL OPS GROUP (ANG)

DEPARTMENT OF DEFENSE
AIR FORCE BASE STRUCTURE
United States
FY 1989

Authorized Manpower
Full-Time Permanently
Assigned

State	Name of Installation	City	IDPPC Code	Mil.	Civ.	Tot	Total Pers.	Total Acreage	Major Unit-Activity-Function
RHODE ISLAND									
	COVENTRY AFS	COVENTRY	205	0	41	41	41		17 COMMUNICATIONS (ANG)
	QUONSET STATE AIRPORT AFS	N KINGSTON	205	1	271	272	284		60 143 TAC AIRLIFT GROUP (ANG)
	NORTH SMITHFIELD AFS	SLATERSVILLE	205	0	45	45	45		10 AIRCRAFT CONTROL/WARNING (ANG)
SOUTH CAROLINA									
	CHARLESTON AFB	CHARLESTON	204	4293	1252	5545	5873		6232 437 MILITARY AIRLIFT WING
	MCENTIRE AFB	EASTOVER	205	5	347	352	357		2481 169 TAC FIGHTER GROUP (ANG)
	MYRTLE BEACH AFB	MYRTLE BEACH	202	3256	451	3707	3780		3998 354 TACTICAL FIGHTER WING
	SHAW AFB	SUMTER	202	6047	571	6618	6801		11450 363 TACTICAL FIGHTER WING
SOUTH DAKOTA									
	FLYSWORTH AFB	BOX ELDER	101	6640	593	7233	7445		25494 44 STRAT MSL WC & 28 BOMB WG
	FOE FOSS FIELD AFS	SIOUX FALLS	205	2	277	279	282		145 114 TAC FIGHTER GROUP (ANG)
TENNESSEE									
	MCGHEE TYSON AIRPORT AFS	ALCOA	105	42	343	385	388		271 134 AIR REFUELING GROUP (ANG)
	ARNOLD AFB	MANCHESTER	306	158	207	365	1909		39081 R&D ACTIVITY
	NASHVILLE METROPOLITAN APT AFS	NASHVILLE	205	1	375	376	381		85 118 TAC AIRLIFT WING (ANG)
	MEMPHIS IAP AFS	OAKVILLE	205	1	260	261	264		85 164 TAC AIRLIFT GROUP (ANG)

DEPARTMENT OF DEFENSE
 AIR FORCE BASE STRUCTURE
 United States
 FY 1989

Red Manpower
 Permanently
 Assigned

State	Name of Station	City	IDPPC Code	Mil.	Civ.	Tot.	Total Pers.	Total Acreage	Major Unit-Activity-Function
TEXAS									
	BYESS AFB	ABILENE	101 1	5546	431	5977	6280	6434	96 BOMBARDMENT WING
	BERGSTROM AFB	AUSTIN	202 1	4533	983	5516	5725	3972	67 TACTICAL RECON WING
	LAUGHLIN AFB	DEL RIO	508 1	2333	542	2875	3136	5536	47 FLYING TRAINING WING
	EL DORADO AFS	EL DORADO	191 2	73	33	106	157	118	PAVE PAWS
	CARSWELL AFB	FORT WORTH	101 1	4802	918	5720	5987	3426	7 BOMBARDMENT WING
	GARLAND AGS	GARLAND	205 2	4	33	37	37	6	COMMUNICATIONS (ANG)
	ELLINGTON FIELD AGS	HOUSTON	205 2	7	405	412	415	215	147 FIGHTER INTERCEPT GP (ANG)
	LA PORTE AGS	LA PORTE	205 2	1	16	17	17	12	ENGINEERING (ANG)
	REESE AFB	LUBBOCK	508 1	2175	583	2758	3052	3953	64 FLYING TRAINING WING
	GOODFELLOW AFB	SAN ANGELO	508 1	2411	383	2794	2794	1136	TECHNICAL TRAINING
	BROOKS AFB	SAN ANTONIO	508 1	1518	1037	2555	3003	1310	AEROSPACE MEDICAL DIVISION
	KELLY AFB	SAN ANTONIO	507 1	1947	17258	19205	24311	4706	AIR LOGISTICS CENTER
	LACKLAND AFB	SAN ANTONIO	508 1	6550	1972	8522	10002	6766	USAF BASIC MILITARY SCHOOL
	RANDOLPH AFB	UNIVERSAL CITY	508 1	5091	2383	7474	7817	3953	12 FLYING TRAINING WING
	SHEPPARD AFB	WICHITA FALLS	508 1	3611	1330	4941	6991	5397	TECHNICAL TRAINING CENTER

DEPARTMENT OF DEFENSE
AIR FORCE BASE STRUCTURE
United States
FY 1989

Authorized Manpower
Full-Time Permanently
Assigned

State	Name of Installation	City	IDPPC Code	Cat	Mil.	Civ.	Tot.	Total Pers.	Total Acreage	Major Unit-Activity-Function
UTAH										
	HILL AFB	CLEARFIELD	507	1	4941	14329	19270	25112	374574	AIR LOGISTICS CENTER
	SALT LAKE CITY IAP AGS	SALT LAKE CITY	105	2	4	353	357	361	102	151 AIR REFUELING GROUP (ANG)
VFRMONT										
	BURLINGTON IAP AGS	SO. BURLINGTON	205	2	2	365	367	370	241	158 TAC FIGHTER GROUP (ANG)
VIRGINIA										
	LANGLEY AFB	HAMPTON	202	1	9294	1770	11064	11064	3440	1 TACTICAL FIGHTER WG & HQ TAC
	RICHMOND IAP (BYRD FIELD) AGS	SANDSTON	205	2	1	304	305	305	143	192 TAC FIGHTER GROUP (ANG)
WASHINGTON										
	FAIRCHILD AFB	AIRWAY HEIGHTS	101	1	4329	820	5149	5328	5955	92 BOMBARDMENT WING
	FOUR LAKES AGS	CHENEY	205	2	1	40	41	41	156	AIRCRAFT CONTROL/WARNING (ANG)
	SPOKANE IAP AGS	SPOKANE	205	2	3	38	41	41	79	COMMUNICATIONS (ANG)
	MCCORD AFB	TACOMA	204	1	4841	1445	6286	6541	5786	62 MILITARY AIRLIFT WING
WEST VIRGINIA										
	YEAGER AIRPORT AGS	CHARLESTON	205	2	1	242	243	246	218	130 TAC AIRLIFT GROUP (ANG)
	SHEPHERD FIELD AGS (EHRVA)	MARTINSBURG	205	2	•	302	302	306	349	167 TAC AIRLIFT GROUP (ANG)

DEPARTMENT OF DEFENSE
 AIR FORCE BASE STRUCTURE
 United States
 FY 1989

Authorized Manpower
 Full-Time Permanently
 Assigned

State	Name of Installation	City	IDPPC Code	Mil.	Civ.	Tot.	Total Pers.	Total Acreage	Major Unit-Activity-Function
WISCONSIN									
	TRUAX FIELD AGS	MADISON	205 2	4	321	325	328	150	128 TAC FIGHTER WING (ANG)
	GEN BILLY MITCHELL FIELD AGS	MILWAUKEE	105 2	9	670	679	733	166	128 AIR REFUELING GP (ANG) + AFR
WYOMING									
	CHEYENNE MAP AGS	CHEYENNE	205 2	3	249	252	255	67	153 TAC AIRLIFT GROUP (ANG)
	FRANCIS E. WARREN AFB	CHEYENNE	101 1	3808	665	4473	4606	33466	90 STRATEGIC MISSILE WING

DEPARTMENT OF DEFENSE
 AIR FORCE BASE STRUCTURE
 United States Territories and Possessions
 FY 1989

Territory	Name of Installation	City	IDPPC Code	Cat	Authorized Manpower Full-Time Permanently Assigned		Total Pers. Acreage	Total Pers. Acreage	Major Unit-Activity-Function
					Mil.	Civ.			
GUAM	ANDERSEN AFB	AGANA, GUAM	101	1	3854	655	4509	4688	20172 43 BOMBARDMENT WING
PUERTO RICO	PUERTO RICO IAP AGS	SAN JUAN	205	2	2	401	403	406	44 156 TAC FIGHTER GROUP (ANG)

DEPARTMENT OF DEFENSE
AIR FORCE BASE STRUCTURE
Used by U.S. Forces in Foreign Areas
FY 1989

Authorized Manpower
Full-Time Permanently
Assigned

Country	Name of Installation	City	IDPPC Code	Mil.	Civ.	Tot.	Total Pers.	Total Acreage	Major Unit-Activity-Function
AUSTRALIA									
	WOOMERA AIR STATION	WOOMERA	101 2	210	0	210	282	25	ELECTRONICS SITE
BELGIUM									
	FLORENNES AIR BASE	FLORENNES	202 1	1283	250	1533	1538	212 485	TAC MISSILE WING
GERMANY, FEDERAL REP OF									
	TEMPELHOF CENTRAL AIRPORT ASN	BERLIN	202 2	1054	761	1815	1844	906 7350	AIR BASE GROUP
	BITBURG AIR BASE	BITBURG	202 1	4416	872	5288	5418	1626 36	TACTICAL FIGHTER WING
	RHEIN MAIN AIR BASE	FRANKFURT	204 1	846	1207	2053	2300	919 435	TACTICAL AIRLIFT WING
	HESSISCH OLDENDORF ASN	HESSISCH	202 2	572	74	646	652	78 609	TACTICAL CONTROL SQ
	WUESCHEIM AIR BASE	HUNDHEIM	202 1	970	1	971	971	103 38	TAC MISSILE WING
	RAMSTEIN AIR BASE	LANDSTUHL	202 1	8777	3131	11908	12337	4532 86	TACTICAL FIGHTER WING
	HAHN AIR BASE	LAUTZENHAUSEN	202 1	4920	907	5827	5943	1413 50	TACTICAL FIGHTER WING
	PRUEM AIR STATION	PRUEM	202 2	439	67	506	517	73 66	COMBAT SUPPORT SQ
	SEMBACH AIR BASE	SEMBACH	202 1	3200	645	3845	3920	1086 66	ELECTRONIC COMBAT WING
	SPANGDAHLEM AIR BASE	SPANGDAHLEM	202 1	4611	579	5190	5246	1352 52	TACTICAL FIGHTER WING
	LINDSEY AIR BASE	WIESBADEN	202 1	2064	460	2524	2534	105 7100	COMBAT SUPPORT WING
	ZWEIBRUCKEN AIR BASE	ZWEIBRUCKEN	202 1	2596	420	3016	3044	771 26	TACTICAL RECON. WING

DEPARTMENT OF DEFENSE
 AIR FORCE BASE STRUCTURE
 Used by U.S. Forces in Foreign Areas
 FY 1989

Authorized Manpower
 Full-Time Permanently
 Assigned

Country	Name of Installation	City	IDPPC Code	Mil.	Civ.	Tot.	Total Pers.	Total Acreage	Major Unit-Activity-Function
GREECE									
	HELLENIKON AIR BASE	ATHENS	402 1	1487	350	1837	1837	176 7206	AIR BASE GROUP
	IRAKLION AIR BASE	GOURNES	202 1	1019	142	1161	1161	247 7276	AIR BASE GROUP
GREENLAND									
	SONDRESTROM AIR BASE	HOLDSTEINBORG	202 2	33	631	664	1240	462376 1015	AIR BASE GROUP
	THULE AIR BASE	THULE	101 1	181	3	184	1639	338884 1012	AIR BASE GROUP
ITALY									
	SAN VITO AIR BASE	BRINDISI	203 1	1370	275	1645	1678	360 7275	AIR BASE GROUP
	COMISO AIR BASE	COMISO	202 1	1632	266	1898	2116	379 487	TAC MISSILE WING
	AVIANO AIR BASE	PORDENONE	202 1	1823	520	2343	2403	1123 40	TACTICAL GROUP
JAPAN									
	KADENA AIR BASE	KOZA CITY	202 1	9378	2625	12003	12401	15227 18	TACTICAL FIGHTER WING
	MISAWA AIR BASE	MISAWA	202 1	8534	1066	9600	9794	3982 432	TAC FIGHTER WING
	YOKOTA AIR BASE	TOKYO	204 1	4579	1888	6467	6824	2943 475	AIR BASE WING

DEPARTMENT OF DEFENSE
 AIR FORCE BASE STRUCTURE
 Used by U.S. Forces in Foreign Areas
 FY 1989

Authorized Manpower
 Full-Time Permanently
 Assigned

Country	Name of Installation	City	IDPPC Code	Mil.	Civ.	Tot.	Total Pers.	Total Acreage	Major Unit-Activity-Function
KOREA, REPUBLIC OF									
	YUNSAN AIR BASE	KUNSAN	202	1	2952	397	3349	3436	2615 8 TACTICAL FIGHTER WING
	KWANG JU AIR BASE	KWANG JU	202	2	406	86	492	657	329 COMBAT SUPPORT BASE
	OSAN AIR BASE	SONGTAN	202	1	8906	959	9865	10164	8477 51 TAC FIGHTER WING
	SUWON AIR BASE	SUWON	202	2	1031	65	1096	1296	30 25 TAC FIGHTER SQ
	TAEGU AIR BASE	TAEGU	202	2	704	129	833	1053	370 497 TACTICAL FIGHTER SQ
NETHERLANDS									
	SOESTERBERG AIR BASE	SOESTERBERG	202	1	1583	118	1701	1749	524 32 TACTICAL FIGHTER SQUADRON
PANAMA									
	HOWARD AIR FORCE BASE	BALBOA	202	1	2406	587	2993	3101	14121 USAF SOUTHERN AIR DIV
PHILIPPINES									
	CLARK AIR BASE	ANGELES	202	1	9550	2177	11727	12482	56952 3 TACTICAL FIGHTER WING

DEPARTMENT OF DEFENSE
AIR FORCE BASE STRUCTURE
Used by U.S. Forces in Foreign Areas
FY 1989

Country	Name of Installation	City	IDPPC Code	Cat	Authorized Manpower Full-Time Permanently Assigned		Total Pers.	Total Acreage	Major Unit-Activity-Function
					Mil.	Civ.			
PORTUGAL									
	LAJES FIELD AIR BASE	LAJES	202	1	2247	1086	3333	3843	1132 1605 MIL AIRLIFT SPT WING
SPAIN									
	TORREJON AIR BASE	MADRID	202	1	4115	1000	5115	5405	3682 401 TACTICAL FIGHTER WING
	ZARAGOZA AIR BASE	ZARAGOZA	202	1	1015	179	1194	1764	2903 406 TACTICAL FIGHTER TNG WING
TURKEY									
	INCIRLIK AIR BASE	ADANA	202	1	2166	272	2438	3279	3473 39 TACTICAL GROUP
	ANKARA AIR STATION	ANKARA	402	2	449	125	574	1131	168 SUPPORT STATION
	PIRINCLIK AIR STATION	DIYARBAKIR	103	2	148	4	152	555	176 ELECTRONICS STATION
	IZMIR AIR STATION	IZMIR	402	2	446	74	520	867	22 SUPPORT STATION
UNITED KINGDOM									
	RAF ALCONBURY	ALCONBURY	202	1	3647	478	4125	4217	1193 10 TACTICAL FTR WING
	RAF CROUGHTON	CROUGHTON	203	2	376	50	426	426	694 2130 COMMUNICATIONS SO
	RAF BENTWATERS	EYKE	202	1	3523	510	4033	4117	1099 81 TACTICAL FIGHTER WING
	RAF FAIRFORD	FAIRFORD	202	1	1153	186	1349	1349	1785 7020 AIR BASE GROUP
	HIGH WYCOMBE AIR STATION	HIGH WYCOMBE	202	2	116	34	150	198	103 SUPPORT ACTIVITIES

DEPARTMENT OF DEFENSE
AIR FORCE BASE STRUCTURE
Used by U.S. Forces in Foreign Areas
FY 1989

Country	Name of Installation	City	IDPPC Code	Mil.	Civ.	Authorized Manpower Full-time Permanently Assigned		Total Acreege	Major Unit-Activity-Function
						Tot.	Tot.		
RAF	LAKENHEATH	LAKENHEATH	202	1	4742	668	5410	5626	2044 48 TACTICAL FIGHTER WING
RAF	MILDENHALL	MILDENHALL	204	1	3116	567	3683	3991	1147 513 AIRBORNE CMD + CNTL WING
RAF	MOLESWORTH	MOLESWORTH	202	1	701	31	732	825	45 303 TACTICAL MISSILE WING
RAF	GREENHAM COMMON	NEWBURY	202	1	1564	271	1835	2029	2957 501 TACTICAL MISSILE WING
RAF	CHICKSANDS	SHEFFORD	202	1	1322	144	1466	1489	411 7274 AIR BASE GROUP
RAF	UPPER HEYFORD	UPPER HEYFORD	202	1	4610	571	5181	5345	1195 20 TACTICAL FIGHTER WING
RAF	WETHERSFIELD	WETHERSFIELD	202	2	523	60	583	677	801 ENGINEERING SUPPORT SQUADRON
RAF	WOODBRIDGE	WOODBRIDGE	202	1	537	1	538	539	994 78/91 TAC FIGHTER SQUADRONS

CHAPTER FIVE
MARINE CORPS BASE STRUCTURE

I. INTRODUCTION

This Chapter presents the Marine Corps' approach to its basing structure and the relationship of that structure to the Marine Corps' tactical force structure. In addition, base operating costs are identified.

The National Security Act of 1947, as amended, prescribes the organization of the Marine Corps.

Based on that law, the Marine Corps is organized into operating forces assigned to the Fleet Marine Force; reserve forces; security forces for naval installations, ships and embassies; and a supporting establishment of operating bases, air stations, training centers, logistics, and support bases and headquarters elements.

Section VI is a listing of installations defined as major or minor activities. Major activities are defined as those installations which have a Current Property Value (CPV) of at least \$100 Million dollars or more. Minor activities are those which have a CPV less than \$100 Million. The only exception to this is Camp Fuji, Japan and MWTC Bridgeport, California which are training activities for Camp Butler and Camp Pendleton respectively.

II. BASE STRUCTURE OVERVIEW

Marine Corps tactical forces are assigned to installations which provide suitable local and regional training opportunities and position the forces for support and responsiveness to contingency requirements.

The major Marine Corps operating forces consist of Fleet Marine Force, Atlantic (FMFLANT) and Fleet Marine Force, Pacific (FMFPAC). These forces are assigned as type commands to U.S. Atlantic and Pacific Fleets, respectively. FMFLANT provides forces for one Marine Amphibious Force (MAF) and FMFPAC provides forces for two MAFs. These MAFs have multiple tasking of a global nature and during contingencies may or may not remain in their current theater of operations.

Specifically, FMFLANT will maintain one Marine Amphibious Force (MAF) on the East Coast of the U.S. That MAF will provide up to three Marine Amphibious Units (MAUs) at all times for afloat deployments in the Atlantic, Caribbean, and Mediterranean. The East Coast MAF will rotate battalions and fixed wing squadrons to the Western Pacific.

FMFPAC will maintain two MAFs in the Pacific region. One MAF will remain forward deployed in the Western Pacific with one Marine Amphibious Brigade (MAB) from that MAF stationed in Hawaii. One MAF will remain on the West Coast of the U.S. The West Coast MAF and the 1st MAB in Hawaii rotate battalions and squadrons to the Western Pacific. The MAF's in the Western Pacific and on the West Coast will continue to provide for forward afloat deployments.

The Reserve Division/Wing Team is prepared on short notice to augment/reinforce the active structure with additional capabilities for a major war.

The three active MAFs in the FMP and the Reserve Division/Wing team will be maintained at a maximum state of readiness and deployment posture to assure a capability for rapid and effective response anywhere in the world to support the national strategy. The basic concept that links operating forces with the base structure is the essential requirement to maintain a base and logistics structure capable of:

- supporting peacetime force and operational commitments;
- accommodating rapid expansion to wartime force levels in the event of mobilization; and,

- maintaining a training and logistics support posture that will provide sustained support for forces committed overseas under full mobilization conditions.

Rationale for the Location of Major Activities:

1. Ground Combat Elements located at Camp Lejeune, Camp Pendleton, Camp Butler and Marine Corps Air Station Kaneohe Bay have the following specific requirements:

a. Adequate training areas for both helicopter and over-the-beach amphibious assault training.

b. Direct rail and highway access to ports of embarkation (with one way transit time not exceeding four hours), and across-the-beach out-load capability for all amphibious shipping.

c. Helicopter shore facilities located to afford direct embarkation of personnel, equipment and supplies aboard amphibious shipping at sea from shore based facilities.

d. Light fixed-wing aircraft facilities, helicopter landing sites, and fixed-wing Vertical/Short Take Off and Landing (V/STOL) sites to support air-ground team training and operations.

e. Adequate facilities for combined arms training to include impact areas for live firing of organic weapons.

f. Remote areas with suitable beaches and undeveloped airfield sites for advance deployment training of air-ground teams.

g. Ready access to established logistics support bases.

h. Sea, air, and beach areas with suitable adjacent maneuver areas inland for the accomplishment of integrated Navy/Marine amphibious training and exercises.

2. Aviation Combat Elements have the following requirements:

a. Fighter and Attack Squadrons (VMFA/VMA) located at Marine Corps Air Station, Beaufort, Cherry Point, El Toro, Iwakuni, Kaneohe Bay, and Yuma.

(1) A tactical jet air base within 200 miles of a major operational/tactical base.

(2) Capability to conduct aircraft carrier qualifications within 100 miles of a suitable air installation which can be used in emergency situations such as low fuel state or fouled deck diverts.

(3) Field mirror landing practice at the field and other suitable outlying airfields within 100 miles of home base.

(4) High performance air combat maneuvering (ACM) air space free from other activity and within 100 miles of home base.

(5) Sea and air space free from other activity for safe firing of Sidewinder, Sparrow, or other air-to-air missiles currently in the inventory or those which will be introduced or tested in the foreseeable future.

(6) Instrumented weapons range, targets and control facilities free from other activity for safe firing of missile weapons systems and for special weapons delivery training.

(7) Targets and control facilities for delivery of air-to-air and air to surface ordnance, and ground, sea, and air space free from other activity at 1 installations for accomplishment of necessary training with conventional ordnance. Targets within 100 nautical miles of home base. If located greater than 100 miles from home base, a support field with appropriate facilities will be required to support aviation unit deployments.

(8) Fixed and moving shore and seaborne targets for accomplishment of necessary all-weather training with conventional ordnance and guided stand-off weapons which are currently available or will be introduced.

(9) Ground Controlled Intercept/Marine Tactical Data System (GCI/MTDS) units located so as to promote air-to-air intercept training.

(10) Suitable air space for conduct of aerial refueling practice.

(11) Adversary aircraft support facilities for ACM training.

b. Marine Utility/Attack Helicopter/Marine Medium Helicopter/Marine Heavy Helicopter/Marine Observation Squadrons (HML/A/HMM/HMH/VMO) located at Marine Corps Air Stations, Tustin, New River, Futenma, Kaneohe Bay and Camp Pendleton.

(1) A helicopter air station located within 40 miles of a Marine Division.

(2) High elevation, confined area, landing sites for training rotary wing pilots.

(3) Protected air space and ordnance target complexes within 50 miles of home base for training pilots and gunners.

(4) Outlying landing sites within 50 miles of home base for the conduct of syllabus training including field carrier landing practice.

(5) Facilities for all-weather training.

(6) Ready access to division training areas for combined arms and assault helicopter joint vertical training.

(7) Ready access to helicopter capable amphibious shipping (LHA/LPH) for the conduct of ship-based training and operations.

3. Requirements of the Combat Service Support Elements located at Camp Lejeune, Camp Pendleton, Camp Butler and Marine Corps Air Station, Kaneohe Bay are as follows:

(1) Access to road and rail for the shipment and receipt of supplies and equipment to support the MAFs.

(2) Storage and maintenance facilities to provide the appropriate level of support to operating forces in garrison and in preparation for deployment.

(3) Sea, air and beach areas with sufficient training area to exercise command and control, landing support operations, heavy engineer operations, tactical motor transport, field medicine as well as supply and maintenance in a field environment.

4. Marine Corps operating bases for forward deployed units in Japan and Hawaii generally meet the requirements as stated previously.

5. The Marine Corps base at Twentynine Palms, originally established as an artillery training base and aviation gunnery range, is now the Marine Corps Air Ground Combat Center (MCAGCC). Twentynine Palms' size and location permit unrestricted firing of both artillery and air delivered ordnance. The Headquarters of the 7th Marine Amphibious Brigade (MAB) and selected subordinate units are located at Twentynine Palms. Additionally, this base provides ample space for the maneuver of mobile-mechanized task forces. Ten Combined Arms Exercises are scheduled each year and are conducted by Battalion or larger size units. The Marine Corps Communications-Electronics School is also located at Twentynine Palms to take advantage of the absence of electromagnetic interference and conflicting electromagnetic transmissions.

6. The Marine Corps has two logistics support activities, one at Albany, Georgia and the other at Barstow, California. The Marine Corps logistics bases are geographically located to provide the required direct support to individual FMF's at near minimum operating and transportation costs. Both are located in areas of relatively stable labor markets where there is little competition from other government agencies or the civilian sector for the required labor skills.

7. The Marine Corps maintains two recruit depots, one at Parris Island, South Carolina and the other at San Diego, California. Generally, recruits from the Western half of the nation are trained at San Diego and those from the East are trained at Parris Island. Female recruits are trained only at Parris Island. The geographical locations of the present depots reduce the travel costs of arriving recruits and of graduating Marines.

III. RELATIONSHIP OF BASE STRUCTURE TO FORCE STRUCTURE

The Marine Corps base structure is reflective of the mission to support its current and projected force structure levels. It is continually under review for potential mission changes, economy measures, and other relevant developments.

STRATEGIC FORCES (100)

Not applicable.

GENERAL PURPOSE FORCES (200)

The two FMF Headquarters, Fleet Marine Force, Atlantic at Camp Elmore, Norfolk, Virginia, and Fleet Marine Force, Pacific at Camp Smith, Honolulu, Hawaii, are colocated with Headquarters, Commander-in-Chief, Atlantic and Pacific respectively, for command, control, and communications efficiency.

The Marine Corps has three active Marine Amphibious Forces (MAFs). Two MAFs and a portion of the third MAF are based in the United States.

I MAF is based on the West Coast with its command element, and its major ground combat element, the 1st Marine Division (MARDIV), located at Camp Pendleton, California. The 3d Marine Aircraft Wing (MAW), the aviation combat element of I MAF, has its fixed wing aviation elements located at Marine Corps Air Station (MCAS), El Toro, California and MCAS, Yuma, Arizona. The helicopter elements of the 3d MAW are located at MCAS, Tustin, California and at Camp Pendleton. The 1st Force Service Support Group (FSSG), I MAF's combat service support element is located at Camp Pendleton with detachments located at El Toro and MCAGCC, Twentynine Palms. The Headquarters of the 7th Marine Amphibious Brigade (MAB), located at Twentynine Palms, California, is designated to marry up with equipment and supplies embarked aboard the Maritime Prepositioning Ships-2. The units that comprise the 7th MAB, are located at Twentynine Palms, Pendleton, Tustin, and El Toro, California. Also located at MCAGCC, Twentynine Palms are a reinforced infantry battalion, an artillery battalion, a tank and a LAV Battalion. An expeditionary airfield has been established to support training at the MCAGCC. Additionally, I MAF is the follow-on force in the event of a NATO/Warsaw Pact war or conflict in the Western Pacific area.

II MAF is based on the East Coast. The 2d MARDIV, the Ground Combat Element of II MAF, is located at Camp Lejeune. Its Combat Service Support Element, the 2d FSSG is located at Camp Lejeune with detachments located at Cherry Point and Beaufort. The 2d MAW, the MAF's Aviation Combat Element, has its fixed wing aviation units located at MCAS Cherry Point, North Carolina and MCAS Beaufort, South Carolina. The helicopter units are

located at MCAS New River adjacent to Camp Lejeune. The East Coast based MAF is the Marine Corps' primary force in the event of a NATO/Warsaw Pact war. The headquarters of the 6th Marine Amphibious Brigade (MAB), located at Camp Lejeune, North Carolina, is designed to marry up with equipment and supplies embarked aboard Maritime Prepositioning Ships-1 (MPS-1). The units that comprise the 6th MAB are located at Camp Lejeune, Cherry Point, and New River, North Carolina and Beaufort, South Carolina.

III MAF, consisting of ground, aviation, and logistic components, is headquartered at Camp S. D. Butler, Okinawa, Japan. Camp Butler is the collective for all Marine Corps owned camps and facilities which comprise the Marine Corps base structure on Okinawa. The Ground Combat Element of the 3d MARDIV (reinforced) is located at Camp Butler. The Combat Service Support Element, 3d FSSG, is located at Camp Butler with a detachment located at Iwakuni. The Aviation Combat Element is located at MCAS Futenma, Japan. The tactical fixed wing aviation component is based at MCAS Iwakuni, Japan. Presently, every infantry battalion and tactical aviation squadron and detachment in III MAF is deployed to the Western Pacific from either I MAF, II MAF or the 1st MAB under the Unit Deployment Program. The forward based III MAF is immediately available for contingency operations in the Western Pacific. The 1st Marine Amphibious Brigade (MAB) may provide additional ground and aviation forces for III MAF.

The 1st MAB is stationed at MCAS Kaneohe Bay, Hawaii and is designated to marry up with equipment on board Maritime Prepositioning Ships-3 (MPS-3). The ground combat element of the Brigade consists of the 3d Marine Regiment, Brigade Service Support Group, and associated support units. The aviation component of tactical fixed wing aviation and helicopters is also located at MCAS Kaneohe Bay. Dependents of the deployed personnel are homebased at MCAS Kaneohe Bay and require facilities for their support. The 1st Marine Amphibious Brigade is immediately available for contingency operations throughout the Western Pacific.

AUXILIARY FORCES (300)

Not applicable.

MISSION SUPPORT FORCES (400)

The Marine Corps Air Ground Combat Center (MCAGCC) was formerly known as Marine Corps Base, Twentynine Palms, California and is commonly referred to as the "Combat Center". The mission of the Combat Center is to administer and conduct a combined arms program in order to exercise and evaluate participating units in the command, control, and coordination of supporting arms. This mission includes providing the training and guidance for Exercise Forces/Marine Air-Ground Task Forces (MAGTFs) in fire support planning and coordination. To achieve the necessary degree of realism in combat training, live ordnance, innovative training aids, and tactics and techniques of the real world opposition forces are used. Inherent in this mission is the requirement to examine existing doctrine critically and to provide training opportunities to identify innovative and more efficient means of accomplishing the Fleet Marine Force (FMF) mission.

Henderson Hall is located adjacent to Headquarters Marine Corps in Arlington, Virginia. Henderson Hall provides services and support to Headquarters Marine Corps, including but not limited to, enlisted members' billeting and messing, enlisted and staff non-commissioned officer clubs, post exchange services, and recreational facilities. Henderson Hall's collocation with Headquarters Marine Corps increases the efficiency of the support services it provides.

The Marine Corps Mountain Warfare Training Center (MCMWTC) is located at Pickel Meadow in the Toiyabe National Forest, Mono County, California. The Center provides mission-oriented individual and unit training supportive of the Marine Corps contingency missions on the northern flank of NATO, Southwest Asia, and Northeast Asia. The climate and terrain of MCMWTC is unique, offering high altitude, rugged mountain terrain and severe winter conditions. It is the only such location the Marine Corps has ready access to in the continental United States. Mountain and cold weather skills can only be obtained by training in the environment. In addition to mountain and cold weather skills, the training emphasizes small unit leadership, teamwork, confidence, and physical toughening which are applicable to any operational commitment.

Camp Fuji, Japan provides critical organic weapons training ranges which are becoming increasingly unavailable on Okinawa. The training area includes hand grenade, demolitions, LAAW, mortar, tank, and artillery ranges. It affords the capability for long range observed fire, tank maneuver, and full employment of the Marine tank/infantry team. It also provides a site for cold weather training. It is considered an essential training area to support the Fleet Marine Force, Pacific.

Marine Corps Auxiliary Landing Field (MCALF) Bogue is located in North Carolina between Camp Lejeune and MCAS Cherry Point. The installation has been altered to accommodate the Expeditionary Airfield (EAF) program which is the present mission of the airfield. The installation is divided into two geographical areas; a garrison area and an expeditionary area. The garrison area provides support and services for those personnel in EAF training and for EAF equipment evaluation. The expeditionary area includes the airfield pavements and is operated only within the capability of the installed EAF equipment to retain as realistic a combat environment as possible. MCALF Bogue is the only installation on the East Coast that provides training for flight and ground crews and for Marine Corps engineer and Naval Construction Battalion personnel in installation, maintenance, use, and operation of EAF equipment.

CENTRAL SUPPORT FORCES (500)

The Marine Corps has logistic support bases in Albany, Georgia, and Barstow, California.

The Marine Corps maintains recruit depots at Parris Island, South Carolina and San Diego, California.

The Marine Corps Combat Development Command (MCCDC) is located at Quantico, Virginia. MCCDC provides professional education for Marine Corps officers at the intermediate and career level. MCCDC also conducts officer acquisition training for all Marine Corps officer candidates and infantry initial skill training for newly commissioned officers. Additionally, MCCDC provides communications initial skill and skill progression training for Marine Corps officers, and computer sciences initial skill training for Marine Corps officer and enlisted personnel. In addition, MCCDC develops the doctrine, tactics, techniques, and equipment employed by landing forces in

amphibious operations and exercises academic supervision over all Marine Corps formal schools. The Marine Security Guard Battalion is also located at MCCDC and is charged with the training of Marine Corps security personnel for duty with the Department of State.

Marine Corps Air Facility (MCAF), Quantico provides maintenance and support facilities for HMX-1. HMX-1 provides helicopter support for the President of the United States, the Vice President, members of the Cabinet, and foreign dignitaries. MCAF, Quantico is situated within easy supporting distance of the Capitol.

INDIVIDUALS (600)

Not applicable.

IV. BASE OPERATIONS SUPPORT COSTS

A summary of the estimated FY 1989 Base Operations Support Costs follows.

TABLE XII
 MAJOR DEFENSE PROGRAMS
 MARINE CORPS BASE OPERATIONS
 SUPPORT COSTS (\$MILLIONS)

<u>Major Defense Program</u>	<u>Fifty</u>	<u>US Territories/</u>	<u>Foreign</u>	<u>Total</u>
	<u>States</u>	<u>Possessions</u>	<u>Overseas</u>	
Strategic (01)				
General Purpose (02)	596.8		185.8	782.6
Intelligence & Communication (03)				
Airlift/Scalift (04)				
Guard & Reserve Forces (05)	20.3			20.3
Research & Development (06)				
Central Supply & Maintenance (07)	82.4		.9	83.3
Training, Medical & other Personnel (08)	127.8			127.8
Administrative & Associated Activities (09)	6.2			6.2
Support to Other Nations (10)				
Subtotal	<u>833.5</u>		<u>186.7</u>	<u>1020.2</u>
Construction	272.2		14.8	287.0
Family Housing Operations and Maintenance	103.4		4.3	107.7
Total	<u>1,209.1</u>		<u>205.8</u>	<u>1,414.9</u>

V. ACTIONS TO REDUCE ANNUAL BASE OPERATIONS COSTS

The Marine Corps continues to pursue all means available to reduce base operations costs, including:

1. Increased maintenance of real property (MRP) funding in order to inhibit the growth of the cost of reducing the backlog of maintenance and repair (BMAR).
2. Implementation of audit findings in order to obtain recommended savings.
3. The Marine Corps is complying with the energy conservation program in DOD and has instituted a Marine Corps energy investment program. Both of these efforts result in cost avoidance and reduced requirements in base operating costs.
4. The construction of projects under the MCON Energy Conservation Program (ECIP).
5. Continuation of the Efficiency Review Program.
6. Continuation of the Commercial Activities Program.
7. The Marine Corps Air Station (MCAS) El Toro and Iwakuni, Marine Corps Base, Camp Lejeune and the Marine Corps Logistics Base (MCLB), Albany are currently participating in the Office of the Secretary of Defense sponsored Model Installations Program which is designed to improve management efficiency of Base Operations Support.

SECTION VI

MARINE CORPS BASE STRUCTURE

SUMMARY OF NUMBER OF MARINE CORPS INSTALLATIONS

Mission Category (IDPPC)	Fifty States	U.S. Territories and Possessions	Foreign Areas	Total
GENERAL PURPOSE (262)	12	0	3	15
GENERAL PURPOSE (492)	5	0	1	6
CENTRAL SUPPLY AND MAINTENANCE (507)	2	0	0	2
TRAINING, MEDICAL AND OTHER PERSONNEL (508)	3	0	0	3
TOTAL MARINE CORPS	22	0	4	26

DEPARTMENT OF DEFENSE
MARINE CORPS BASE STRUCTURE
United States
FY 1989

Authorized Manpower
Full-time Permanently
Assigned

State	Name of Installation	City	ICPPC Code	Mil.	Civ.	Tot	Total Pers.	Total Acreage	Major Unit-Activity-Function
ARIZONA									
	MCAS, YUMA	YUMA	202 1	4205	373	4578	5236	2930	JET TNG & TAC AVIATION (3DAW)
CALIFORNIA									
	MC LOGISTICS BASE	BARSTOW	507 1	630	2085	2715	2735	5688	DEPOT MAINT/SUPPLY & STORAGE
	MC MOUNTAIN WARFARE TNG CTR	BRIDGEPORT	402 3	*	*	*	*	60513	COLD WEATHER/MOUNTAIN TNG
	MCAS, EL TORO	IRVINE	202 1	11574	868	12442	12965	5220	HQ 3RD MAW/JET TNG/OPER SPT
	MC BASE, CAMP PENDLETON	OCEANSIDE	202 1	36501	1541	38042	39151	186139	FMF GRND UNITS/TRP TNG/OPER SPT
	MCAS CAMP PENDLETON	OCEANSIDE	202 1	*	*	*	*	343	HELO TNG/OPERATIONS
	MC AIP GD CBT CTR 29 PALMS	PALM SPRINGS	402 1	8036	485	8521	10222	595589	COMBINED ARMS TNG. MCCES
	MC RECRUIT DEPOT, SAN DIEGO	SAN DIEGO	508 1	6221	273	6494	10328	503	RECRUIT TRAINING
	MCAS, TUSTIN	TUSTIN	202 1	4437	44	4481	4489	1709	MAG-16/HELO TRAINING/OPERATION
DIST OF COLUMBIA									
	MARINE BARRACKS 8TH & J ST	WASHINGTON	402 2	1058	44	1112	1112	5	CEREMONIES/SECURITY
GEORGIA									
	MC LOGISTICS BASE	ALBANY	507 2	1170	2789	3959	4021	3327	DEPOT MAINT/SUPPLY & STORAGE/ICP

DEPARTMENT OF DEFENSE
MARINE CORPS EASE STRUCTURE
United States
FY 1989

Authorized Manpower
Full-Time Permanently
Assigned

State	Name of Installation	City	IDPPC Code	Cat	Mil.	Civ.	Tot.	Total Pers.	Total Acreage	Major Unit-Activity-Function
HAWAII										
	CAMP H. M. SMITH	HONOLULU	202 1		2104	17	2121	2170	420 HQ	FMF PAC/HQ CINCPAC/HQ IPAC
	MCAS, KANEHOE BAY	KAILUA	202 1		10562	369	10931	11311	39392	1ST MAB/JET & HELO TNG OPNS
NORTH CAROLINA										
	MCAS, CHERRY POINT	HAVELOCK	202 1		10638	1645	12283	12487	26683	HQ 2ND MAW/JET TNG & OPNS/MARF
	MC BASE, CAMP LEJEUNE	JACKSONVILLE	202 1		43005	2221	45226	45965	88432	FMF GRND UNITS/TRP TNG/OPN SPT
	MCAS, NEW RIVER	JACKSONVILLE	202 1		.	.	.	.	2773	MAG 26/HELO TNG/OPER SUPPORT
	MCALF, BOGUE	SWANSBORO	402 3		.	.	.	.	837	2ND MAW/EXPEDITION AIRFLD TNG
SOUTH CAROLINA										
	MCAS, BEAUFORT	BEAUFORT	202 1		3808	464	4272	4288	6676	MAG-31/JET TNG/OPN SUPPORT
	MC RECRUIT DEPOT	PARRIS ISLAND	508 1		8097	565	8662	12383	8081	RECRUIT TRAINING
VIRGINIA										
	CAMP ELMORE	NORFOLK	202 2		736	5	741	741	22	HQ FMF LANI
	MC CBT DEV CMD	QUANTICO	508 2		7049	1495	8544	8746	60647	OFF PROF TNG/SKILL TNG/MC INST
	HQMC, HENDERSON HALL	WASHINGTON DC	402 2		2712	44	2756	2906	21	HQ USMC

DEPARTMENT OF DEFENSE
 MARINE CORPS BASE STRUCTURE
 Used by U.S. Forces in Foreign Areas
 FY 1989

Country	Name of Installation	City	IDPPC Code	Cat	Authorized Manpower			Total Pers.	Total Acreage	Major Unit-Activity-Function
					Mil.	Civ.	Tot.			
JAPAN										
	MARINE CORPS AIR STA, FUTENMA	FUTENMA, OKINAWA	202	1	3390	27	3417	3417	1188	HELO TRNG/OPERATIONAL SUPPORT
	MARINE CORPS BASE, CAMP BUTLER	FUTENMA, OKINAWA	202	1	15543	2256	18099	18184	45120	TRAINING/OPERATIONAL SUPPORT
	CAMP FUJI	GOTEMBA	402	3	43	69	112	112	34110	TRAINING SUPPORT
	MARINE CORPS AIR STA, IWAKUNI	IWAKUNI	202	1	2805	851	3656	3656	6590	JET TRAINER/OPERATIONAL SPT