



CHARLESTON AIR FORCE BASE



ECONOMIC IMPACT ANALYSIS FISCAL YEAR 2001





The 437th Airlift Wing Vision:

**"Providing our nation's premier
airlift force from the world's premier air base"**

Our Mission:

**"Professionals working together to support, train,
and provide the world's best airlift force for America"**

Executive Commitment:

We here at the 437th Airlift Wing take pride in our people and our many accomplishments. The members of "Team Charleston" go above and beyond the call of ordinary duty. They exemplify the core values of Air Force personnel worldwide. Striving to do their personal best, while maintaining their professionalism and dedication to leadership. We will continue to meet and exceed these standards for our customers worldwide with unlimited potential for growth.

Enclosed is the Charleston Air Force Base "Economic Impact Analysis" for Fiscal Year 2001. This analysis estimates the economic effect an installation had on its local area. This economic area includes Charleston, Dorchester, and Berkeley counties.

**Commander
437th AIRLIFT WING**

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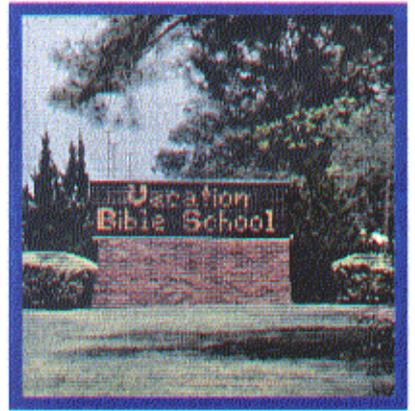
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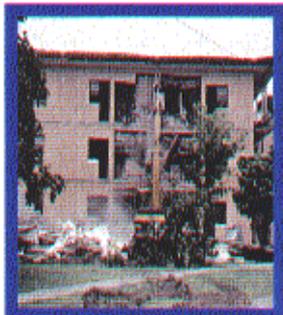
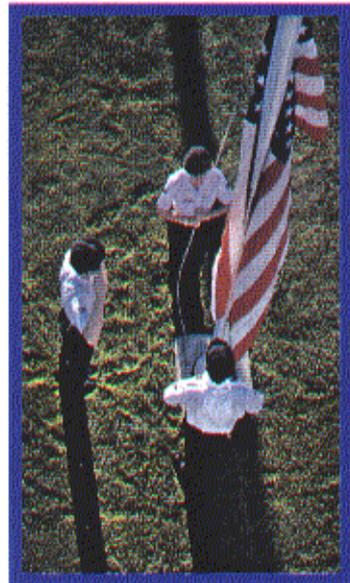
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PART I

BACKGROUND



FOREWORD

CHARLESTON AIR FORCE BASE ECONOMIC IMPACT ANALYSIS FISCAL YEAR 2001

Charleston AFB's primary mission is airlift--professionals working together to support, train and provide the world's best airlift force for America. The base is also home of the 315th Reserve Airlift Wing. In addition, there are several tenant units, some directly supporting the base, and others carrying out their own missions using Charleston facilities.

Approximately 2,494 individuals live on Charleston AFB in the 1,430 family housing units and seven dormitories provided for members and their families.

Charleston's workforce consists of 6,942 military members and civilian employees. Approximately 3,156 are active duty, 2,441 are Air Force Reserve, one is Foreign Military, and 1,344 are civilian employees. Civilian employees are divided into three major categories: Wage Grade employees, General Schedule Civil Service employees, and Non-Appropriated Fund employees (included in the non-appropriated numbers are private businesses; i.e., Base Exchange, Commissary, and Nations Bank).

The economic impact of Charleston AFB on the local area was approximately \$452.4 million last fiscal year. This amount represents wages and salaries of all military and civilian employees. Also included are local contracts and construction expenditures, educational aid, and Base Exchange/Commissary contracts.

METHODOLOGY

The total economic impact of a base on its economic area is computed by summing annual base payroll, annual base expenditures, and the estimated dollar value of indirect jobs created. An economic area is generally defined as a Metropolitan Statistical Area (MSA). The Indirect job multipliers for Air Force installations lists Charleston AFB as the Charleston-North Charleston SC MSA. The average annual pay for the local area was obtained from the Charleston Chamber of Commerce, using South Carolina Employment Security Commission Labor Market Information Division data. The 2001 pay scale was prepared using a Secretary of the Air Force / Directorate of Economics and Business Management (SAF/FMCE) program that was developed within the parameters of the Office of Secretary Defense's economic impact analysis model. The funding sources used in this analysis are Appropriated Funds (APF) and Non-Appropriated Funds (NAF).

* * * * *

AVAILABILITY OF INFORMATION

This Economic Impact Analysis (EIA) provides unclassified key information about the resources and economic impact of Charleston AFB on the surrounding communities. Release of this document to non-military individuals must be obtained from the Public Affairs Office at Charleston AFB SC (843) 963-5608, or DSN 673-5608. It can also be accessed on the internet at <http://www.charleston.af.mil/CHAS/impact/impact.htm>. Questions concerning the content of this analysis should be directed to the Public Affairs Office.

Information contained in this analysis is current as of 30 September 2001. This analysis was prepared by Holly C. Mehringer GS-9, 437 CPTS/FMA, front cover top graphic designed by SSgt Richard Kaminsky, 437 CS/SCSV, and base photographs provided by A1C Jeffrey Martinez, 437 CES/CECC.

FORCE STRUCTURE

Aircraft Type

C-17

#Assigned

40



FACT SHEET

C-17 Globemaster III



Mission

The C-17 Globemaster III is the newest, most flexible cargo aircraft to enter the airlift force. The C-17 is capable of rapid strategic delivery of troops and all types of cargo to main operating bases or directly to forward bases in the deployment area. The aircraft is also able to perform tactical airlift and airdrop missions when required. The inherent flexibility and performance characteristics of the C-17 force improve the ability of the total airlift system to fulfill the worldwide air mobility requirements of the United States.

The ultimate measure of airlift effectiveness is the ability to rapidly project and sustain an effective combat force close to a battle area. Threats to U.S. interests have changed in recent years, and the size and weight of U.S.-mechanized firepower and equipment have grown in response to improved capabilities of potential adversaries. This trend has significantly increased air mobility requirements, particularly in the area of large or heavy oversized cargo. As a result, newer and more flexible airlift aircraft are needed to meet potential armed contingencies, peacekeeping or humanitarian missions worldwide. The C-17 was designed and built with this new world order in mind.

Features

The operational requirements impose demanding reliability and maintainability of the C-17 system. These requirements include an aircraft mission completion success probability of 92 percent, only 20 aircraft maintenance man-hours per flying hour, and full and partial mission capable rates of 74.7 and 82.5 percent respectively. The Boeing warranty assures these figures will be met.

The C-17 measures 174 feet (53 meters) long with a wingspan of 169 feet, 10 inches (51.76 meters). Four fully reversible Pratt & Whitney F117-PW-100 engines (the commercial version is currently used on the Boeing 757) power the aircraft. Each engine is rated at 40,440 pounds of thrust. The thrust reversers direct the flow of air upward and forward to avoid ingestion of dust and debris. Maximum use has been made of off-the-shelf and commercial equipment, including Air Force-standardized avionics.

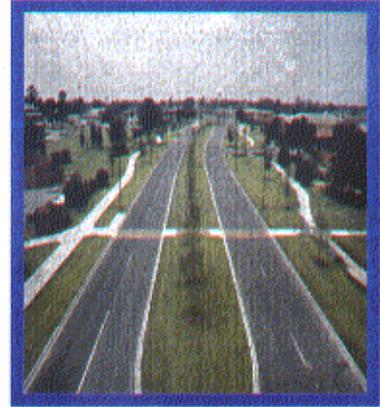
The aircraft is operated by a crew of three (pilot, copilot and loadmaster), reducing manpower requirement risk exposure, and long-term operating costs. Cargo is loaded onto the C-17 through a large aft door that accommodates military vehicles and palletized cargo. The C-17 can carry virtually all of the Army's air-transportable equipment.

Maximum payload capacity of the C-17 is 169,000 pounds (76,657 kilograms), and its maximum gross takeoff weight is 585,000 pounds (265,352 kilograms). With a payload of 160,000 pounds (72,575 kilograms) and an initial cruise altitude of 28,000 feet (8,534 meters), the C-17 has an unrefueled range of approximately 2,400 nautical miles. Its cruise speed is approximately 540 knots (0.73 Mach). The C-17 is designed to airdrop both equipment and 102 paratroopers.

The design of the aircraft lets it operate through small, austere airfields. The C-17 can take off and land on runways as short as 3,000 feet (914.4 meters) and as narrow as 90 feet (27.4 meters) wide. Even on such narrow runways, the C-17 can turn around using a three-point star turn and its backing capability.

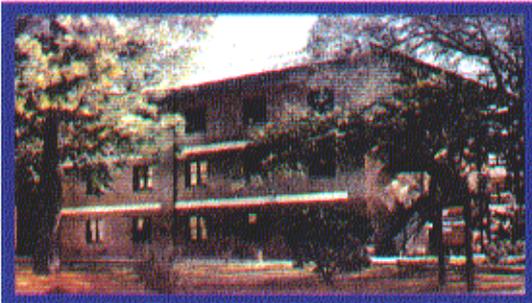
Background

The C-17 made its maiden flight on September 15, 1991, and the first production model was delivered to Charleston AFB SC, on June 14, 1993. The 17th Airlift Squadron, the first squadron of C-17s, was declared operationally ready January 17, 1995. The Air Force is programmed to receive a total of 120 C-17s by the year 2005. The bulk of the inventory will be at Charleston AFB and McChord AFB WA. C-17s will also be at Altus AFB OK and an Air National Guard unit at Jackson MS.



PART II

WING ASSETS



VALUE OF RESOURCES

As of: 30 Sep 01

CAPITAL ASSETS

Buildings and Real Property	\$266,934,000
Land	<u>\$2,082,809</u>
Total:	\$269,016,809

WEAPONS SYSTEMS

Aircraft C-17 (40)	<u>\$10,817,642,318</u>
Total:	\$10,817,642,318

EQUIPMENT

Appropriated Fund	\$92,565,658
Non-appropriated Fund	\$9,727,426
Base Exchange	\$5,800,000
Commissary	<u>\$971,260</u>
Total:	\$109,064,344

INVENTORIES

Stock Fund	\$29,271,139
Sales Outlets	
Base Exchange	\$4,445,424
Commissary	\$770,086
NAF	<u>\$261,979</u>
Total:	\$34,748,628

RETAIL SALES

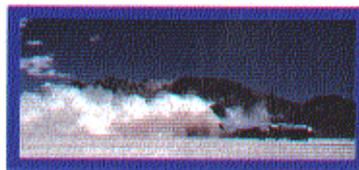
Base Exchange	\$27,366,474
Commissary	\$25,402,611
NAF	<u>\$4,015,616</u>
Total:	\$56,784,701

TOTAL VALUE OF RESOURCES	\$11,287,256,800
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PART III

WING ECONOMIC IMPACT



**ECONOMIC IMPACT ANALYSIS
CHARLESTON AFB - FY01**

**TABLE 1
PERSONNEL BY CLASSIFICATION AND HOUSING LOCATION**

As of: 30-Sep-01

CLASSIFICATIONS	LIVING ON BASE	LIVING OFF BASE	TOTAL
1. APPROPRIATED FUND MILITARY			
Active Duty	1,462	1,694	3,156
Air Force Reserve	13 *	2,428	2,441
Foreign Military	1 **	0	1
TOTAL:	1,476	4,122	5,598
2. ACTIVE DUTY MILITARY DEPENDENTS			
	1,018	1,175	2,193
3. APPROPRIATED FUND CIVILIANS			
General Schedule			511
Federal Wage Grade			355
Seasonal, Temporary, and Overhires			18
		TOTAL:	884
4. NON-APPROPRIATED FUND CONTRACT CIVILIANS AND PRIVATE BUSINESS			
Civilian NAF			229
Civilian BX			142
Civilian Commissary			84
Private Businesses on Base, By Type:			5
Branch Bank			5
		TOTAL:	460
	TOTAL PERSONNEL:		9,135

* Reservists living on base are dependents of an active duty military living on base.

**British military occupying military housing

**ECONOMIC IMPACT ANALYSIS
CHARLESTON AFB - FY01**

**TABLE 2
ANNUAL PAYROLL BY CLASSIFICATION AND HOUSING LOCATION**

As of: 30-Sep-01

CLASSIFICATION	LIVING ON BASE (\$)	LIVING OFF BASE (\$)	TOTAL (\$)
1. APPROPRIATED FUND MILITARY			
Active Duty	\$40,849,824	\$47,332,148	\$88,181,972
ANG/Reserve	<u>\$113,016 *</u>	<u>\$21,107,987</u>	<u>\$21,221,003</u>
TOTAL:	\$40,962,840	\$68,440,135	\$109,402,975
2. APPROPRIATED FUND CIVILIANS			
General Schedule			\$26,404,091
Federal Wage Grade			\$18,343,351
Seasonal, Temporary, and Overhires			<u>\$930,085</u>
		TOTAL:	\$45,677,527
3. NON-APPROPRIATED FUND CONTRACT CIVILIANS AND PRIVATE BUSINESS			
Civilian NAF			\$3,747,685
Civilian BX			\$1,957,694
Civilian DECA			\$2,797,964
Private Businesses On Base, By Type:			
Bank of America			<u>\$120,641</u>
		TOTAL:	\$8,623,984
	TOTAL ANNUAL PAYROLL:		\$163,704,486

* Reservists living on base are dependents of an active duty military living on base.

**ECONOMIC IMPACT ANALYSIS
CHARLESTON AFB - FY01**

**TABLE 3
EXPENDITURES FOR CONSTRUCTION, SERVICES, AND PROCUREMENT OF
MATERIALS, EQUIPMENT, AND SUPPLIES**

As of: **30-Sep-01**

	ACTUAL ANNUAL EXPENDITURES
1. CONSTRUCTION	
Military Construction Program	\$28,830,738
Non- Appropriated Fund	\$921,954
Military Family Housing	\$813,572
O & M	\$7,439,126
TWCF	<u>\$8,785,583</u>
TOTAL:	\$46,790,974
2. SERVICES	
Service Contracts and Commodities *	\$11,048,043
Utilities	<u>\$5,489,708</u>
TOTAL:	\$16,537,751
3. MATERIALS, EQUIPMENT, AND SUPPLIES PROCUREMENT	
Base Exchange (BX)	\$1,708,253
DECA (Commissary)	\$129,390
Health (TRICARE, Government Cost Only)**	\$7,600,000
Education (Impact Aid [IA] and Tuition Assistance)	\$1,087,183
*IA - Berkeley County	\$76,311
IA - Charleston County	\$418,112
IA - Dorchester County	\$44,715
Tuition Assistance	\$548,045
* Includes only AF dependents not all DoD dependents	
TDY (60,338 nights - using local hotels/motels)	\$3,137,609
TWCF Materials, Equipment & Supplies	\$131,125,463
Materials, Equipment & Supplies (not elsewhere included)	<u>\$11,332,044</u>
TOTAL:	\$156,119,941
TOTAL ANNUAL EXPENDITURES:	\$219,448,666

* Includes only contracts in the local economic area or contracts requiring the use of locally supplied goods and services.

**Health care provided to military and their dependents in Charleston, Dorchester, and Berkeley counties

**ECONOMIC IMPACT ANALYSIS
CHARLESTON AFB - FY01**

**TABLE 4
ESTIMATE OF NUMBER AND DOLLAR VALUE OF INDIRECT JOBS CREATED**

As of: 30-Sep-01

Type of Personnel	# of Base Jobs	Multiplier	# of Indirect Jobs
ACTIVE DUTY MILITARY	3,156	0.41	1,294
RESERVE/ANG/TRAINEEES	2,441	0.16	391
APF CIVILIANS	884	0.55	486
NAF CIVILIANS, BX, AND PRIVATE BUSINESS	460	0.55	253
TOTAL:	6,941		2,424

ESTIMATED NUMBER OF INDIRECT JOBS CREATED: 2,424

AVERAGE ANNUAL PAY FOR THE LOCAL COMMUNITY: \$28,586

ESTIMATED ANNUAL DOLLAR VALUE OF JOBS CREATED: \$69,292,464

Data Sources:

Multipliers: Logistics Management Institute Economic Impact Database, Installations and Indirect / Induced Job Multipliers, Feb 95.

Average Annual Pay: Current tables for Average Annual Pay Levels in Metropolitan Areas and Average Annual Pay by State and Industry are accessible at: <http://stats.bls.gov/bls/newsrels.htm>

The average annual pay for FY 2001 was calculated by taking a weighted average of the rate increase for FY 1991 to FY 1999 and the rate increase for FY 1999 to FY 2000 to get a rate increase of 3.41 for FY 01

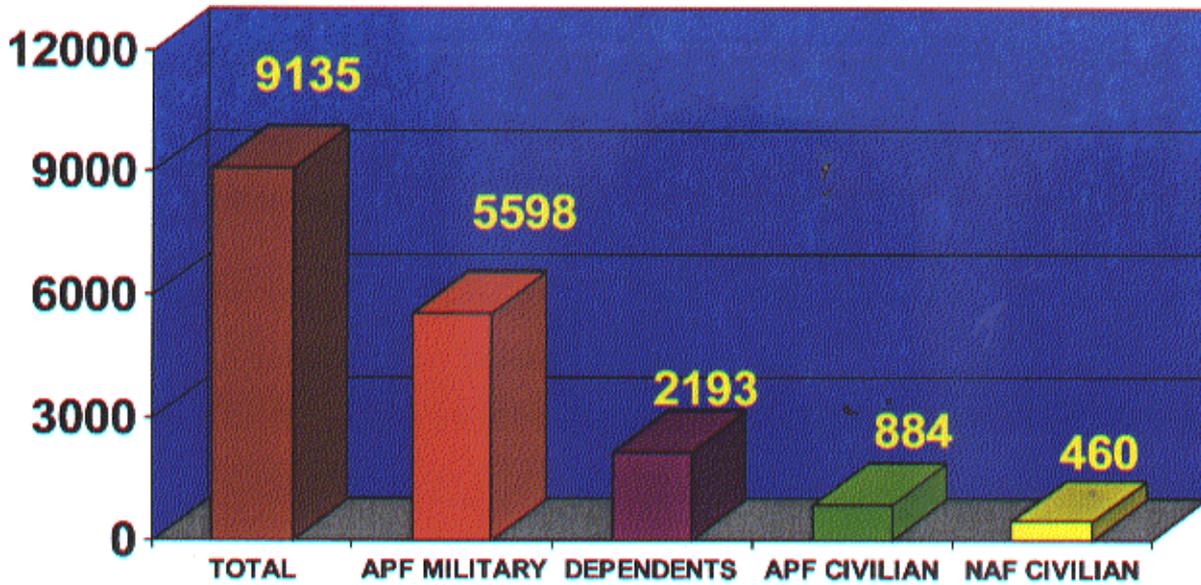
**ECONOMIC IMPACT ANALYSIS
CHARLESTON AFB - FY01**

**TABLE 5
Total Annual Economic Impact Estimate**

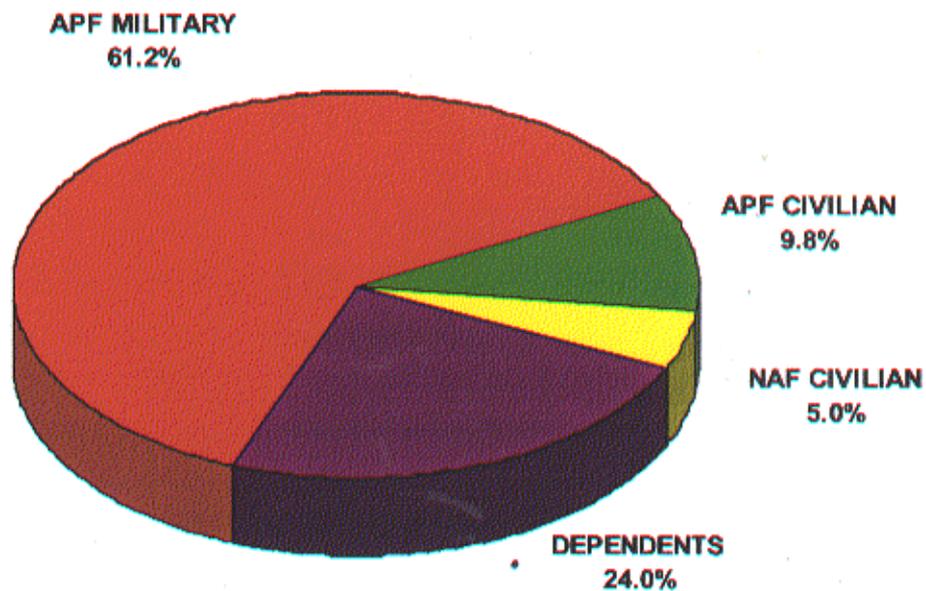
As of: 30-Sep-01

ANNUAL PAYROLL:		\$163,704,486
Military	\$109,402,975	
Federal Civilian	\$45,677,527	
NAF Civilians, BX, and Private Business	\$8,623,984	
ANNUAL EXPENDITURES:		\$219,448,666
ESTIMATED ANNUAL DOLLAR VALUE OF JOBS CREATED:		\$69,292,464
Estimated Indirect Jobs Created	2,424	
Average Annual Pay	\$28,586	
GRAND TOTAL		\$452,445,615

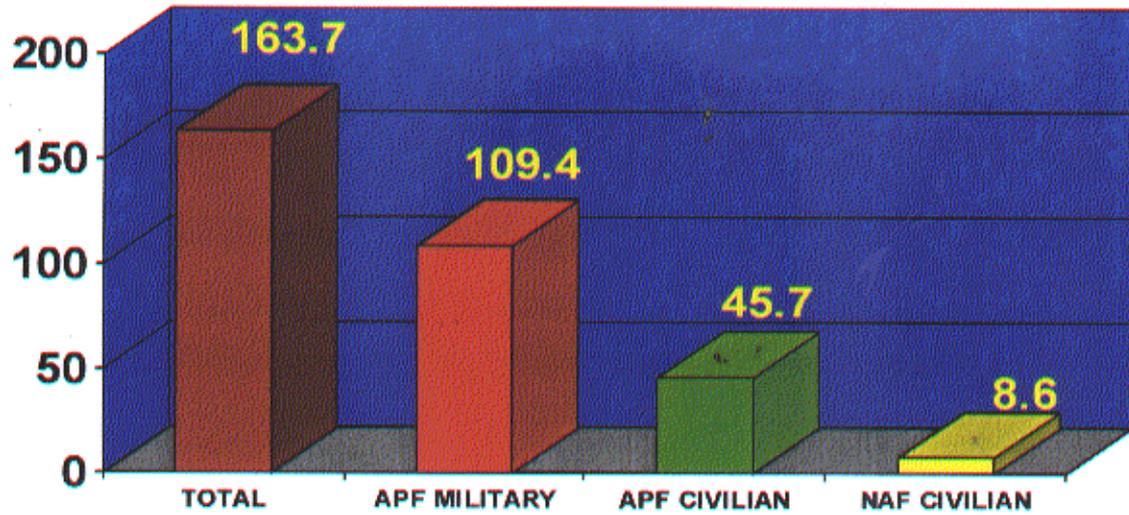
PERSONNEL SUMMARY CHARLESTON AFB - FY01



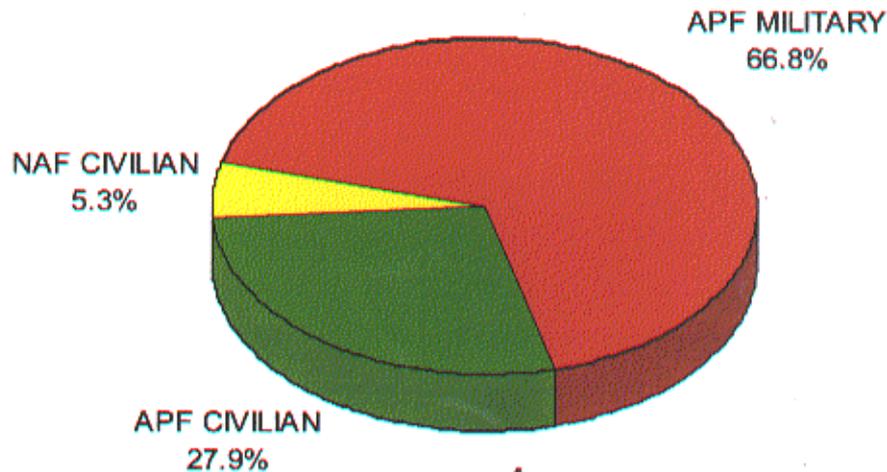
PERSONNEL SUMMARY BY PERCENT CHARLESTON AFB - FY01



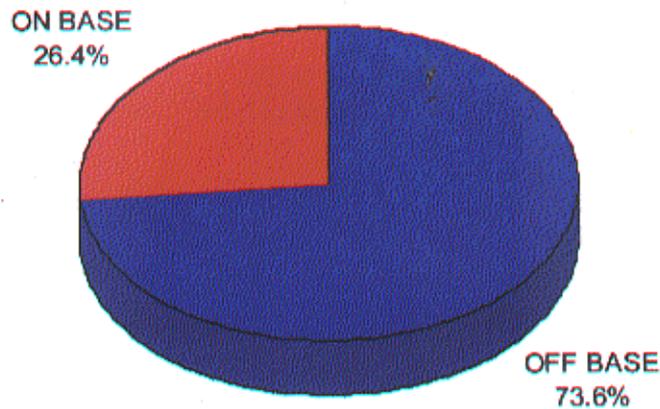
ANNUAL PAYROLL SUMMARY (\$M) CHARLESTON AFB - FY01



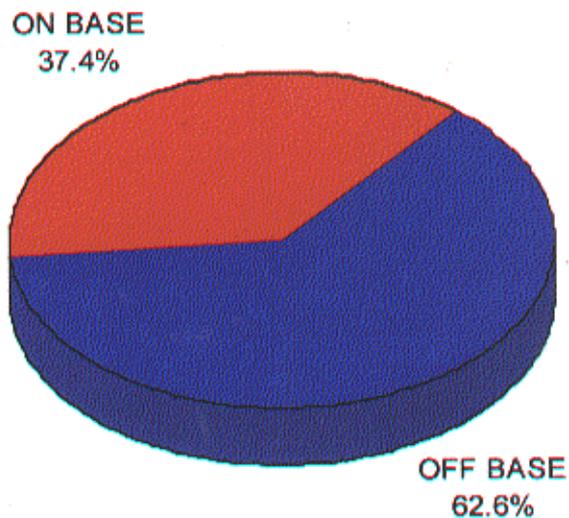
ANNUAL PAYROLL BY PERCENT CHARLESTON AFB - FY01



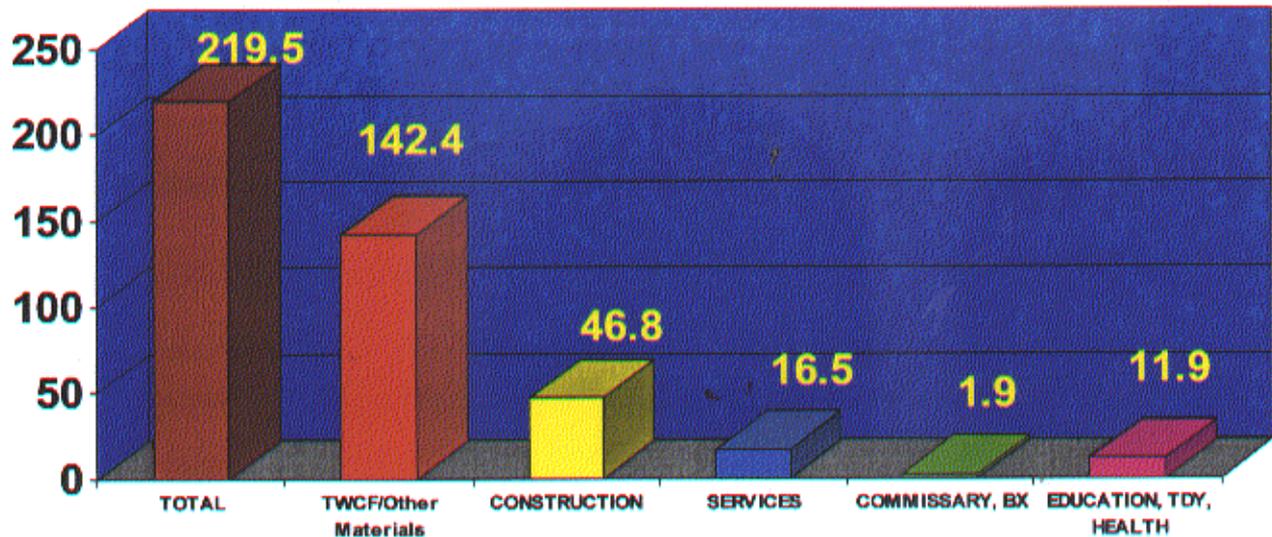
PERCENT OF APF MILITARY
PERSONNEL LIVING ON AND OFF BASE
CHARLESTON AFB - FY01



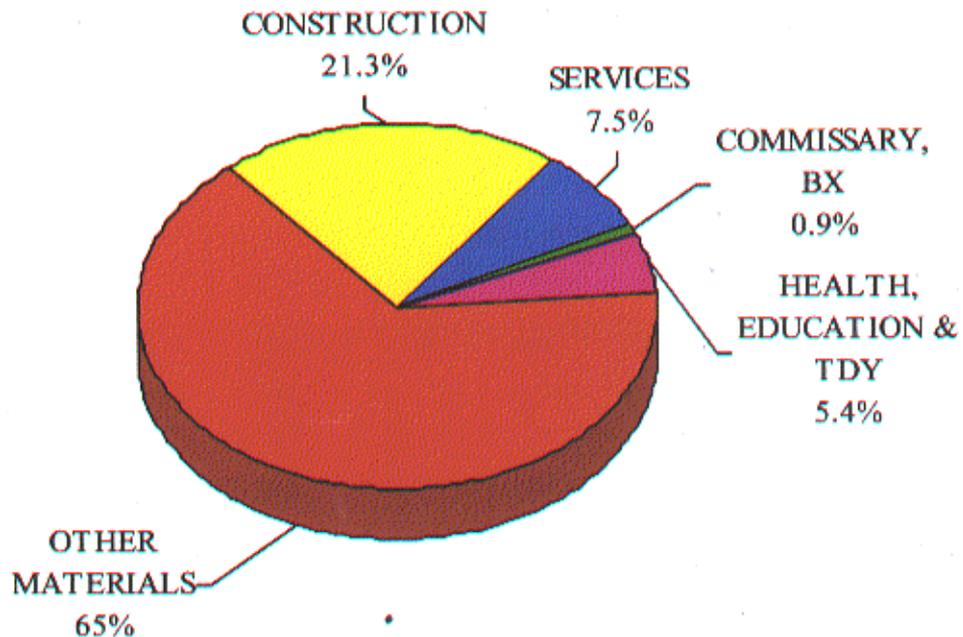
PERCENT OF APF MILITARY
PERSONNEL PAYROLL ATTRIBUTABLE TO
PERSONNEL LIVING ON AND OFF BASE
CHARLESTON AFB - FY01



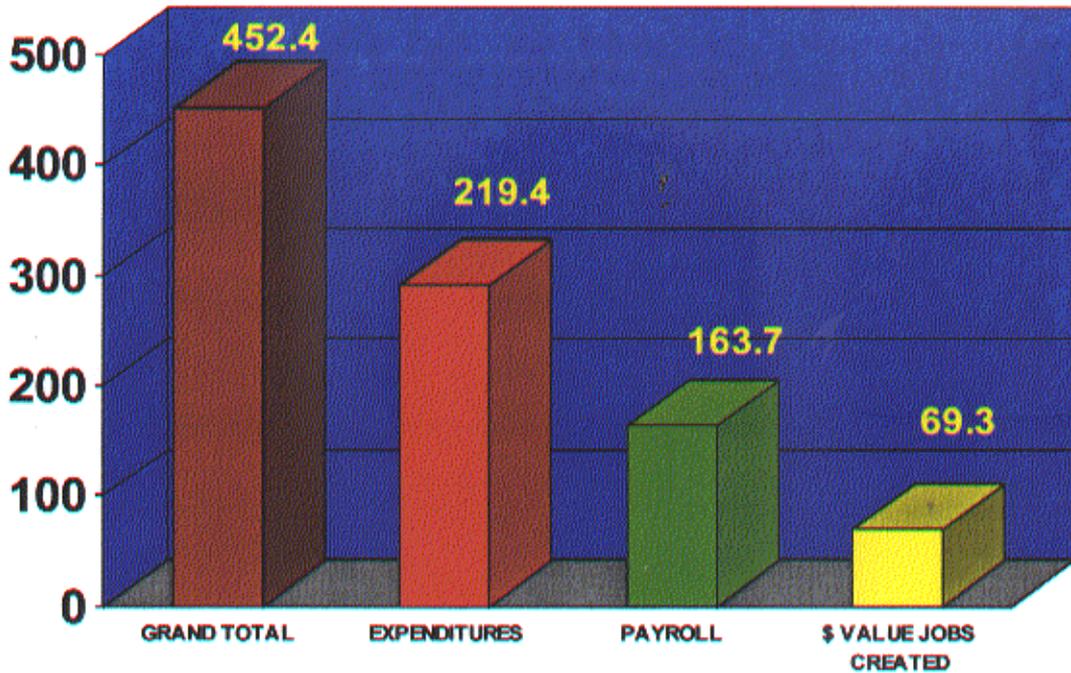
ANNUAL EXPENDITURE SUMMARY (\$M) CHARLESTON AFB - FY01



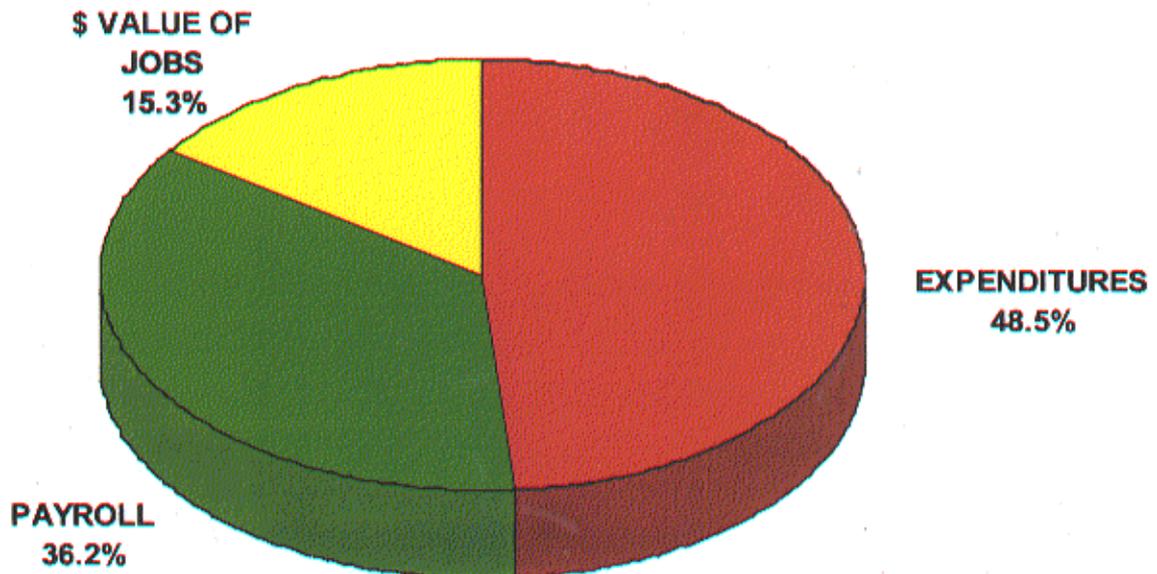
ANNUAL EXPENDITURES BY PERCENT CHARLESTON AFB - FY01

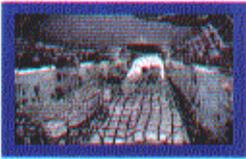


TOTAL ECONOMIC IMPACT (\$M) CHARLESTON AFB - FY01



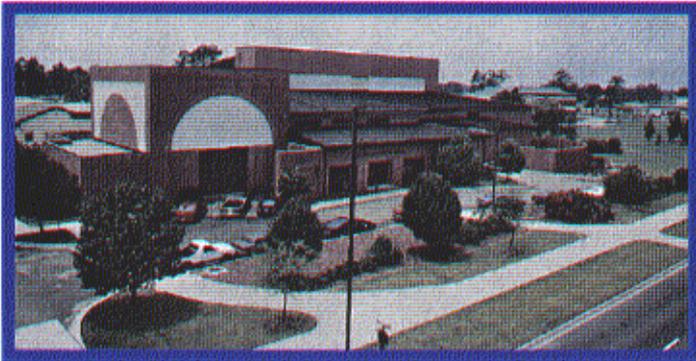
TOTAL ECONOMIC IMPACT BY PERCENT CHARLESTON AFB - FY01





PART IV

MISCELLANEOUS INFORMATION



ORGANIZATION**COMMAND****HOST: 437th Airlift Wing****AMC****437th Airlift Wing Staff Offices****AMC****437th Commander / Vice Commander****437th Command Chief Master Sergeant****437th Director of Staff****437th Command & Control****437th Chaplain****437th Comptroller Squadron****437th Historian****437th Inspector General****437th Manpower & Quality****437th Plans & Programs****437th Protocol****437th Public Affairs****437th Safety Office****437th MEO****437th Staff Judge Advocate****437th Retiree Activities Office****437th Wing Administration****437th Logistics Group****AMC****437th Aircraft Generation Squadron****437th Contracting Squadron****437th Maintenance Squadron****437th Logistics Support Squadron****437th Supply Squadron****437th Transportation Squadron****437th Medical Group****AMC****437th Aerospace Medicine Squadron****437th Medical Operations Squadron****437th Dental Squadron****437th Medical Support Squadron****437th Operations Group****AMC****14th Airlift Squadron****15th Airlift Squadron****17th Airlift Squadron****437th Aerial Port Squadron****437th Operations Support Squadron**

ORGANIZATION**COMMAND**

437th Support Group	AMC
437th Civil Engineer Squadron	
437th Communications Squadron	
437th Mission Support Squadron	
437th Security Forces Squadron	
437th Services Squadron	

TENANT ORGANIZATION

1st Combat Camera Squadron	AMC
315th Airlift Wing - Air Force Reserve	AFRES
412th Logistics Support Squadron	AFMC
Air Force Audit Agency	AFAA
Air Force Office of Special Investigations Detachment 310	AFOSI
American Federation Government Employees Local 1869	AFGE
American Red Cross	ARC
Area Defense Counsel	AFLSA
Army Air Force Exchange Service	AAFES
Defense Commissary Agency	DeCA
Defense Courier Service	DCF
Detachment 1, 33rd Flight Test Squadron	AMC
Detachment 1, 158th Fighter Wing	ANG
Detachment 5, 373 Training Squadron	AETC
US Postal Service	USPS
AF ROTC Det 772 (Chas Southern Univ)	ROTC
Civil Air Patrol: Costal-Charleston Composite SQ	
US Navy Construction	NAVY
Southeast Air Defense Sector	SEADS
Boeing C-17 Field Service	
Boeing C-17 Recovery & Modifications	
United Airlines	
Pratt & Whitney	
Document Automation and Production Service	DAPS