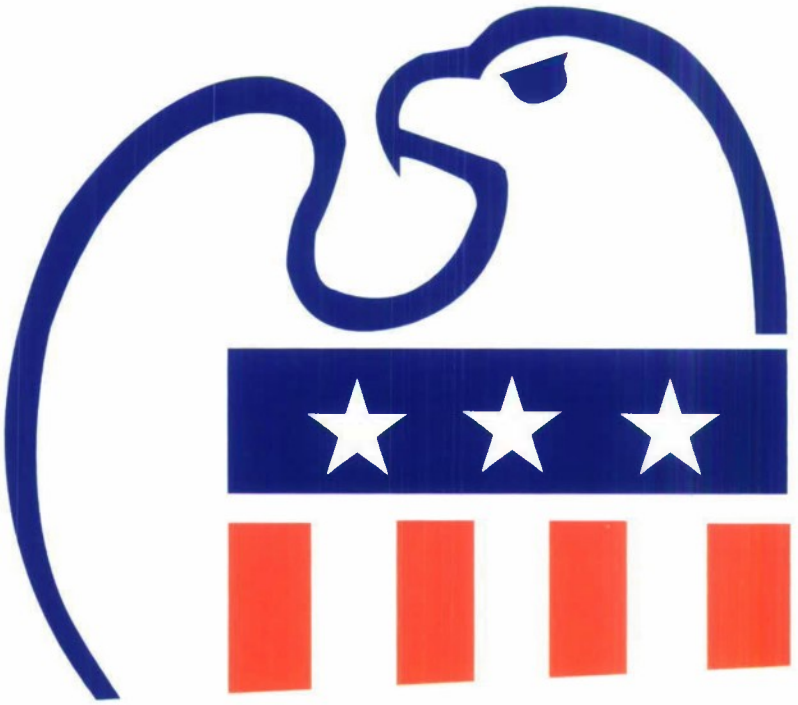
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RESERVE COMPONENT PROGRAMS

March 2000



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Fiscal Year 1999 Report of the Reserve Forces Policy Board

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THE SECRETARY OF DEFENSE
1000 DEFENSE PENTAGON
WASHINGTON, DC 20301-1000

MEMORANDUM FOR THE PRESIDENT

SUBJECT: Annual Report of the Reserve Forces Policy Board for Fiscal Year 1999

The Reserve Forces Policy Board's Annual Report for Fiscal Year 1999 is provided to you, in accordance with Title 10, United States Code, Section 113(c)(2).

This comprehensive report reviews the Reserve components' important contributions to the military's Total Force as we enter the 21st Century. It also examines the progress made by the Department of Defense toward improving the readiness and accessibility of the Reserve components. Finally, it identifies areas where, in the Board's judgment, further improvements are required to make the Reserve components more effective members of the Total Force. This report represents the collective views of the members of the Board, and does not represent the official policy of this or any other department or agency of the federal government.

One of the Board's most significant achievements in 1999 was its leadership of a Total Force education summit. This summit marked the initial step toward a fundamental redesign of the military education curriculum for Active Duty, Guard and Reserve forces. The military educational system can play a pivotal role in eliminating any residual barriers to integration by instilling a vision of Reserve components as integral partners in the Total Force team.

The Board continues to play a vital role in ensuring that the National Guard and Reserve are adequately manned, equipped, and ready. The Board's insightful guidance to me and to the Department of Defense has been most appreciated.

Attachment:
RFPB Annual Report

P111000 2-10-2 [illegible]

THE SECRETARY OF DEFENSE
1000 DEFENSE PENTAGON
WASHINGTON, DC 20301-1000

Honorable Albert Gore, Jr.
President of the Senate
Washington, DC 20510

Dear Mr. President:

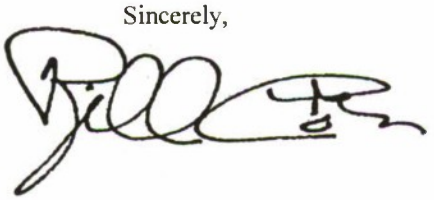
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Sincerely,



Enclosure:
RFPB Annual Report

THE SECRETARY OF DEFENSE
1000 DEFENSE PENTAGON
WASHINGTON, DC 20301-1000

Honorable J. Dennis Hastert
Speaker of the House
of Representatives
Washington, DC 20515

Dear Mr. Speaker:

The Reserve Forces Policy Board's Annual Report for Fiscal Year 1999 is provided to you, in accordance with Title 10, United States Code, Section 113(c)(2).

This comprehensive report reviews the Reserve components' important contributions to the military's Total Force as we enter the 21st Century. It also examines the progress made by the Department of Defense toward improving the readiness and accessibility of the Reserve components. Finally, it identifies areas where, in the Board's judgment, further improvements are required to make the Reserve components more effective members of the Total Force. This report represents the collective views of the members of the Board, and does not represent the official policy of this or any other department or agency of the federal government.

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The Board continues to play a vital role in ensuring that the National Guard and Reserve are adequately manned, equipped, and ready. The Board's insightful guidance to me and to the Department of Defense has been most appreciated.

Sincerely,



Enclosure:
RFPB Annual Report

This report represents the Reserve Forces Policy Board's independent review of Reserve component issues and provides a consensus evaluation of Reserve component programs. It includes the collective views of the Board members and does not necessarily reflect the official policy position of the Department of Defense or any other department or agency of the United States Government.

Reserve Component Programs

The Annual Report of the Reserve Forces Policy Board

Data Based on Fiscal Year 1999

Office of the Secretary of Defense
Washington, DC 20301-7300

March 2000

Reserve Forces Policy Board
Fiscal Year 1999 Annual Report

is dedicated to

William S. Cohen
Secretary of Defense



John J. Hamre
Deputy Secretary of Defense



The Reserve Forces Policy Board is pleased to honor the contributions made by Secretary Cohen and Deputy Secretary Hamre in advancing the full integration of our National Guard and Reserve into the Total Force. Their insightful understanding of the relevance and value of the Reserve components in meeting the nation's defense needs has ensured that the "Total Force" concept became a reality. Under their insired leadership, the Reserve components are actively participating in daily military operations throughout the world. Together, they shared a common vision and resolve to place greater reliance on the nation's Reserve components. Their work has significantly enhanced the effectiveness of the nation's military as it embarks upon a new century. The Reserve Forces Policy Board acknowledges their vital and lasting contributions to the National Guard and Reserve forces of this nation.

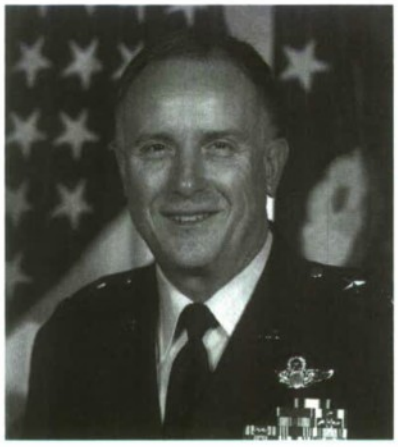
Reserve Forces Policy Board Members



MR. TERRENCE M. O'CONNELL
CHAIRMAN

Chief Operating Officer of Davis O'Connell, Incorporated, Washington, DC. Senior Advisor, National Guard Association of the United States; Political Consultant 1975-1976; Political Director and Assistant to the Executive Director of the Democratic National Committee, 1972-1975. Appointed Chairman, Reserve Forces Policy Board, November 1, 1994.





MAJOR GENERAL WILFRED HESSERT
UNITED STATES AIR FORCE

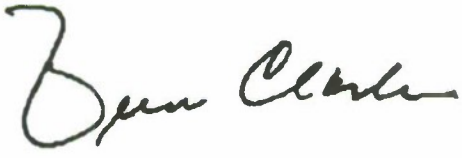
Military Executive, Reserve Forces Policy Board. Deputy Inspector General, Headquarters United States Air Force, 1997-1999. Air National Guard Assistant to Commander US Air Forces Europe, 1996-1997. Wing Commander, 101st Air Refueling Wing, Bangor, Maine, 1991-1996. Assigned to Board July 1, 1999.





VICE ADMIRAL VERNON E. CLARK
UNITED STATES NAVY

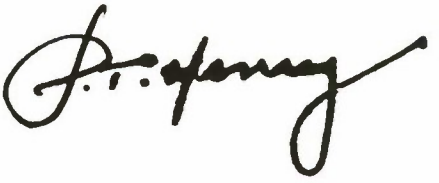
Director, Joint Staff, Washington, DC. Assigned to Board February 10, 1999.





HONORABLE P. T. HENRY

Assistant Secretary of the Army (Manpower and Reserve Affairs), Washington, DC. Assigned to Board August 6, 1998.





MR. PHILIP BERNAL

Deputy Assistant Secretary of the Army (Reserve Affairs, Training, and Mobilization), Washington, DC. Participated on Board since July 1999.

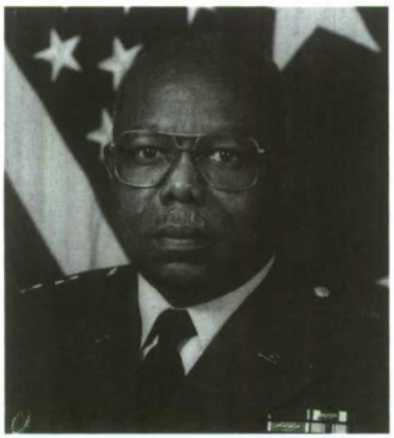




LIEUTENANT GENERAL THOMAS N. BURNETTE, JR. UNITED STATES ARMY

Deputy Chief of Staff for Operations and Plans, Washington, DC. Assigned to Board September 18, 1997.

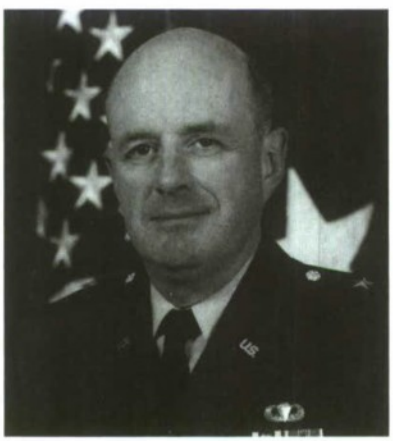




MAJOR GENERAL WARREN L. FREEMAN ARMY NATIONAL GUARD OF THE UNITED STATES

Commanding General, District of Columbia National Guard,
Washington, DC. Assigned to Board May 1, 1997.

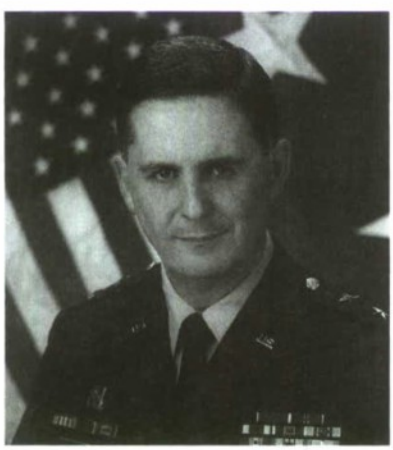




MAJOR GENERAL JOHN R. GROVES, JR. ARMY NATIONAL GUARD OF THE UNITED STATES

The Adjutant General for the State of Kentucky, Lexington, Kentucky.
Assigned to Board June 1, 1997.





MAJOR GENERAL MICHAEL E. DUNLAVEY UNITED STATES ARMY RESERVE

Assistant Deputy Chief of Staff for Intelligence, Washington DC.
Partner, Dunlavey, Ward and Pagliari, Erie, Pennsylvania.
Assigned to Board December 1, 1997.





MAJOR GENERAL CRAIG BAMBROUGH
UNITED STATES ARMY RESERVE

Deputy Commanding General US Army Reserve Command.
Assigned to Board July 1, 1997.





HONORABLE CAROLYN BECRAFT

Assistant Secretary of the Navy (Manpower and Reserve Affairs),
Washington, DC. Assigned to Board October 23, 1998.





MR. MARK DAVIDSON

Deputy Assistant Secretary of the Navy (Reserve Affairs),
Washington, DC. Participated on the Board since May 20, 1998.





REAR ADMIRAL JOHN T. BYRD
UNITED STATES NAVY

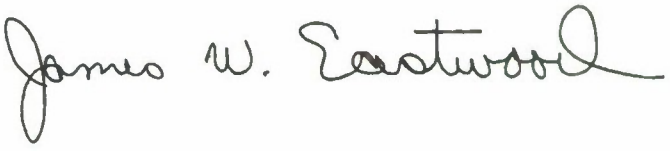
Assistant Deputy for Plans, Policy and Operations, Chief of Naval Operations, Washington, DC. Assigned to Board June 1, 1997.





REAR ADMIRAL JAMES W. EASTWOOD
UNITED STATES NAVAL RESERVE

Deputy Commander in Chief, Vice Commander, CINCLANTFLT, Norfolk, Virginia. President, Granary Associates, Philadelphia, Pennsylvania. Assigned to Board August 1, 1998.





REAR ADMIRAL JAMES P. SCHEAR
UNITED STATES NAVAL RESERVE

Director for Plans, Commander in Chief, U.S. Atlantic Fleet, Norfolk,Virginia. Captain, USAir. Assigned to Board July 1, 1995.





MAJOR GENERAL TERRENCE P. MURRAY
UNITED STATES MARINE CORPS

Assistant Deputy Chief of Staff for Manpower and Reserve Affairs for Reserve Affairs, Headquarters, United States Marine Corps, Quantico, Virginia. Assigned to Board August 1, 1998.





MAJOR GENERAL ARNOLD L. PUNARO
UNITED STATES MARINE CORPS RESERVE

Commanding General, Marine Corps Reserve Support Command, Kansas City, Missouri. Senior Vice-President for Corporate Development (SAIC). Assigned to Board July 1, 1997.





MAJOR GENERAL DENNIS M. McCARTHY
UNITED STATES MARINE CORPS RESERVE

Vice Director for Operations, J3V, USACOM, Norfolk, Virginia. Partner, McCarthy, Palmer, Columbus, Ohio. Assigned to Board October 1, 1996.





HONORABLE RUBY B. DeMESME

Assistant Secretary of the Air Force (Manpower, Reserve Affairs, Installations and Environment), Washington, DC. Assigned to Board July 30,1998.





MR. BRYAN E. SHARRATT

Deputy Assistant Secretary of the Air Force (Reserve Affairs), Washington, DC. Participated on Board since April 14, 1994.





MAJOR GENERAL SUSAN PAMERLEAU UNITED STATES AIR FORCE

Director, Personnel Force Management, Office of the Deputy Chief of Staff, Personnel, Department of the Air Force, Washington, DC. Assigned to Board June 1, 1998.





MAJOR GENERAL WALTER R. ERNST, II
AIR NATIONAL GUARD OF THE UNITED STATES

Deputy Commander in Chief for Mobilization and Reserve Affairs, United States Special Operations Command, MacDill AFB, Florida. Assigned to Board September 1, 1998.





MAJOR GENERAL JOHN H. FENIMORE, V
AIR NATIONAL GUARD OF THE UNITED STATES

The Adjutant General for the State of New York, Latham, New York. Assigned to Board September 1, 1999.





MAJOR GENERAL REESE R. NIELSEN
UNITED STATES AIR FORCE RESERVE

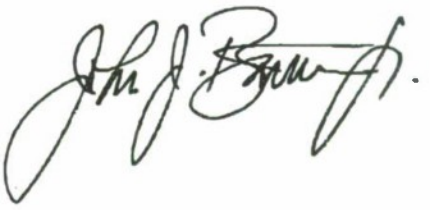
Mobilization Assistant to the Commander in Chief, United States Space Command, Peterson AFB, Colorado. Thiokol Propulsion, Brigham City, Utah. Assigned to Board October 1, 1998.





MAJOR GENERAL JOHN J. BATBIE, JR.
UNITED STATES AIR FORCE RESERVE

Commander, 22ND Air Force, Dobbins ARB, Georgia. Assigned to Board December 1, 1997.





REAR ADMIRAL THOMAS J. BARRETT
UNITED STATES COAST GUARD

Deputy Commander, United States Coast Guard Maintenance and Logistics Command, Atlantic. Assigned to Board June 19, 1997.





REAR ADMIRAL J. TIMOTHY RIKER
UNITED STATES COAST GUARD RESERVE

Senior Reserve Officer, Coast Guard Atlantic Area, Commander (A) Coast Guard Atlantic Area. Ebner & Riker Co., L.P.A., Cincinnati, Ohio. Assigned to Board July 1, 1998.



Staff

Senior Policy Advisor



Colonel Marylin J. Muzny
Army National Guard
of the United States

Senior Policy Advisor



Colonel Bernard M. Cullen
U.S. Army Reserve

Senior Policy Advisor



Captain Robert Filler
U.S. Naval Reserve

Senior Policy Advisor



Colonel David D. Kendrick
U.S. Marine Corps Reserve

Senior Policy Advisor



Colonel Francis Templon
Air National Guard
of the United States

Senior Policy Advisor



Colonel Martin D. Carpenter
U.S. Air Force Reserve

Senior Policy Advisor



LtCol Stephen P. Nasca
U.S. Marine Corps Reserve

Military Assistant



Chief Master Sergeant Gail Paich
U.S. Air Force Reserve

Executive Assistant



Mrs. Trish Elkins

Reserve Force Policy Board Membership Matrix

	DOD	DA		DON		DAF		DOT
CIVILIAN	CHAIRMAN **Mr. Terrence O'Connell**	ASSISTANT SECRETARY OF THE ARMY (Manpower & Reserve Affairs) **Hon. P.T. Henry**		ASSISTANT SECRETARY OF THE NAVY (Manpower & Reserve Affairs) **Hon. Cerolyn Becreft**		ASSISTANT SECRETARY OF THE AIR FORCE (Manpower, Reserve Affairs, Installations, and Environment) **Hon. Ruby B. DeMesme**		
ACTIVE	Director, Joint Staff **VADM Clark**	Deputy Chief of Staff for Operations and Plans **LTG Burnette**		Asst. Deputy Plans and Policy **RADM Byrd**	Ass't Deputy Chief of Staff for Manpower and Reserve Affairs for Reserve Affairs **MejGen Murray**	Director, Personnel Force Management **Mej Gen Pamerleau**		Director Reserve and Training **RADM Barrett**
	MILITARY EXECUTIVE **Maj Gen Shirley M. Carpenter, USAFR**							
RESERVE	**MG Freemen** CG,DCNG	**BG Bembrough** DCG USARC		**RADM Eestwood** Dep Cmdr CINCLANTFLT	**Mej Gen Punero** CG, 4th MarDiv	**Mej Gen Ernst** DCINC, Mob, USSOCOM	**Maj Gen Betble** Cdr 10th AF AFRES	**RADM Riker** Sr. Reserve Officer Atlantic Area
	MG Groves TAG - KY	**MG Dunlavey** ADCS Intelligence USAR		**RADM Schear** VCINC, US Atlantic Fleet	**Mej Gen McCerthy** Vice Dir of Ops, USACOM	**Mej Gen Fenimore** TAG - NY	**Mej Gen Nielson** Mob Ass't CINC SPACECOM	
	ARNG	**USAR**		**USNR**	**USMCR**	**ANG**	**USAFR**	**USCGR**
	ARMY			**NAVY**		**AIR FORCE**		**COAST GUARD**

Former Members and Staff

The following Reserve Forces Policy Board members and staff participated with the Board during the past year:

- Major General Shirley (Sam) Carpenter, USAFR
- Lieutenant General Russell C. Davis, ANGUS
- Colonel Frank C. Khare, ANGUS (Ret)
- Major General Fred H. Lawson, USAR (Ret)
- Major General Robert McIntosh, USAFR
- Colonel Margaret Novack, USAR (Ret)
- Major General Thomas J. Plewes, USAR
- General Eric K. Shinseki, USA
- Major General Joseph D. Zink, ANGUS (Ret)

Liaison Officers

The following individuals served as liaison officers to the Board or points-of-contact in preparation of the Board's annual report:

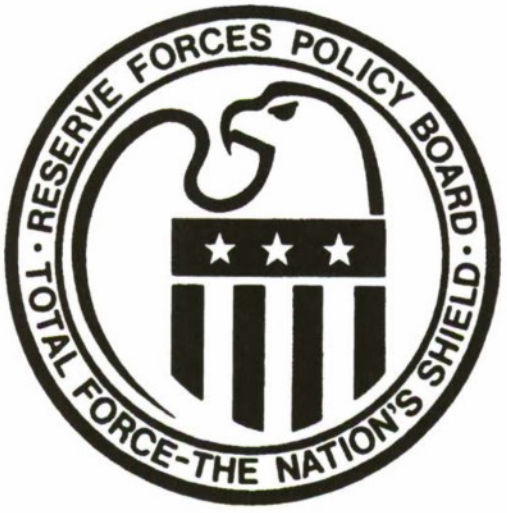
- Major Gregory Bennett
  Headquarters, United States Marine Corps
- Mr. Barry Berkley
  Army National Guard Bureau
- Major Margaret Bond
  Office of the Assistants to the CJCS for National Guard and Reserve Matters
- Lieutenant Colonel Deb Broadwater
  Office of the Deputy Under Secretary of Defense for Program Integration
- Lieutenant Colonel John Carey, USMCR
  Headquarters, United States Marine Corps
- Ms. Kathleen Ciccotelli-Ward
  Washington Headquarters Service Graphics Division
- Ms. Colleen Cosgriff
  Washington Headquarters Service Graphics Division
- Colonel Bruce Davis
  National Guard Bureau
- Mr. Scott Davis
  United States Army Visual Information Service
- Colonel Don Fick
  Headquarters, U.S. Air Force
- Major Chris Goggins
  Office of the Chief, Air Force Reserve
- Colonel Michael P. Hallanan
  National Committee for Employer Support of the Guard and Reserve
- Major Mike Hadley
  Army National Guard Bureau
- Mr. Jim Hemenway
  Office of the Assistant Secretary of Defense for C3I
- Colonel Robert Jarecke
  Headquarters, U.S. Air Force
- Mr. Richard Jeffries
  Air National Guard Bureau
- Lieutenant Colonel Margaret Kuhn
  Office of Assistant Secretary of Defense for Public Affairs
- Commander William J. Lane
  Office of the Director, Naval Reserve
- Lieutenant Colonel Neil Lazendorf
  Office of the Deputy Under Secretary of Defense for Readiness
- Ms. Debra McCorkle
  Office of the Assistant Secretary of Defense for Force Management
- Senior Master Sergeant Troy McIntosh
  Office of the Chief, Air Force Reserve
- Lieutenant Colonel Jane Meyer
  Office of the Assistant Secretary of Defense for Health Affairs
- Lieutenant Colonel Mike Miller
  Office of the Assistant Secretary of Defense for Legislative Affairs

- Mr. John Morris
  Office of Defense Printing Service
- Major Barbara Mossl
  Air National Guard Bureau
- Commander Richard Page
  Office of the Assistant Secretary of the Navy for Manpower and Reserve Affairs
- Lieutenant Colonel Charlie Pate
  Office of the U.S. Army Deputy Chief of Staff for Operations
- Commander Dale Rausch
  Headquarters, U.S. Coast Guard
- Major Kevin Reidler
  Office of the Chief, U.S. Army Reserve
- Colonel Blair Ross
  Office of the Deputy Under Secretary of Defense for Policy
- Ms. Jan Soares
  Office of the Under Secretary of Defense, Comptroller
- Ms. Caral Spangler
  Office of the Under Secretary of Defense, Comptroller
- Mr. Fred Sylvester
  Office of the Deputy Under Secretary of Defense for Environmental Security
- Lieutenant Colonel Paul Vann
  National Guard Bureau
- YNCS Tom Vieira
  Office of the Assistant Secretary of the Navy, Manpower and Reserve Affairs
- Colonel Dan Williams
  Office of the Assistant Secretary of Defense for Special Operations and Low Intensity Conflict
- Major Liz Wilson
  Office of the Assistants to the CJCS for National Guard and Reserve Matters
- Lieutenant Colonel Willie Windsor
  Office of the Deputy Under Secretary of Defense for Installations

Contingency Support Staff

The Board is also supported by individuals from various Reserve components who provide administrative support for Board quarterly meetings, assist in the preparation of the annual report, and assist on special projects. Those who served the Board as Contingency Support Staff during Fiscal Year 1997 are listed below:

- Major Kasse A. Andrews-Weller, USAFR
- Staff Sergeant David B. Epperson, II, USAR
- Master Sergeant Janice I. Filburn, USAFR
- Major Cheryl Kenschaft, ANGUS
- Colonel Mary Jane Koch, USAFR
- Major Ruth Larson, USAFR, Writer/Editor
- Captain Sam Wright, USNR



The logo of the Reserve Forces Policy Board represents the Total Force as the shield for the Nation. The United States is identified by its national symbol, the eagle. The blue field (see front cover) represents the Military Departments of the Army, Navy, and Air Force. The Marine Corps is a part of the Department of the Navy. The Coast Guard may become a part of that Department in time of war. Integrated in that field are three stars depicting the Active component, National Guard, and Reserve. The seven vertical stripes of the shield stand for the seven Reserve components: Army National Guard, Army Reserve, Naval Reserve, Marine Corps Reserve, Air National Guard, Air Force Reserve, and Coast Guard Reserve.

The Annual Report of the Reserve Forces Policy Board is a reflection of the consensus of the 24-member Board. Although most recommendations and proposed policy changes have unanimous support, this report does not purport that the Board members, the Military Services, or the Department of Defense concur with every recommended action or position.

The Annual Report contains the Board's independent review of Reserve component issues and a consensus evaluation of Reserve component programs. The report includes the collective views of the Board members and covers the period of October 1, 1998 through September 30, 1999.

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Total Reserve Strength ..... Inside Back Cover

Introduction

The end of the 20th Century has brought about remarkable changes for the Reserve components. The United States' new role as the world's only remaining superpower, coupled with a dynamic global military environment, has transformed the way in which Reserve components are used. The Reserve Forces Policy Board takes pride in its role in ensuring that members of the National Guard and Reserve receive the equipment and training needed to take on their newly expanded missions. The Board also has been actively engaged in efforts to eliminate residual barriers to integration of the Active and Reserve components.

As the Reserve components play an ever-increasing role in the military's National Military Strategy, the Board believes it is essential that our national leaders continue to review the missions of the Reserve components, to ensure they are being used most effectively. There is anecdotal evidence that the escalating reliance on the Reserve components is beginning to be reflected in declining recruiting and retention figures. While the Reserve components represent a valuable asset to augment full-time forces, the Guard and Reserve are finite resources. Members also have peacetime obligations to communities across the nation. Guardsmen and Reservists are fully prepared to carry out whatever missions they are assigned. Nevertheless, the Board would caution that the Reserve components should not be used to mask other problems facing the military as a whole, such as inadequate funding or insufficient manpower to fulfill a growing global mission.

Policy and Legislative Initiatives

The Board addressed a number of pressing issues during Fiscal Year 1999. The following six issues represent the Board's top priorities.

Fairness of Pay and Benefits

Providing fair pay and benefits represents one of the most important issues facing Reservists and their families. While progress has been made in recent years, significant disparities remain between pay and benefits for Reservists and those of their Active Duty counterparts. The Reserve Forces Policy Board believes it is essential that pay and benefits be applied fairly, regardless of an individual's duty status.

Congress took a major step to address these disparities in 1997 when it directed the Department of Defense to look at pay and benefits for Active Duty members and Reservists called to Active Duty. Congress also asked the department to recommend possible changes to the law that would eliminate any significant disparities resulting solely from requirements involving the length of time a member spent on Active Duty.

A working group identified six areas where changes were warranted:

- Housing allowances for members without dependents
- Housing allowance rates for Reserve component members
- Cost of Living Allowances (COLAs) for the continental United States
- Leave entitlements
- Medical care for family members
- Disability severance pay.

Defense Department leaders have recognized that these issues exist, and the Office of Secretary of Defense for Reserve Affairs, in particular, has been actively working to address them. However, some issues remain for members of the Reserve components and their families. To adequately address these issues will ultimately require additional funding.

The requested report to Congress on pay and benefits disparities is in the final stages of coordination, and is expected to be sent to Capitol Hill later this year. However, it should be noted that the report will not address the full range of pay and benefits disparities between the Active and Reserve components, since it considers only Guardsmen and Reservists on Active Duty. The Board believes there is still a need for a comprehensive comparison of pay and benefits for all members of the Reserve components.

National Guard and Reserve Equipment Appropriation

The Reserve components have used the National Guard and Reserve Equipment Appropriation (NGREA) as a funding lifeline when other parent service appropriations were insufficient to meet their mission requirements. Creation of NGREA also reflected the reality that the Reserve components were not effectively involved in establishing requirements and allocating resources.

Several years ago, the Department of Defense reiterated that each of the parent services was solely responsible for funding the equipment needs of its Reserve components. This requirement was reflected in the Department of Defense Directive that required the services to address their Reserve equipment problems. This initiative also would eliminate the need for Congress to add funding outside of the formal budget process to support National Guard and Reserve equipment requirements.

However, the reality of implementing this initiative has proven to be far more difficult than expected. Top line budget constraints mean that the Active forces are hard-pressed to find sufficient funding for their own equipment needs, let alone those of the Reserve components. As a result, elimination of this equipment appropriation without a corresponding increase in parent service support would severely hamper the Reserve components' ability to provide equipment upgrades, training and modernization. This funding issue ultimately becomes a readiness issue, because it limits the Reserve components' ability to fully participate in day-to-day Total Force operations.

Over the years, NGREA funds have helped fill important needs for the Reserve components. For example, NGREA was used to purchase targeting pods for Guard and Reserve aircraft. These targeting pods were critical to the use of air assets in Kosovo and Southwest Asia. Congressional interest in intra-theater airlift also contributed significantly to the successful implementation of war plans in these regions. Army Guard and Reserve readiness programs have been enhanced by NGREA funding, as has Navy aviation support and information technology support.

Since 1997, NGREA funding has diminished significantly, and this decline is expected to continue to zero in the 2001 budget cycle. While the parent services are now programming additional equipment and modernization funds, the level of real funding for these programs in the Reserve components has remained relatively static. Without NGREA, or more equitable support by parent services, National Guard and Reserve personnel and units cannot achieve the readiness levels necessary to meet National Military Strategy requirements.

The Reserve Forces Policy Board unanimously supports the immediate resolution of this problem before NGREA funding is eliminated. The Board believes this funding source will remain critical to the readiness of the Reserve components until the parent services, in conjunction with Guard and Reserve leadership, establish mutually agreed-upon priorities.

Personnel Reliability Program

The Personnel Reliability Program (PRP) is designed to ensure that personnel performing duties involving nuclear weapons meet

the highest possible standards of reliability. Throughout the Cold War, Selected Reservists were full partners in the nuclear mission and stood nuclear alert missions alongside their Active Duty counterparts. But in the Cold War's aftermath, when strategic and tactical nuclear missions were consolidated in the Active components, Guardsmen and Reservists were excluded from the PRP.

Recent studies considering the merits of transferring dual-mission assets such as the B-52 and B-1B bomber to the Reserve components have rekindled interest in reopening PRP to Guardsmen and Reservists. The current Reserve component exclusion would limit these strategic assets to conventional missions. In addition, the PRP exclusion would hinder future efforts to fully integrate the Reserve components into space and nuclear security force missions.

After more than two years of effort to overhaul the PRP program directive, the Defense Department has reached a tentative compromise that would allow Selected Reservists to participate in PRP. At issue was how the program requirement for "continuous observation" would be applied to Guardsmen and Reservists. The draft directive, now in formal coordination, establishes a single Active and Reserve standard for continuous observation. This standard is defined as a minimum of 12 days per month with no more than 14 days between observations. Although this compromise will enable Reserve component units to be assigned nuclear missions, the Board has reservations about establishing minimum PRP requirements based on physical observation, rather than mission proficiency or training metrics.

Recruiting and Retention

The increased use of the Reserve components is beginning to take a toll on the force. Participation levels now average well above the traditional "two weeks a year, one weekend a month" commitment once expected of Reservists. In Fiscal Year 1986, the Reserve components contributed 900,000 mandays; by Fiscal Year 1999, that figure had jumped to 12.5 million mandays. The added strains on individual members and their families are now being reflected in recruiting and retention figures for the Reserve components, much as they have been for some time in the Active forces.

No one issue is responsible for the increase in members leaving the Guard and Reserve and the increased difficulty in signing up new members. Instead, it is a combination of a number of factors. For example, there have been dramatic increases in the number and length of deployments members are being asked to support, along with the amount of time devoted to training for both combat missions and peacekeeping duties. Members have reported increasing employer concerns at the amount of time they are being asked to devote to their Reserve duties.

Compounding these problems is the fact that pay and benefits have not yet caught up with the escalating demands being made on members of the Reserve forces. Continuing to use the Reserve components at such high levels without adequate compensation will only exacerbate the situation. The Reserve components may be nearing the threshold at which many of its members decide the time and effort required to participate is too high for the level of compensation received, and they opt to leave.

Recruiting and retention are complex issues, the result of several contributing stressors. Addressing these problems will require a complex web of solutions, as well. Nevertheless, the Reserve Forces Policy Board believes it is essential that these issues be given careful examination before they begin to affect the Reserve components' ability to operate effectively.

Tax Incentives for Employers

The growing reliance on the Reserve components to perform day-to-day military operations brings with it the potential for conflicts with Reservists' civilian employers. For years, employers had become accustomed to losing their employees for their two-week annual tours and for one weekend a month. However, longer tours and more frequent deployments may have already begun to strain the relationship with companies that had previously supported the Guard and Reserve. Some form of incentives for employers of Guard and Reserve members could help alleviate this friction.

The National Committee for Employer Support of the Guard and Reserve reports there are rising levels of concern over the increased absence of their employees because of military duties. In particular, civilian employers are increasingly resistant to longer absences and more frequent mobilizations. Yet with the escalating number of humanitarian and peacekeeping missions, this trend is expected to continue for the foreseeable future.

Tax incentives have been proposed as one option for some employers. However, the impact of such tax incentives varies widely, depending on the size of the company and the number of Guardsmen and Reservists it employs. Moreover, the cost of such a tax change must be factored in with the many other complex factors affecting the federal budget, such as spending caps and budget surpluses. In addition, employers such as federal, state and local governments would be unaffected by such a tax incentive program.

Nevertheless, some form of congressional recognition for employers of Guardsmen and Reservists would be beneficial on a number of fronts to offset the impact of extended absences for military duty. Such incentives would serve to recognize the sacrifices – financial and otherwise – employers have made to support the National Guard and Reserve. It would be prudent to address this issue before it becomes a major problem for members and prompts them to consider leaving the Reserve components to avoid jeopardizing their civilian jobs.

Three-Star Issue

The Board considered the issue of the appropriate level of rank for the directors and chiefs of the Reserve components, and supports elevating these leadership positions to three-star rank. At the current two-star-level, the Reserve component chiefs are at a disadvantage when competing with leaders of the Active components for funding and other resources. Such a change would also demonstrate respect for the men and women serving in the Reserve components by bringing their leaders' rank closer to that of their Active Duty counterparts. Several past studies support this action, including the 1992 Hay Group report, and the Board's own report to Congress in response to a directive in the 1997 Defense Authorization Act.

Although there were positive indications of support from the services on elevating the Reserve component chiefs to three-star rank, particularly if additional three-star headroom were provided, no action occurred until Congress authorized the promotions. President Clinton signed the Fiscal Year 2000 National Defense Authorization Act, which contains provisions allowing Reserve component chiefs to be promoted to the higher grades. However, because of the lack of headroom, no Reserve component chiefs have been promoted in the year since the provision became law.

At issue is the question of additional three-star authorizations. The Reserve Forces Policy Board believes the solution is to create six additional three-star authorizations, with the caveat that this change would result in no net increase in the total number of general officer positions

currently authorized by law. These six additional authorizations could be created by converting existing one- and two-star authorizations.

The desired promotions could be achieved by adding the following language to Title 10, Section 525 (b): "The directors and chiefs of the Reserve components are in addition to the number that would otherwise be permitted for that officer's armed force for officers serving on Active Duty in grades above O-8 under paragraph (1) and (2)."

Board Activities

Visit to Pacific Command Headquarters, January 11-14, 1999
Far East Trip, November 12-23, 1999

One of the Board's on-going initiatives has been to visit all nine Unified Combatant Commands, a practice initiated in 1995. Meeting with commanders and their forces in the field has proven to be a productive approach, since the impact of legislative and departmental policy changes is most keenly felt at this level. In fact, these visits have been the source of many issues the Board has addressed in recent months.

The visits to Pacific theater in January and November 1999 marked the completion of the Board's field trips to Unified Combatant Commands. During the first leg of the trip in January, Board members also visited U.S. Marine Forces, Pacific, U.S. Pacific Fleet, Pacific Air Forces, and U.S. Army Pacific, including the 9th Regional Support Command and Hawaii National Guard. Admiral Joseph W. Prueher, the Commander-in-Chief, U.S. Pacific Command, emphasized that augmentation by Reserve component members was critical to the command's ability to maintain military and economic stability in the region.

During the second phase of the Pacific theater trip in November, Board members visited military installations in Japan, Korea and Thailand. The Board found that the Active forces in the region have made impressive progress in using Reserve component resources to address their mission requirements. While some procedural issues remain to be resolved, there is a clear commitment by commanders to fully use all available Reserve component assets.

In general, Board members found that Active Duty commands in the Pacific theater consider their Reserve components to be a valuable resource. As a result of personnel shortages in some critical career fields, Guardsmen and Reservists are being used extensively to support both routine operations and major exercises in the region.

Major Issues and Concerns of the Pacific Command

Several common themes emerged during the course of the Board's visits to the Pacific region. For example, the command relies on Reserve component units on annual training to provide a wide range of mission support, including engineering construction projects, aviation maintenance, fuel handling, intelligence production, civil affairs, and psychological operations. In addition, Individual Mobilization Augmentees (IMAs) are increasingly being used to make up for Active Duty personnel shortages. Reserve component members, especially IMAs, also provide essential continuity for major exercises such as Ulchi Focus Lens and Foal Eagle.

While commanders were strongly supportive of the Guardsmen and Reservists affiliated with their operations, they also voiced a number of concerns about difficulties encountered in obtaining the services of the Reserve components:

- **Simplification of Administration and Funding:** Pacific Command officials stressed the importance of having ready access to qualified members of the Reserve components to augment certain critical specialties. Having Reserve component members assigned to the manpower and

personnel directorate is especially helpful in obtaining and funding Guardsmen and Reservists in key specialties.

However, the process used to bring Reserve component members on board remains a fundamental frustration to the Active Duty community. Each of the Reserve components uses different criteria for allocating and funding mandays. Policies also vary widely by component on the funding of per diem and travel. Commanders recommended that the Department of Defense establish clear and uniform standard for funding Reserve component support to the Active components.

The mechanics of gaining access to members of the Reserve components is not only complex and time-consuming, but it varies from service to service. Officials told the Board that it was essential that procedures be simplified to access Reserve components, especially for short-notice, peacetime contingencies. In particular, they recommended that the Board address the need for standardizing Reserve component pay and personnel systems, terminology, and travel and duty orders. They also suggested that the Department of Defense consolidate funding categories and adopt standard manpower codes for career specialties.

- **Extending Annual Tour Lengths:** Because the great distances involved in traveling from the United States to Japan or Korea, many Reservists are forced to use a portion of their 12- or 14-day annual tours to accomplish in-processing or out-processing activities, or to make return travel arrangements. As a result, they often must leave before the completion of an exercise or operation in which they play critical roles. Many commanders recommended that the Department of Defense establish a standard 21-day annual tour for U.S-based Guardsmen and Reservists operating in the Pacific region.

- **179-day Issue**: The Pacific Air Forces commander said that it would often be useful to keep a well-qualified Guardsman or Reservist on duty with the command for longer than 179 days. However, under current law, Reserve component members cannot serve longer than 179 days without being counted against Active component end strength. The Board agrees that Title 10 should be modified to exclude Reserve component tours of more than 179 days from being counted against Active component end strength. Such a change would not only offer greater flexibility and continuity for the combatant commands, but would also provide greater access to the Reserve components.

- **General Officer End Strength Relief**: Reserve component general and flag officers who serve more than 180 days are currently counted against the Active component end strength, under Title 10. Pacific Command officials recommended that Title 10 be amended to allow these senior officers to serve for longer periods without counting against Active end strengths. This would enable the commands to make better use of the management and leadership skills of these senior-level officers, as well as providing essential continuity for command operations.

- **Equipment Compatibility***:* The commander of Pacific Air Forces reported that Active and Reserve component forces continue to use different equipment systems. The lack of compatibility between the systems represents a major deterrent to operational integration of Active and Reserve forces. Standard munitions and equipment should be required for all segments of the Total Force, to help improve force integration.

- **Joint Professional Military Education:** An increasing number of Reserve component officers are being assigned to joint commands. But unlike their Active Duty counterparts, these individuals generally

have not had the benefit of Joint Professional Military Education to provide them with the fundamental knowledge of joint operations. The services do not presently program slots in Joint Professional Military Education courses for members of the Reserve components. Pacific Command officials also recommended that all full-time support officers attend the Armed Forces Staff College before reporting for a joint duty assignment.

Education Summit

In January 1999, Secretary of defense William Cohen directed the Reserve Forces Policy Board to sponsor a DoD Education Summit. Secretary Cohen wrote, "This summit will establish educational objectives and policy guidelines designed to achieve a more Total Force approach for all military education programs. The summit should specifically address the areas of course content, curriculum structure, and methods of instruction." He further stated, "Creating a truly seamless Total Force requires an educational process that begins upon entering military service and continues throughout one's career."

- **Background**

The education summit was held in May 1999 and was the culmination of a series symposia sponsored by the Reserve Forces Policy Board in support of Total Force integration. The symposia focused on developing the understanding and participation needed by all parties to effectively structure the Total force for the challenges of the 21st Century. The symposia participants acknowledged that long standing cultural and structural barriers must be resolved before the Total Force can become a reality.

Reserve Forces Policy Board efforts have drawn from two primary sources; 1) an extensive series of meetings with the Unified Combatant Commands to identify Total Force barriers and; 2) a series of focus groups conducted in Fiscal Year 1998 that identified cultural and structural barriers to integration. These barriers were addressed during a July 1998 symposium at the National Defense University. There it was determined that a large percentage of the barriers were due to the lack of knowledge and understanding about the Reserve components, their capabilities and strengths.

Recommendations to address these barriers to integration fell into two categories; 1) more effective education throughout a member's military career, and; 2) increased opportunities for integration in training and exercises. The July 1998 symposium consensus was that the Services should re-think military education and that current commissioning and Professional Military Education (PME) courses at all levels are inadequate in describing the roles and missions of the Reserve components.

- **Education Summit – May 1999**

The 1999 Education Summit participants included the key leadership from the Services' educational organizations and the Reserve components. Work at the Summit centered on Secretary Cohen's charge, "I ask you to harness that spirit at this summit by providing sound recommendations that will educate all Service members on the imperative of viewing Active, Guard, Reserve and DoD civilians as integral partners of the same team. I look to you to improve the professional military education system, and, in so doing, to better prepare tomorrow's military personnel for service in the Total Force."

Shaping course content, curriculum structure and opportunities for greater access to Professional Military Education and Joint Professional Military Education for all service members were topics addressed at breakout and joint sessions at the two-day summit. Congressman Ike Skelton (D-MO), former Chairman of the Panel on Military Education

of the House Armed Services Committee wrote participants commending Secretary Cohen for taking the first steps toward implementing the Reserve Component provision of the Goldwater-Nichols Act. Results of the summit included a shared vision, principles, and policy elements for Total Force education. The draft report was published in June1999 and sent to all attendees for their comments. Subsequently, at the July 1999 Board meeting all the input from the participants was addressed and reviewed by the Board. The Education Summit Report was then unanimously approved for publication.

After a brief meeting with the Secretary of Defense, the Board met to brief the Deputy Secretary of Defense regarding the results of the Education Summit and recommendations. Dr. Hamre commended the Board on the summit outcomes and the inclusion of the civilians employees. He stated "it is crucial that we all know and appreciate our respective roles, particularly the role of the citizen soldier as the linkage between national security policy and the will of the people".

- **Total Force Education Memo**

The Total Force Education memo was published February 3, 2000. The Secretary of Defense wrote, "In order to make integration a reality and to function effectively as a Total Force, there must be a greater understanding of each of the components beginning early in one's career. Relevant information about Active, Guard, Reserve, and Civilian components should be embedded in the content of the course curriculum from basic training and pre-commissioning through the most senior level schools, commensurate with the students' rank, level of responsibility and appropriate professional development. In short, more effective education is the key to effective integration."

He further stated, "Educational institutions also must ensure that their faculty is adequately prepared to instruct these topics. As a minimum, topics should include: principles and values of the civil-military foundation of the United States; constitutional and legal basis of our military institutions; history and evolution of the Active, Guard and Reserve; the role of the citizen soldier as the linkage between national security policy and the will of the people; wartime and peacetime missions; Reserve component structure and capabilities; activation and mobilization processes; effects of activation as it relates to family, employers, and the community; employment of Reserve component units and individuals and the role of DoD civilian personnel including political appointees and permanent government employees."

He also directed that the "service schools should have a flexible combination of delivery systems with courses designed from the beginning for easy access by Active, Guard, Reserve and Civilian members of DoD. The delivery system utilized should be based on individual needs and availability. Equal career educational credit should be the same regardless of the delivery mechanism. Increased use of advanced distributive learning will ensure educational opportunities for members of all components." He closed by asking the leadership of DoD, JCS, and the Services "to enact these total force education measures that I've detailed in this memorandum to create the proper environment for an integrated, seamless Total Force for the 21st Century."

Alumni Meeting, September 21-22, 1999

During this annual gathering, current and former Board members were given a number of briefings on the latest initiatives within the Reserve components community.

- **Smart Card Initiative**: The Board was briefed on the so-called "Smart Card." The Navy was the lead service in this initiative, but each of the military services has had pilot programs underway to test the feasibility of using a single card to perform a variety of functions.

For example, the card would serve as an ID card, allow physical access to secure areas, and also keep an electronic record of an individual's medical, dental, personnel and training records.

Based on the success of these pilot programs, Deputy Secretary of Defense John J. Hamre issued a memorandum to all services in November 1999, directing them to adopt a standard smart card throughout their organizations. "The department is committed to innovation through the reformation of business process and exploitation of technology to achieve our goal of efficiency and improved effectiveness," Mr. Hamre wrote. "Now is the time to adopt smart cards throughout the department and realize the potential that this technology offers."

- **Anthrax Immunizations:** The Board received a comprehensive briefing from the Anthrax executive agent on the Defense Department's Anthrax vaccine immunization program. The Board agreed to further explore the Anthrax issue with additional briefings. Based on the results of these briefings, the Board voted to forward letters of support to the Secretary of Defense and Congress.
- **Information Operations/Assurance:** The Board received a briefing from the Office of the Secretary of Defense for Reserve Affairs on Information Operations and Information Assurance programs within the Reserve components. Information Operations (IO) programs are designed to defend U.S. information systems and associated information, while taking steps to affect an adversary's information systems. Information Assurance (IA) programs are designed to protect critical information, to ensure its integrity, confidentiality, and availability.
- **Reserve Component Employment:** Major General James Andrews, Deputy Assistant Secretary of Defense for Readiness, Training and Mobilization, briefed the Board on the Reserve Component Employment (RCE-05) study and the 20 follow-on initiatives now underway. These efforts are designed to find ways to more effectively use the Reserve components and to achieve a higher level of integration with the Active forces.

Among the issues being considered by these follow-on assessments are:

- Reserve component readiness
- Reserve component integration in Information Operations and Information Assurance
- Reserve component force structure, to respond to changing world situations
- Training technology policy
- Collective and unity training policy
- Individual and institutional training

The Reserve Forces Policy Board looks forward to continuing its tradition of helping the Reserve components become integral members of the Total Force team. The Board stands ready to meet these emerging challenges at the dawn of the new century.


DEPARTMENT
OF
DEFENSE

Executive Summary

Introduction

The nation's military forces are facing unprecedented challenges as they enter the 21st Century. In the decade since the Cold War ended, the world has witnessed radical changes in the global political and military climate. With the fall of the Soviet Union, the United States became the world's only remaining superpower. That role entails both new risks and new opportunities.

America's armed forces have had to shift their focus as well, to adapt to the dynamic world situation. The military strategy of defending the Cold War's static frontiers has now been replaced with a military posture of global engagement. This strategy involves not only shaping the global environment, but also responding to contingencies wherever the nation's interests are at stake.

As the nation's military strategy has evolved, so too has the role of the Guard and Reserve. The Reserve components are no longer viewed solely as trained forces being held in reserve in case of a major war. They are increasingly being used to provide specialized service and to augment the daily operations of Active Duty forces strained to the limit by frequent deployments and high operations tempo. In addition, the Reserve components are being called upon more frequently and for longer periods to participate in contingency operations around the globe. Members of the Guard and Reserve are serving everywhere there is a need for an American military presence, from Eastern Europe and Southwest Asia to South America.

The Reserve components are full-fledged members of the nation's defense team. Few military operations today could succeed without their support and participation. But they must be adequately funded and equipped to continue their expanded role in defending America. This report will present a detailed picture of the state of today's Reserve component forces, as they look forward to a new millennium of defending freedom.

Roles, Missions, and Operations

The basic mission of each of the seven Reserve components is to maintain properly trained and equipped units and individuals available for prompt mobilization for war, national emergency, or other contingency operations.

The military's long-sought goal of a "Total Force," where the Reserve components are an integral part of the equation, has been a cornerstone of America's defense strategy for 30 years. Defense leaders have repeatedly stressed the importance of integrating the Reserve components into the entire spectrum of military operations. Substantial progress has been made toward achieving this goal in recent years. Nevertheless, it has remained a work in progress, as officials sought to eliminate institutional and cultural barriers between the Active and Reserve forces.

Today that Total Force Policy is becoming a reality, almost by necessity. The Active forces have seen their ranks reduced by nearly a third since the Gulf War was fought in the early 1990s. The Guard and Reserve have also downsized, yet they have been instrumental in taking on many of the missions formerly carried out by Active forces.

As defense budgets continue to decline, the Reserve components are likely to become an even more valuable commodity. Most Guardsmen and Reservists are on military duty for 100 days or fewer each year, yet they are readily available in case of a national emergency. The Reserve

components represent a cost-effective means of enhancing the Active forces' ability to operate effectively in an uncertain world.

Still, some barriers remain between the Active and Reserve components that continue to hinder the Reserve components' ability to achieve their full potential. In the past, Reserve components have been funded at lower levels than Active forces, or received "hand-me-down" weapons and equipment from the Active components. However, changes are underway in the overall budget process that attempt to involve the Reserve components earlier in the process to limit future inequities. Operating with equipment that is outdated or incompatible with Active units severely limits the Reserve components' ability to operate on today's high-tech battlefields.

Reserve components now represent a larger percentage of the total military force than ever before. The Guard and Reserve support an increasing number of missions both at home and abroad. Their missions have expanded in recent years to include space operations, undergraduate pilot training, national missile defense, intelligence, special operations, and other vital areas. Reserve components are on the cutting edge of the nation's anti-terrorism efforts, with the creation of civil support teams for use in case of incidents involving weapons of mass destruction.

Defense leaders continue to explore new opportunities for the Reserve components. One of the most successful approaches has been to encourage the services to let Guardsmen and Reservists replace their Active counterparts in real-world operations. This not only provides critical real-world training for Reservists, but also relieves the high operational tempo of Active forces.

Reserve components participated in a variety of real-world operations during Fiscal Year 1999. National Guard and Reserve units were involved in operations in Bosnia, Kosovo, and Southwest Asia, among others. Other units played critical roles in humanitarian assistance missions, such as the massive disaster relief efforts in Central America and the Caribbean following Hurricanes Mitch and Georges.

The Reserve components have played a pivotal role in assisting officials in fledgling democracies in Eastern Europe. Many of these countries had been under totalitarian rule for decades, and are still struggling to make the transition to democracy. Joint Military Contact Teams have used their expertise to provide assistance in a variety of disciplines, from civil engineering to human rights.

Members of the Reserve components can offer that same expertise here at home. Perhaps the most visible form of assistance comes in the form of disaster relief operations. But other community assistance programs provide essential engineering or medical services to local communities, along with providing critical training to Reservists. Programs such as 'Adopt-a-School' and drug awareness mentoring programs also offer opportunities to showcase these "citizen soldiers" in their own hometowns. These programs help forge a valuable bond between the civilian community and members of the military, a mission the Reserve components are uniquely equipped to accomplish.

Funding

All the Reserve components are being asked to increase their support of Active forces, a challenge that will likely require additional funding, manpower and equipment. The new global military environment also has necessitated a fundamental restructuring of many of these forces. At the same time, the Reserve components are struggling to overcome years of under-funding of programs ranging from personnel to military construction.

As always, the top funding priority has been to ensure that forces are prepared to fight and win. But the evolving force structure within

each of the Reserve components has made it especially challenging to determine the necessary funding profile in recent years.

One of the most critical challenges facing all the services is weapons modernization. This is a particularly sensitive issue to the Reserve components, which have historically been equipped with less up-to-date weapons and equipment than the Active forces. With the declining pace of the post-Cold War military drawdown, however, fewer Active units are able to transfer their equipment to the Reserves. Funding constraints have made it difficult for the Reserve components to maintain their aging equipment, let alone modernize the inventory. As a result, Reserve forces are in danger of becoming obsolete on the battlefield unless they are given sufficient resources to upgrade their own weapons and equipment.

Adequate funding also is critical to maintaining other key readiness components, such as training. It is essential to fully fund the Reserve components' Operation and Maintenance accounts, which represent the primary means of funding readiness training and equipment. To overcome funding shortfalls experienced by the Reserve components in previous years, the Defense Department has made a concerted effort to increase support to the Reserves in coming years.

Force readiness also means meeting the needs of members and their families, by supporting quality of life issues such as pay and benefits and facilities. The morale and welfare of military members directly affects readiness, as well as retention and recruiting.

The escalating pace of contingency operations continues to pose a funding challenge to the Reserve components. The Reserve components do not set aside funds for contingency operations. If Congress does not appropriate funds for such operations, they have to be funded from the training accounts. The impact on training of the increasing numbers of contingency operations remains to be seen.

During Fiscal Year 1999, the Reserve components continued their extensive support of Active force contingency operations, humanitarian assistance, counter-drug missions, and training exercises. Reserve component support was essential to the success of these missions, and would have been impossible without adequate funding.

Manpower, Personnel, and Force Structure

The decade since the fall of the Berlin Wall has seen stunning changes in both the Active and Reserve forces. As a result of the military drawdown, the ranks of the Active forces dropped by more than a third, while Reserve forces declined by nearly one-fourth. Nevertheless, military forces have seen an overall increase in the number of operations they have been asked to support around the world. Guardsmen and Reservists are operating everywhere their Active Duty counterparts are, supporting both contingencies and routine military operations.

Moreover, the military's fundamental missions are undergoing a transformation. No longer will these forces be configured solely to fight and win the nation's major wars. Instead, they must be structured to effectively take on non-traditional missions such as peacekeeping, humanitarian assistance, homeland defense against weapons of mass destruction, counter-drug operations, and other non-combat operations. Each of the services is actively engaged in re-tooling its forces to meet these new demands. This involves downsizing or closing some units, while activating or expanding others that provide critical skills.

With the greater demands being placed on the Reserve components comes the potential for conflict with members' civilian employers. For years, employers had become accustomed to losing their employees to the Guard and Reserve for their two-week annual tours and

one weekend a month. However, longer tours and more frequent deployments may already have begun to strain the relationship with companies that had previously supported the Guard and Reserve. The National Committee for Employer Support of the Guard and Reserve indicates that employers are beginning to voice concerns over the growing burdens associated with increased use of the Reserve components.

Ironically, just as the Reserve components are the most in demand, they are beginning to have difficulty attracting adequate numbers of personnel. Several of the Reserve components fell short of their recruiting goals in Fiscal Year 1999. They are facing many of the same recruiting obstacles as the Active Duty forces. A booming economy has created an extremely attractive civilian employment picture and produced record low unemployment rates. In addition, fewer young people are expressing interest in joining the military, even on a part-time basis. But the Reserve components also must contend with the declining number of individuals leaving Active Duty, which has reduced the pool of prior-service members who are most apt to join the Guard and Reserve.

To boost recruiting and to retain the quality individuals currently in the Reserve components, the services are making use of a number of innovative programs. Additional benefit programs are being considered similar to those being offered by civilian employers. These include health care, 401(k)-type savings plans, child care, and additional educational opportunities.

In addition, Reserve components continue to emphasize the need for parity in pay and benefits with Active forces. For example, they have recommended that Reserve members who are injured or become ill in the line of duty receive equitable medical or dental care, regardless of what duty status the individual was serving in when the injury occurred.

Women and minorities continue to play a growing role in the Reserve components. Several career fields have been opened to women in recent years, thereby increasing their opportunities to serve. All the services are actively recruiting women and minorities, to ensure that the Reserve components reflect the demographics of the communities where members live and work.

The frequency and duration of Reserve deployments represent challenges both to the members themselves and to their families. The uncertainty associated with sudden deployments, such as presidential call-ups, underscores the need for an on-going system to prepare and support family members during mobilizations. Each of the seven Reserve components has programs in place to address family issues, often using volunteers to provide training and assistance.

Readiness and Training

Trained and ready forces provide the flexibility necessary to shape the global environment and deter potential foes. They are capable of responding to the full spectrum of crises, from limited contingency operations to major wars. The opportunity for Reserve components to perform real-world missions improves unit readiness and training in the short-term. However, repeated or lengthy peacetime operational missions can eventually degrade the training level of units to perform their specific wartime mission.

Readiness is a cumulative process that requires time and resources to develop and sustain. Achieving necessary readiness levels in today's dynamic political, fiscal, and operating environment presents a significant and ongoing challenge in four key areas: attracting and retaining quality people, training the force, ensuring adequate levels of equipment, and maintaining that equipment.

The readiness level of all Reserve component units is reported using the Global Status of Resources and Training Systems database,

known as GSORTS. More than 9,500 units report the status of their personnel, training, available equipment and supplies, and equipment condition. An overall unit resource and training category rating is then assigned to reflect the unit's ability to execute its designated wartime mission.

Senior defense leaders have warned Congress in recent years that readiness was deteriorating, and that a significant investment was necessary to avoid a "hollowing" of the force. Despite anecdotal evidence of declining readiness, the GSORTS database has continued to show a high state of overall readiness. Critics have suggested that the readiness reporting system developed during the Cold War is not sensitive enough to detect the strain of numerous peacekeeping operations. Congress has directed the Department of Defense to devise a readiness ratings system that is more sensitive to the current pace of peacetime operations.

Using the Reserve components to support Active Duty operational missions represents a fundamental shift in their role. During the Cold War, Reserve training focused primarily on preparing for the mobilization mission. Now, however, Reserve component units are increasingly seen as an option to relieve the high operations tempo of Active Duty units. As a result, all Reserve components have seen a marked increase in the amount of participation of their members.

It remains to be seen just how this increased reliance on Reserve components will ultimately affect their readiness. To date, the ongoing use of Guard and Reserve units to support peacekeeping missions such as those in Bosnia and Kosovo has not resulted in any significant deterioration in readiness. However, combat units engaged in peacekeeping operations risk losing their warfighting skills, because high-intensity combat training is generally unavailable during real-world operational missions. Such units will likely require a certain amount of "reconstitution time" between peacekeeping deployments to regain highly perishable skills.

This report presents an overview of the primary readiness challenges facing each of the Reserve components, especially in the areas of personnel, training, available equipment, and equipment condition. In addition, it reviews special readiness challenges unique to individual services. The seven Reserve components each face differing readiness challenges because of their specific missions, weapon systems, training, and mobilization requirements.

To enhance readiness throughout the Reserve forces, each of the services has begun implementing new training initiatives. For example, there is an increased emphasis on simulators and trainers to provide cost-effective training to members. In addition, "distance learning" is seen as a promising new educational tool, enabling members to have access to training materials from their home or unit. Using technology such as computer networks, CD-ROMs, and audio/video teletraining enables Guardsmen and Reservists to upgrade skills without attending on-site training.

Equipment

The dynamic global environment requires that military forces have the added flexibility of modern equipment systems. Increasing demands on the military to respond to small-scale contingencies around the world mean that Reserve components must be properly equipped to perform their missions. Moreover, the increased use of Reserve forces in support of Active operational missions has highlighted the importance of having compatible equipment.

Equipment has traditionally been provided to units according to their designated wartime mission, with the most modern equipment going to units that would deploy first in a crisis. Units that would deploy later must generally rely on older equipment. However, there is a fundamental disconnect in this policy when it comes to the Reserve components. Late deployers for an overseas crisis could be the first deployed for a peacetime engagement, such as a natural disaster.

The Reserve components are currently equipped to meet mobilization requirements under the national military strategy. However, there are significant equipment incompatibilities between the Active and Reserve forces. With the growing use of Reserve assets to support peacekeeping missions, these units need to be equipped to the same degree as traditional "first to fight" units.

The readiness levels of the Reserve components depend upon modern equipment being available. Adequate funding levels for Guard and Reserve equipment is becoming increasingly critical, now that units are being called on to perform a greater share of day-to-day operational missions. It is vital that Guard and Reserve units are equipped with equipment that is compatible with that of their Active counterparts, to reduce logistics costs and to enable units to train and operate together effectively.

The Guard and Reserve forces have traditionally received much of their equipment from Active units. However, only a small amount of equipment was transferred from Active units to the Reserves in Fiscal Year 1999. This further exacerbates the continuing equipment shortages in the Reserve forces. Shortages of modern equipment mean that the Reserve components must operate with equipment that is incompatible with that of the Active forces. Experience has shown that commanders are reluctant to mobilize Reserve units with incompatible equipment for combined operations. Equipment shortages also reduce a unit's ability to train, reducing its readiness and ability to respond to contingencies. However, these shortages appear likely to continue, given the decreased resources programmed in coming years.

The National Guard and Reserve Equipment Appropriation has often been used to reduce equipment shortages in high-priority units. However, the equipment appropriation declined in both Fiscal Years 1998 and 1999, and is projected to decline even further. In fact, there is some discussion that this funding source could be eliminated altogether. This would place a severe burden on the Reserve forces. Forced to rely solely on parent services that are also operating under severe budget constraints, the Reserve forces are likely to lose out completely and be unable to meet their obligations to the Total Force. Reserve component readiness could suffer unless alternate procurement funds are made available.

Facilities

Providing quality facilities for the Reserve components is critical to maintaining unit readiness. Because the mission of the Reserves is to equip, train, and prepare for their wartime missions with the Active forces, it is essential that they have quality facilities that meet their operational needs. In recent years, however, force structure changes, base closures, and new missions inherited from the Active forces have all challenged the Reserves' ability to maintain their facilities and utility systems.

The Reserve components operate and maintain more than 43,000 buildings valued at more than $50 billion. While the inventory has grown in recent years, primarily due to new missions and Active Duty base closings, roughly half of all Reserve facilities need extensive renovations or replacement because of their age or condition.

Reserve components must compete with the Active forces to obtain funding for new construction. However, Reserve construction projects typically are not given a high enough priority to compete for the limited construction funding available. As a result, the Reserves have historically had to rely on congressional add-ons to fund construction requirements.

The growing backlog of military construction projects has now reached an estimated $6.6 billion. The largest portion of this backlog is made up of current mission requirements, that is, projects needed to replace antiquated

facilities, alleviate severe space deficiencies, or upgrade deteriorating pavements and utility systems.

Attempting to maintain a growing inventory of aging facilities has placed a severe strain on all the Reserve components. The Operation and Maintenance funds necessary to maintain and repair these facilities must compete with other critical funding requirements, such as travel and training. The backlog of maintenance and repair now totals nearly $2 billion. That means these aging facilities will continue to deteriorate, only adding to the escalating facility repair costs.

Increased funding for construction of new facilities would help ease the strain, since new facilities are cheaper to maintain than older ones. But by failing to replace aging structures, Reserve units are forced to use maintenance funds to provide short-term solutions. That, in turn, diverts funds that could be used to reduce the maintenance backlog.

The Reserve components have made use of a number of innovative programs to address their facility challenges. For example, closure of Active Duty bases has enabled some units to dispose of unneeded facilities and relocate to more economically efficient locations. Others have consolidated with units sharing similar missions. Finally, still others have explored the economic benefits of "joint use" facilities, in which several units share in the operating costs of the facility.

Environmental Programs

All the Reserve components have strong environmental programs to protect the millions of acres of land entrusted to them. These programs ensure that their military operations comply with all federal, state, and local environmental requirements. They also develop initiatives to reduce the impact of escalating legal and regulatory requirements.

Each of the Reserve components sets specific environmental goals in the areas of compliance, pollution prevention, restoration, and conservation. Such goals have enabled environmental managers to quantify the success of individual programs. For example, the Air Force Reserve has reduced its production of solid and hazardous wastes by 70 percent since 1992, well above its goal of a 50 percent reduction.

The success of Reserve component environmental programs is illustrated by the minimal number of compliance violations and fines levied against Reserve installations. In most cases, the violations involved training or record-keeping discrepancies. Nevertheless, the ultimate goal of all Reserve environmental programs is to ensure that no violations occur.

In general, Reserve component environmental programs were adequately funded in Fiscal Year 1999. In some cases, however, unforeseen requirements levied by environmental authorities required that additional funds be transferred from other accounts in order to achieve the required level of compliance without affecting military operations.

Such environmental compliance issues underscore the impact that legal and regulatory requirements can have on all the Reserve components. For example, a recent court ruling struck down Environmental Protection Agency regulations implementing the Clean Air Act. Such rulings could affect Reserve component flying operations, and must be monitored carefully by environmental officials. In some instances, the impact of new laws can be remedied by working with environmental authorities; in other cases, more restrictive environmental laws may require additional funding to ensure compliance by the Reserve components.

The Reserve components have initiated a number of innovative programs designed to reduce the production of hazardous substances, and to increase the use of recycling and other environmentally friendly products and services.


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Preface



Purpose of Report

The Reserve Forces Policy Board is the principal and independent policy advisor to the Secretary of Defense on matters relating to the Reserve components. The law requires "an annual report from the Reserve Forces Policy Board on the Reserve programs of the Department of Defense . . ." (10 USC 113(c)(2)). This annual report is submitted by the Secretary of Defense to the President and Congress. It includes information on the six Reserve components within the Department of Defense, along with the Coast Guard Reserve, which is a Department of Transportation agency during peacetime.

The purpose of this annual report is to provide timely, relevant, and credible advice and information from the Board to the Secretary of Defense and Congress. This information should help ensure that decisions affecting the Reserve components enhance the Total Force's ability to meet national security requirements.

The 24-member Board is composed of a Chairman, appointed by the Secretary of Defense; the Assistant Secretaries of the Army, Navy, and Air Force, whose duties encompass Reserve Affairs; a representative from the Joint Chiefs of Staff; one Active component general or flag officer from each military department and the Coast Guard; two Reserve generals or flag officers from each of the six Defense Reserve components and one from the Coast Guard Reserve; and a Reserve component general or flag officer who serves on Active Duty as military advisor to the chairman and as military executive of the Board. The Reserve component members have a wide range of industrial, business, professional, and civic experience, in addition to their military expertise.

The Board considers issues from many sources including the Congress; the Office of the Secretary of Defense; the military services; designated committees, councils, and boards; theater commanders; and, individual National Guard and Reserve members. The Board also establishes and maintains communications with individuals and agencies outside the Department of Defense, whether governmental, public, or private, as appropriate and necessary for the Board's mission. The members of the Board have the responsibility to raise issues they feel have policy implications affecting the National Guard and Reserve.

Organization of the Report

This annual report reviews the contributions and challenges of the Reserve components in a number of critical areas. The report is divided into seven chapters: Roles, Missions, and Operations; Funding; Manpower, Personnel, and Force Structure; Readiness and Training; Equipment; Facilities; and Environmental Programs. Appendix A provides a list of contacts for obtaining detailed information on various programs. Reserve component command and control diagrams are provided in Appendix B. Finally, Appendix C is a list of the tables and charts contained throughout the report. All data contained in this report is accurate as of September 30, 1999, unless otherwise indicated.

History of the Reserve Forces Policy Board

President Harry S. Truman signed Executive Order No. 10007 on October 15, 1947. He directed the Secretary of Defense to take the necessary steps to strengthen all elements of the Reserve components of the armed services. In November 1947, James Forrestal, the first Secretary of Defense, appointed the Committee on Civilian Components. In 1949, under Secretary of Defense Louis Johnson, that group became the Civilian Components Policy Board.

Secretary of Defense George C. Marshall created the Reserve Forces Policy Board in 1951, replacing the Civilian Components Policy Board. On July 9, 1952, Congress passed the

Armed Forces Act of 1952. This act established the Reserve Forces Policy Board as "the principal policy advisor to the Secretary of Defense on matters relating to the Reserve components." Passage of the Reserve Officer Personnel Act of 1954 and the Reserve Bill of Rights and Revitalization Act of 1967 underscored the Board's role and expanded its authority, responsibility, and membership. In 1995, a member of the Joint Chiefs of Staff was added to the Board's membership. Listed below are the individuals who have served as chairmen and military executives.

Chairmen

Charles H. Buford
July 1952 - March 1953

Arthur S. Adams
March 1953 - September 1955

Milton B. Baker
September 1955 - September 1957

John Slezak
October 1957 - September 1977

Louis J. Conti
October 1977 - September 1985

Will Hill Tankersley
October 1985 - October 1989

John O. Marsh, Jr.
November 1989 - October 1994

Terrence M. O'Connell
November 1994 - Present

Military Executives

RADM Irving M. McQuiston, USNR
July 1952 - June 1959

MG Ralph A. Palladino, USAR
July 1959 - December 1968

Maj Gen John S. Patton, USAFR
January 1969 - January 1973

RADM John B. Johnson, USNR
January 1973 - January 1975

MG W. Stanford Smith, USAR
January 1975 - April 1979

Maj Gen Joseph D. Zink, ANGUS
May 1979 - June 1983

LTG LaVern E. Weber, ARNGUS
June 1983 - June 1984

MG James D. Delk, ARNGUS
September 1984 - August 1986

MG William R. Berkman, USAR
August 1986 - July 1992

MG William A. Navas, Jr., ARNGUS
August 1992 - February 1995

Maj Gen Shirley M. Carpenter, USAFR
March 1995 - July 1999

Maj Gen Wilfred Hessert, ANGUS
July 1999 – Present

Comments and Additional Copies

The Board appreciates the helpful comments and recommendations that have followed previous reports. A limited number of copies of this report are available for official distribution. Comments and requests for additional copies should be addressed to:

Reserve Forces Policy Board
Office of the Secretary of Defense
7300 Defense Pentagon
Washington, DC 20301-7300

Telephone (703) 697-4486 (Commercial)
DSN 227-4486
Fax (703) 614-0504



Roles, Missions, and Operations

1

"Like their Active Duty counterparts, the Guard and Reserve are standing tall around the globe on the front lines of freedom, courageously weathering the cold of the Korean Peninsula and the searing heat of Kuwait."

Charles L. Cragin
Principal Deputy Assistant Secretary of Defense for Reserve Affairs



Introduction

Throughout our nation's history, the national policy has been to maintain relatively small standing military forces in peacetime. In time of war or national emergency, the Active Duty forces have been augmented by millions of individuals who left their civilian pursuits to serve their country, then returned to their traditional jobs and families.

Initially it was the state militias that could be called on to respond most rapidly to emergencies. Early this century, Congress gave these state forces a federal charter when it created the National Guard Bureau, made up of the Army National Guard and the Air National Guard. Individuals who enlist in the National Guard execute two enlistment oaths: one to the United States and one to their state. In their state capacity, National Guard members can be called to duty by their governors to respond to state emergencies, such as riots, floods, or forest fires, etc. In their federal capacity, they can be called to duty by the President or Congress to respond to national emergencies, such as the 1990 invasion of Kuwait by Iraq.

Congress later created five exclusively federal Reserve components: The Army Reserve, Naval Reserve, Marine Corps Reserve, Air Force Reserve, and Coast Guard Reserve. These five, in addition to the Army National Guard and the Air National Guard, make up the seven Reserve components prescribed in Title 10, U.S. Code Section 10101. It is cost-effective for the nation to rely on the Reserve components as much as possible. Most members of these components are paid the equivalent of just 60 to 100 mandays per year, but they are available for recall on short notice in the event of a national emergency.

Much has changed since the creation of the state militias. At the time, the nation was primarily rural, and most able-bodied citizens owned and regularly used rifles or muskets for hunting and personal protection. When called to military service, the militiamen were required to bring their personal weapons, ammunition and equipment with them, and were able to use those weapons with little or no additional training.

Later, during both World Wars, members of a more urban society required more extensive military training before they were ready for combat. However, the Atlantic and Pacific Oceans still provided some measure of protection. They also gave the nation time in which to draft and train millions of service members before deploying them.

By the latter half of the century, however, the weapons of war had become far more complex. Individuals required extensive military training to serve effectively. Development of weapons of mass destruction with intercontinental range also lessened the buffer value of the two great oceans. Moreover, as a superpower, the United States took on greater global responsibilities after World War II. These developments prompted a major expansion of both the Active and Reserve components of the armed forces.

In the early years of the Cold War, President Harry S. Truman directed the first Secretary of Defense, James Forrestal, to take steps to strengthen the Reserve components. Mr. Truman was a Missouri Army National Guard Officer who served in World War I as a field artillery battery commander and later retired as an Army Reserve colonel. Mr. Forrestal appointed a high-level committee to conduct "a comprehensive, objective and impartial study" of the Reserve components. One outcome of that study was the creation of the Reserve Forces Policy Board.

As early as 1969, President Richard Nixon and Defense Secretary Melvin Laird recognized that the nation could no longer afford to rely solely on the Active components to meet every need short of global war with the Soviet Union. In August 1970, Mr. Laird directed that the Total Force — meaning both Active and Reserve forces — be considered when planning, programming, manning, and equipping Defense Department forces. He recognized that

Guard and Reserve units' lower operating costs could yield a larger and more effective force for a given budget. These insights continue to guide each service in its planning, programming, budgeting, and execution processes.

The "Total Force Policy," as it came to be known, was augmented by Defense Secretary James Schlesinger in August 1973. He directed each service secretary to provide the manning, equipment, training, facilities, construction, and maintenance needed to assure that Guard and Reserve units meet deployment times and readiness required by contingency plans. In 1982, Defense Secretary Caspar Weinberger stressed, "Units that fight first shall be equipped first, regardless of component." Thirteen years later, Defense Secretary William Perry reiterated that the increased reliance on the Reserve components required better planning, training, and funding for their requirements to make them a fully capable member of the Defense team.

The Total Force Policy has since become the cornerstone of our defense policy. Most recently, in September 1997, Defense Secretary William Cohen said, "Our goal, as we move into the 21st century, must be a seamless Total Force that provides the National Command Authorities the flexibility and interoperability necessary for the full range of military operations."

The nation's seven Reserve components now represent an integral part of the Total Force, due in large part to the course charted by Defense Secretaries over the past three decades and the continuing leadership of Defense Secretary Cohen.

Operational control of the nation's unified combatant commands is assigned to their commanders-in-chief. The chain of command runs from the President to the Secretary of Defense to the commanders-in-chief. A unified combatant command is composed of forces from two or more services and has a broad and continuing mission. The number of such commands is not set by law or regulation and may vary from time to time. The nine current unified commands and their headquarters are: U.S. European Command (Stuttgart, Germany); U.S. Pacific Command (Honolulu, HI); U.S. Joint Forces Command (Norfolk, VA); U.S. Southern Command (Miami, FL); U.S. Central Command (MacDill Air Force Base, FL); U.S. Space Command (Peterson Air Force Base, CO); U.S. Special Operations Command (MacDill Air Force Base, FL); U.S. Transportation Command (Scott Air Force Base, IL); and U.S. Strategic Command (Offutt Air Force Base, NE).

To enhance national defense, the Reserve components must be fully integrated ready forces with relevant missions, able to operate across the entire spectrum of military requirements. The Reserve Forces Policy Board believes that the following guiding principles should be considered:

- The nation should place maximum reliance on the Reserve components. When used, Reserve components should fight as part of the Total Force.
- Reserve component representatives must participate at all policy, planning, and decision-making levels.
- Reserve components must be organized, resourced, equipped, and trained to meet requirements of the warfighting commanders-in-chief.
- Using Reserve components to counter threats to national security helps promote the national will. It also enhances public support of the military because it draws members from the local civilian community.
- To be a credible force, each Reserve component must be given the equipment, resources and training on the primary weapons systems of its parent service. Reserve components must be prepared to assume their role in the Total Force.
- The process of calling on Reserve components should be rapid and fully funded. It also should be standardized across the services.

- Commanders-in-chief must outline their requirements and then allow the services and their Reserve components the flexibility to satisfy these requirements.
- Reserve components must maintain their combat capability. They should get the necessary training and resources at the unit level to meet mobilization readiness requirements.

Missions of the Reserve Components

The purpose of each reserve component is to provide trained units and individuals to augment the Active components in time of war or national emergency, or as necessary to protect the national security.

Unlike the other five Reserve components, the Army National Guard and Air National Guard have dual federal and state roles. This dual status, established by the Constitution, has been consistently reaffirmed by Congress. It reflects the fundamental concept of America's citizens mobilizing for the common defense.

There are 54 National Guard organizations, made up of the 50 states plus Puerto Rico, Guam, the Virgin Islands, and the District of Columbia. Each state organization is led by an Adjutant General who reports to the governor. The District of Columbia National Guard is led by a Commanding General, appointed by the President, who reports to the Secretary of the Army.

In their state capacity, members of the Army National Guard or Air National Guard are subject to state call-up to protect life and property in state emergencies such as riots, floods, earthquakes or forest fires. National Guard members also support state and local law enforcement agencies in counter-narcotics, weapons of mass destruction counter-measures, and other operations.

In their federal capacity, members of the Army National Guard and the Air National Guard are called on to maintain well-trained and equipped units available for rapid mobilization in case of war or national emergency. During peacetime, combat-ready units carry out missions that enhance their readiness for mobilization, such as contingency operations.

The mission of the Army Reserve is to provide the capacity to project land force power with trained individuals and units that are ready to mobilize and deploy rapidly. The Army Reserve provides the nation with trained soldiers and units to fulfill specific warfighting requirements for the Army.

The Naval Reserve augments Active Duty Navy units by providing peacetime support to the fleet in day-to-day operations while simultaneously promoting flexible crisis-response capability. The Naval Reserve is integrated in all aspects of Navy operations to enhance the Navy's ability to respond to both peacetime contingencies and major wars.

The mission of the Marine Corps Reserve is to augment and reinforce the Active force by providing qualified units and individuals in time of war or other national emergency. In its augmentation role, the Marine Corps Reserve provides trained and equipped units, detachments, or individuals to Active commands to bring their force structure to the required level. In its reinforcement role, the Marine Corps Reserve provides similar assets to provide additional depth, combat replacements, and expanded combat structure in the Active force.

The roles and missions of the Air Force Reserve mirror those of the Active Air Force, so its members are readily available to augment or supplement the Active force when required. Air Force Reserve units and individuals may be aligned with Active forces in an associate relationship, sharing resources and equipment, or they may stand alone. In a few cases, the Air Force Reserve performs missions that are unique to the Reserve, such as weather reconnaissance.

The U.S. Coast Guard is an agency of the Department of Transportation. Despite the Coast Guard's relatively small size, its

multi-mission capabilities and broad law enforcement authorities have shaped the service into a unique element of national security. The Coast Guard Reserve is a fully integrated partner in carrying out the Coast Guard's missions. It adds significant capability and flexibility in meeting the service's military mobilization requirements, as well as domestic emergency and operational surge requirements. The Coast Guard Reserve also serves as a ready force multiplier to fill short-term Active personnel gaps and help mitigate personnel tempo stress.

Mobilization

Mobilization is the process by which units and individuals of the National Guard and Reserve forces are brought to Active Duty with their parent services – the Army, Navy, Marine Corps, Air Force, and Coast Guard. Mobilization occurs when the National Command Authority determines that the Active Duty force needs to be augmented by forces from the Reserve components.

During the Cold War, mobilizations were rare, because the Active components were large and capable. In the post-Cold War era, however, mobilizations have occurred more frequently. This is largely because a number of responsibilities were transferred from the Active components to the Guard and Reserve in the early 1990s. Beginning with the Gulf War in 1990-91, there have been five presidential mobilizations of the Guard and Reserve components.

The Secretary of Defense, with advice from the Joint Chiefs of Staff, the commanders-in-chief, and the service secretaries, recommends mobilization to the President and Congress to support a given operation or contingency. The President may order up to 200,000 members of the Reserve components to Active Duty for up to 270 days under the Presidential Reserve Call-up, (formerly known as the Presidential Selected Reserve Call-up), as prescribed in Title 10, United States Code. This could occur prior to a partial mobilization for a major theater war, or for small-scale peacetime contingency operations, such as those in Bosnia or the former Republic of Yugoslavia. A total of 161,447 members of the Guard and Reserve were activated in January 1991 for the Gulf War. In April 1999, a total of 5,727 members of the Reserve components were called up for operations in Kosovo.

For more limited contingencies, every effort is made to use volunteer Guardsmen and Reservists before seeking authority to involuntarily order members of the Reserve components to Active Duty. However, presidential call-up authority has occasionally been invoked for such limited operations. For example, since 1995, more than 24,830 Reserve component members have been involuntarily mobilized to support operations in Bosnia and Kosovo.

Only the President can involuntarily call Guard and Reserve members to federal Active Duty for extended periods of time. Service secretaries have the authority to call members of the Ready Reserve to Active Duty for up to 15 days per year under Title 10, United States Code Section 12301(b). Governors have authority under each state's laws to call members of the National Guard to state service.

The mobilization process typically starts when one of the combatant commanders-in-chief recommends the execution of an operations plan. The commander-in-chief forwards a request to the chairman of the Joint Chiefs of Staff for forces required to execute the plan. The chairman validates the requirements, coordinates with the services, and recommends to the Secretary of Defense that Reserve component forces be mobilized. If the secretary concurs, he will recommend mobilization to the President.

After consultation with Congress, the President will issue an Executive Order authorizing the involuntary call-up of Reserve component units and individuals. The Secretary of Defense will then allocate mobilization requirements among the services, based on the advice of

Table 1-1
ARMY NATIONAL GUARD AND ARMY RESERVE CONTRIBUTIONS TO THE ARMY

Unit Type	Army National Guard Number Units	Army Reserve Number Units	Combined Percent of Total Army
Divisions (Institutional Training)	0	7	100%
Chemical Brigades	0	3	100%
Water Supply Battalions	9	2	100%
Enemy Prisoner of War Brigades	0	1	100%
Judge Advocate General Units	0	18	100%
Public Affairs Units	28	29	82%
Exercise Divisions	0	5	100%
Enhanced Separate Brigades	15	0	100%
Civil Affairs Units	0	36	97%
Petroleum Support Battalions	20	12	92%
Medical Brigades	0	6	85%
Chemical Battalions	0	8	75%
Transportation Composite Groups	1	4	80%
Motor Battalions	2	12	78%
Maintenance Battalions	13	5	71%
Engineer Battalions (Combat Heavy)	14	14	73%
Psychological Operations Units	0	31	81%
Hospitals	0	31	77%
Medical Groups	0	8	73%
Engineer Battalions (Combat)	46	25	70%
Petroleum Groups	0	1	50%
Corps Support Groups	4	10	75%
Field Artillery Battalions	100	0	58%
Air Defense Battalions	19	0	48%
Terminal Battalions	0	4	50%
Military Police Battalions	12	19	66%
Military Police Brigades	2	2	43%
Medium Helicopter Battalions	3	1	66%
Infantry Divisions	4	0	80%
Corps Support Commands	1	1	50%
Light Infantry Divisions	1	0	20%
Area Support Groups	8	21	44%
Attack Helicopter Battalions	13	2	45%
Aviation Brigades	9	1	24%
Special Forces Groups	2	0	29%
Ordnance Battalions	2	2	29%
Armor Divisions	1	0	33%
Theater Signal Commands	0	2	66%
Signal Battalions	26	5	36%
Army Signal Brigades	3	1	20%
Infantry Divisions (Mech)	2	0	40%
Military Intelligence Battalions	14	5	39%
Armored Cavalry Regiments	1	0	33%
Air Defense Brigades	1	0	25%
Engineer Battalions (Topographical)	1	0	25%
Training Brigrades	0	2	25%
Theatre Army Area Commands	0	2	25%
Air Traffic Battalions	2	0	40%
Field Artillery Brigades	17	0	94%
Infantry Scout Group	1	0	100%
Aviation Groups	5	0	71%
Air Traffic Groups	2	0	50%

Sources: Army National Guard, Army Reserve, and Army (DAMO-FDF).
Data as of September 30, 1999.

Table 1-2
NAVAL RESERVE CONTRIBUTIONS TO THE NAVY

Unit Type	Changes +/-	Number Units	Percent of Navy[1]
Mobile Inshore Undersea Warfare Units	NC	22	100%
Logistics Support Squadrons	NC	10	100%
Naval Embarked Advisory Teams (NEAT)	NC	7	100%
Mobile Inshore Undersea Warfare Groups	NC	2	100%
Fighter Composite Squadrons (U.S. Based)	NC	2	100%
Heavy Logistics Support (C-130)	NC	4	100%
Mine Countermeasure Support Ship	NC	1	100%
Expeditionary Support Force	+2	14	93%
Airborne Mine Countermeasures Helicopters	+2	14	52%
Mobile Construction Battalions	NC	12	60%
Intelligence Program	NC	103	48%
Mobile Diving & Salvage Units	NC	14	60%
Special Boat Units	NC	1	33%
Fleet Hospitals	NC	4	40%
Fast Frigates (FFG-7s)	NC	10	27%
LAMPS MK-I Anti-Submarine Warfare Squadrons	NC	2	13%
Naval Special Warfare Units	NC	16	38%
Mobile Mine Assembly Groups (MOMAG)	NC	11	50%
Explosive Ordnance Disposal Units	NC	4	33%
Carrier Air Wings	NC	1	9%
Maritime Patrol Squadrons	+1	8	35%
Helicopter Warfare Support Squadrons	NC	2	100%
Landing Ship, Tank (LST 1179)	NC	2	100%

[1]Percentages determined by counting like-type units or personnel.
Source: Naval Reserve.
Data as of September 30, 1999.

15 states, participated in missions supporting the wartime readiness of Central Command, Southern Command, European Command, and Pacific Command, including the Korean theater of operations. The Army National Guard participated in more than 40 missions in support of Active Duty and Special Operations training. In Fiscal Year 1999 more than 760 soldiers from the 19th Special Forces Group (Airborne) deployed to the regions of Central Command, European Command, and Pacific Command. From the 20th Special Forces Group (Airborne), more than 700 soldiers deployed for 20 Joint Combined Exchange Training Exercises in Europe, the Caribbean, Central and South America.

The Army Reserve provides most of the Army's civil affairs and psychological operations capability, which are core missions of special operations. There are 36 Reserve civil affairs units in 22 states, comprised of nearly 5,000 soldiers. These units make up 97 percent of the Department of Defense's civil affairs force. Civil affairs units provided 1,690 soldiers for operations in Bosnia and 100 soldiers for operations in Kosovo.

There are 31 Army Reserve psychological operations units in 15 states, comprised of more than 2,600 soldiers. These units represent 62 percent of the Defense Department's psychological operations force. Army Reserve

Table 1-3
MARINE CORPS RESERVE CONTRIBUTIONS TO THE MARINE CORPS

Unit Type[1]	Number Units	Percent of Marine Corps
COMMAND ELEMENT[1]		
Civil Affairs Groups	2	100
Air-Naval Gunfire Liaison Companies	2	100
Force Reconnaissance Companies	2	40
Communications Battalions	1	25
GROUND COMBAT ELEMENT[1]		
Marine Divisions	1	25
Headquarters Battalions	1	25
Tank Battalions	2	50
Artillery Battalions	5	33
Reconnaissance Battalions	1	33
Combat Engineer Battalions	1	25
Infantry Battalions	9	27
Light Armored Reconnaissance Battalions	1	25
Assault Amphibian Battalions	1	20
COMBAT SERVICE SUPPORT ELEMENT[1]		
Force Service Support Groups	1	25
Engineer Support Battalions	1	25
Transportation Support Battalions	1	25
Headquarters and Service Battalions	1	25
Maintenance Battalions	1	25
Supply Battalions	1	25
Medical Battalions	1	25
Dental Battalions	1	25
AVIATION COMBAT ELEMENT[1]		
Marine Aircraft Wings	1	25
Marine Wing Headquarters Squadrons	1	25
Marine Aircraft Groups	4	28
Adversary Squadrons[2]	1	100
Marine Light Attack Helicopter Squadrons[2]	2	25
Marine Fighter/Attack Squadrons[2]	4	33
Marine Medium Helicopter Squadrons[2]	2	10
Marine Heavy Helicopter Squadrons[2]	2	14
Marine Aviation Logistics Squadrons	4	28
Marine Aerial Refueler Transport Squadrons[2]	2	40
Marine Air Control Groups	1	25
Marine Wing Communications Squadrons	1	14
Marine Air Support Squadrons	1	25
Marine Tactical Air Control Squadrons	1	25
Low Altitude Air Defense Battalions	1	33
MACS TAOC Detachments	2	4
MWCS Airfield Detachments	1	17
Marine Wing Support Groups	1	25
Marine Wing Support Squadrons	4	28

[1]Percentages determined by counting like-type units.
[2]Percentages determined by counting primary authorized aircraft.
Source: CMC(RA) and MCCDC(TFSD).
Data as of September 30, 1999.

Table 1-4
AIR NATIONAL GUARD AND AIR FORCE RESERVE CONTRIBUTIONS TO THE AIR FORCE

Flying Units	Air National Guard	Air Force Reserve	Combined Percent of Total Air Force
Aircraft[1]			
Weather Reconnaissance	0	10	100%
Aerial Spraying	0	4	100%
Fighter Interceptor Force	90	0	100%
Tactical Airlift	218	104	64%
Air Rescue/Recovery	25	29	57%
Aerial Refueling/Strategic Tankers	204	64	55%
Tactical Air Support	18	33	38%
Tactical Fighters	477	72	30%
Strategic Airlift	28	68	27%
Special Operations	5	12	17%
Support Aircraft	6	0	4.5%
Bombers	18	8	21%
Aircrews[2]			
Aeromedical Evacuation	1,293	1,705	83%
Strategic Airlift/(Associate)	0	2,075	44%
Tanker/Cargo/(Associate)	0	474	52%
Aeromedical Airlift/(Associate)	0	36	44%
AWACS	0	144	8%
Non-Flying Units			
Space	1	4	5%
Engineering Installation	19	0	68%
Aerial Port	27	42	82%
Combat Communications	45	3	77%
Aircraft Control & Warning	2	0	100%
Tactical Control	19	0	68%
Air Traffic Control	10	0	62%
Combat Logistics Support Squadrons	0	6	62%
Civil Engineering[3]	97	43	61%
Weather	33	0	46%
Strategic Airlift Maintenance (Associate)	0	7	48%
Security Police	85	35	35%
Medical[4]	89	40	22%
Communications Flights	88	35	22%
Intelligence[5]	4	2	4%

[1]Primary Authorized Aircraft count.
[2]Authorized personnel.
[3]Includes RED HORSE (Combat Engineer) Units.
[4]Excludes aeromedical and evacuation personnel.
[5]Percentages are for units and do not include IMA participation.
Sources: The Air National Guard and the Air Force Reserve.
Data as of September 30, 1999.

Table 1-5
COAST GUARD RESERVE CONTRIBUTIONS TO THE COAST GUARD

Unit Type[1]	Number Billets[1]	Percent of Coast Guard[1]
Deployable Port Security Units	933	98%
Marine Safety Offices	1985	25%
Operational Shore Facilities	2822	34%
Command & Control	1122	14%
Vessels	372	5%
Repair/Supply/Research	682	9%
Training	93	1%

[1]Percentages determined by counting mobilization billets.
Source: Coast Guard Reserve.
Data as of September 30, 1999.

psychological operations units provided 547 soldiers to Operation Joint Guard.

Naval Special Warfare forces support naval and joint special operations within the theater-unified commands. The Naval Reserve has 35 Special Warfare Units nationwide, including detachments supporting every aspect of Naval Special Warfare exercises and operations. Additional Naval Special Warfare units are assigned to support special operations forces in all theaters of operation.

In Fiscal Year 1999, more than 1,300 Naval Reservists from 35 Naval Special Warfare Reserve Units provided over 20,000 mandays of support to special operations missions and exercises worldwide. For example, they participated in Mexican counter-drug training and Navy SEAL team augmentation and deployment training. Reservists also served as patrol coastal liaison officers for patrol coastal ships deployed to the western Pacific and as port security coordinator in the Middle Eastern theater of operations.

The Air Force's Special Operations Command includes seven Air National Guard Units, including the 193rd Special Operations Wing of the Pennsylvania Air National Guard, three weather flights, a combat communications squadron, and a special tactics flight. Within these units are special operations squadrons, which perform a variety of special operations missions. These include long-range infiltration, aerial refueling, re-supply, and combat weather missions deep within sensitive or enemy-controlled territory. The 193rd Special Operations Wing represents 100 percent of the Air Force's dedicated psychological operations capability. In addition, other units are equipped to conduct surgical fire support and terminal air traffic operations within the same environment.

The 193rd Special Operations Wing participated in Operation Allied Force in support of operations in Kosovo. The combat communications squadron and two of the weather flights deployed to the European Theater. In addition, all units supported requests for personnel and equipment throughout Fiscal Year 1999.

The Air Force Reserve maintains the 919th Special Operations Wing to support Special Operations Command. This unit operates MC-130 aircraft specially equipped with electronic countermeasures, and provides the Defense Department's only penetrating tanker capability. The unit has flown almost half of all helicopter air refueling missions for Special Operations Command. In Fiscal Year 1999, wing personnel worked the equivalent of more than 12,000 mandays in support of contingency operations. In January 2000, the wing became the only Air Force Reserve unit to own and maintain aircraft flown and

operated by crews of both Active Duty and Reserve members.

Special operations forces are limited in the other Reserve components. Neither the Marine Corps Reserve nor the Coast Guard Reserve has formal special operations forces.

Reserve Intelligence Programs

The Reserve components have dramatically increased their contributions to military intelligence programs in recent years. Reservists have augmented the ranks of the Active intelligence community and have been involved in virtually every aspect of the intelligence mission, from data collection to analysis and dissemination. Thc trend toward increased reliance on Reserve intelligence personnel for real-world operations is expected to continue for the foreseeable future.

The Army's Reserve components operate under the concept of Contributory Intelligence Support. This means that intelligence soldiers from the Guard and Reserve receive hands-on training in their wartime specialties by performing real-world missions for the Active Army and other defense intelligence agencies. Reserve intelligence soldiers contributed to a number of intelligence operations, including intelligence support in the Balkans, weapons inspection in Bosnia, threat analysis for the Arabian Peninsula, weapons acquisition programs in the Middle East, and assessments of the North Korean military.

In Fiscal Year 1999, Army Reserve component intelligence personnel contributed 65, 159 mandays, the equivalent of adding a full-time Active military intelligence battalion to the Army's inventory. Three-fourths of these mandays were performed by Army Reserve members and one-fourth by Army Guardsmen. This represents a 205 percent increase in intelligence mandays for the Army Reserve and a 260 percent increase for the Army Guard since 1997. The need for trained Army Reserve component intelligence soldiers continues to outpace available funding by more than three to one, despite the 13,155 Reserve intelligence officers currently fielded by thc Guard and Reservc. Expansion is feasible, provided additional resources become available.

The Naval Reserve Intelligence Command has become a vital tool for Active Duty commands around the world. Members of the Reserve intelligence community have proven their ability to work effectively with the Activc Navy and other services in joint operating environments. The command has a total of 3,523 intelligence positions. They are assigned to 71 intelligence units, as wcll as 14 Intelligencc Volunteer Training Units (non-pay) covering 37 drill sites in 24 states. The units are assigned to 21 combatant commands or other agencies, such as the Defense Intelligence Agency. Their missions have included operational intelligence, counter-terrorism, exercise support missions, and intelligence production and analysis to support counter-drug operations. In addition, there are 28 Joint Reserve Intelligence Centers. Reservists have supported several joint military operations other than war, such as Bosnia, Haiti and Rwanda.

In Fiscal Year 1999, intelligence personnel performed a total of 199,177 mandays in support of Active forces. This included 9,090 days for the presidential call-up for Bosnia. Rescrvc intelligence command personnel represent just 4 percent of the Naval Rcserve, but they made up 28 percent of all Naval Reservists recalled to duty in Bosnia. At any given time, there are more than 150 Reserve intelligence command personnel serving on extended Active Duty.

The Marine Corps Reserve's intelligencc professionals have become one of the most frequently requested assets to support both real-world contingencies and exercises. Marine Reserve intelligence members provided counter-intelligence support to operations in Germany, Bosnia, Haiti, and Bahrain, among others. They also participated in exercises such as Dragon Warrior and Battle Griffin. These increased commitments have prompted intelligence officials to initiate a number of programs to boost the ranks of the Marines' Reserve

intelligence community. For example, Reservists are soon expected to join Active Duty instructors at the Navy-Marine Corps Intelligence Training Command, the primary source of formal intelligence education. Efforts are underway to build computer-based training and mobile training teams to help train Reservists at their home stations, much as the Active forces now operate. This would enable Reservists to more quickly become intelligence specialists, as well as attend advanced courses on topics such as intelligence computer systems and anti-terrorism.

The Air Force's Reserve intelligence force has seen a marked rise in reliance on its members, as Active Duty manning levels have decreased and mission requirements have increased. There are nearly 4,000 members of the Air Force Reserve and Air National Guard intelligence community. This represents one-fourth of the Air Force's total intelligence force. The 1,700 Individual Mobilization Augmentees (IMAs) represent about 60 percent of the Air Force Reserve's entire intelligence force. The IMAs include 300 individuals providing intelligence support, such as engineering, communications, and computer fields.

The increased reliance on Air Reserve intelligence support is especially evident in the number of mandays performed by IMAs. They performed more than 150,000 mandays in Fiscal Year 1999. That equates to an average of 83 days per IMA, or roughly 47 days above the basic participation requirements. This work included 65,700 days of augmenting Active units to relieve the burdens of operational tempo. Another 13,644 days were performed in support of Operation Allied Force in Kosovo. There were 151 intelligence IMAs involuntarily recalled under the presidential call-up. Other IMAs deployed to Joint Task Force Southwest Asia, as well as to operations in and around Bosnia.

The Coast Guard Reserve operates no specific intelligence units. However, a small number of Reservists are assigned to area intelligence staffs, where their expertise is used in ongoing Coast Guard operations and contingency planning. Individual Reservists also are assigned to the Coast Guard Investigative Service, which conducts counter-intelligence operations.

Balancing Reserve Force Distribution

Reserve components represent a vital element in the military's ability to maintain its ties with the civilian community. Operating a network of units composed of individuals who live and work in a community helps strengthen the bond between the public and its armed forces. That relationship yields the added benefit of helping to influence national will when the use of military force is being considered.

However, recent force reductions and unit closures have eliminated this crucial link in many parts of the country. Moreover, certain areas of the country may end up with a greater share of Guard and Reserve units. Should these units be activated during a major conflict, those regions could also end up bearing a disproportionate share of the resulting casualties. As a result, a concerted effort is being made by all the services to balance the distribution of their Guard and Reserve units throughout the country.

The Army National Guard's Force Management Division is responsible for coordinating with all 54 states and territories to ensure a balanced distribution of forces during the military drawdown. Among the initiatives used to achieve this balance are the Command Plan Process, the Total Guard Analysis XXI Process, and the Command and Control Review. In addition, the Dual Use Functional Capability process monitors aviation, chemical, engineer, maintenance, medical, military police, and transportation structures. Each of these initiatives is designed to assess the current and projected geographical distribution of Guard units. All aspects of combat, combat support, and combat service support force structure are re-balanced continually to ensure that

no state or geographical area is disproportionately affected by the drawdown.

The Army Reserve stations its units to develop the proper mix of trained and equipped forces needed for the Army's warfighting mission. The Army Reserve's Force Programs Directorate is responsible for assigning unit locations. Among the factors considered for a potential site are its population demographics, such as age, education, work skill distribution, along with the ability of a community to sustain unit manning. Units are not restricted to state or other geographical boundaries. As a result, the Army Reserve disperses its units throughout the country. Units with similar missions or skills are not normally stationed near one another. Moreover, units from a single region are unlikely to serve in the same theater of war, or even in the same operations. Therefore, the Army Reserve is confident that its forces are effectively dispersed in communities throughout the United States and its territories.

The Naval Reserve faces a unique challenge in balancing the distribution of its forces, because half of all Naval Reservists live in states with no major fleet presence. The Navy is committed to maintaining at least one Naval Reserve Activity in every state, using innovative initiatives like the "heartland" Naval Reserve Intelligence program that uses secure, electronic networks to link Reserve Intelligence Centers in cities like Minneapolis to fleet centers in Norfolk. That enables the use of intelligence officers from throughout the country, not just coastal areas. In addition, the Naval Reserve generally spreads units with similar missions throughout the country. For example, the Naval Reserve's 35 aircraft squadrons are spread from Maine to Florida, and from Texas to California and Washington state. Moreover, individuals assigned to these units live throughout the country, further minimizing the impact on a specific region.

The Marine Corps Reserve maintains more than 280 units at 186 sites in 47 of the 50 states. Its approach is to assign Reserve forces to communities that are best able to support the required skills for unit members, while maintaining the necessary core combat, support, and service functions. The 1997 Quadrennial Defense Review mandated a number of closures and unit re-locations. However, members from affected units will generally be able to move to nearby units, thereby maintaining the geographical balance. Similarly, unit re-locations also help keep the geographical balance. For example, the Marine Reserve unit in Tacoma, WA, relocated to Fort Lewis, only a few miles away.

The Air National Guard has established a Future Forces Team to realign Air National Guard forces for greater participation in the new Expeditionary Aerospace Force concept. This team is working with adjutants general from across the country to ensure that the national defense burden is shared equally by all regions of the U.S.

The Air Force Reserve establishes its units based on several factors, including the needs of the Air Force, mission requirements, co-location with similar weapon systems, available infrastructure, and the quality of the potential recruiting population. The Air Force Reserve also expects to consider regionally balanced forces once the new Expeditionary Aerospace Force concept is implemented. Air Force Reserve units will then be assigned to each of the 10 Aerospace Expeditionary Forces. Each expeditionary force represents a pool of resources from which assets are deployed on a rotating basis, which should help reduce the problem of disproportionate losses in any given region.

Because most Coast Guard units and the Reservists who augment them are located adjacent to the nation's coasts and major waterways, the service lacks a significant presence in some inland communities. This fact, coupled with the relatively small size of the Coast Guard Selected Reserve, makes it difficult to maintain uniform membership throughout the United States.

New Reserve Component Missions

All the Reserve components agree that they could accept more roles and missions from the Active components, provided they are adequately funded, manned, and equipped.

In Fiscal Year 1999, the Army and Air National Guard established 10 Weapons of Mass Destruction Civil Support Teams. These teams are designed to provide the first military response to civil authorities in domestic emergency situations, such as terrorist attacks involving weapons of mass destruction. The National Guard also envisions a larger role in mission leadership. In Fiscal Year 2000, for example, a divisional headquarters element will assume command and control of a current contingency operation. Enhanced Separate Brigades and divisional units will also become more involved in deploying for small-scale contingencies humanitarian assistance, and force protection for joint deployments.

The Army Reserve added several new missions to its lineup in Fiscal Year 1999. All units developed and conducted several contingency plans and exercises to prepare for possible Y2K (Year 2000) computer problems that could affect mission readiness. Two chemical reconnaissance units were trained to survey and mark contaminated areas in case of a terrorist incident. Also, 25 chemical units received extensive training in a complete range of decontamination support in case of a domestic terrorism incident involving weapons of mass destruction.

The Army Reserve is supporting peacekeeping operations in Bosnia with helicopters from a combat aviation battalion. Reserve CH-47 Chinook helicopter units are supporting firefighting and high-altitude search and rescue operations at Fort Lewis, WA. In addition, Army Reserve units are supporting the Central and Southern Commands with fixed-wing aircraft in Southwest Asia and Central America. In Central America, Army Reserve engineering units performed additional missions to rebuild roads, bridges, schools, and other structures damaged or destroyed by Hurricane Mitch.

The Naval Reserve neither added nor removed any roles or missions in Fiscal Year 1999. Other roles that the Naval Reserve could assume include augmenting fleet replacement squadrons and deployed squadrons, increasing peacetime contributory support, and increasing Reserve participation in the Integrated Undersea Surveillance System and the Command and Control Warfare Group Fleet Intelligence Warfare Center.

No new Marine Corps Reserve roles or missions were assigned, nor were any rescinded in Fiscal Year 1999. Funding was available for planned training and exercises; however, fiscal constraints limited the ability to support any new requirements.

The Air National Guard was given operational control of the Senior Scout reconnaissance and surveillance program, a critical boost to the intelligence arena. The program could support all of Southern Command's signal intelligence collection requirements, and could support the Pacific and European Commands as well. However, the program was funded at approximately $17.7 million per year for operations and maintenance, manpower, and procurement. That is $5.3 million less than is required.

The Air National Guard also converted three combat communications squadrons to air support operations squadrons to support Army National Guard enhanced Separate Brigade. Patient decontamination teams have been trained and are available for emergency response in case of an event involving weapons of mass destruction. In the future, the Air National Guard could take on additional missions involving unmanned vehicles or space. Nevertheless, it is unlikely that the Air National Guard can assume any major additional missions without receiving additional funding and staff.

The Air Force Reserve added no significant additional missions during Fiscal Year 1999, nor were any rescinded.

The Coast Guard Reserve added no significant additional roles or missions during Fiscal Year 1999. However, the Coast Guard Aviation program manager has expressed interest in 300 additional Reserve positions to support routine operations. In addition, the Information Security program manager is interested in obtaining 100 to 200 positions to support internal security. Finally, additional Reserve positions are being considered to help respond to requests from the commanders-in-chief and Joint Chiefs of Staff for Coast Guard staff presence and expertise.

Reserve Participation in Operations and Training Exercises

One of the best opportunities for members of the Reserve components to hone their fighting skills is to participate in worldwide operations and training exercises.

The Army National Guard saw an increase in its support for contingency operations in Fiscal Year 1999. For example, some 1,800 soldiers provided support to Operation Joint Forge in Bosnia, Operation Joint Guardian in Kosovo, and Operation Southern Watch in Kuwait and Saudi Arabia. Deployments to these regions are increasingly aimed at relieving operational and personnel tempo of the Active forces. For instance, Army National Guard infantry units provided security force protection for Patriot missile batteries in Kuwait and Saudi Arabia. They also provided two aviation task forces to Kuwait, equipped with assault and attack helicopters. In Fiscal Year 1999, the Army Guard mobilized 865 soldiers to support operations in Bosnia. Deployed units included aviation, medical, military police, public affairs, and transportation. To date, a total of 5,400 soldiers from more than 190 units have mobilized for Active Duty in support of operations in Bosnia.

The Army Reserve supported a number of joint operations, including Operations Joint Endeavor/Joint Forge in Bosnia, Joint Guardian in Kosovo, and Northern/Southern Watch in Southwest Asia. A total of 12,500 Reserve soldiers have been mobilized under presidential authority since December 1995. Some 500 additional individual Reservists also are supporting the European Command, Central Command, and the Special Operations Command. Army Reserve units participated in four joint exercises, including Ulchi Focus Lens in Korea and Roving Sands at Fort Bliss in Texas. A total of 14,294 Reservists were involved in the four joint exercises. The Army Reserve also conducted eight exercises of its own, in which 22,596 soldiers participated. These included Rio Lobo at Fort Bragg, NC, and Rio Grande at Camp Rapids, SD, for chemical operations; and Silver Sword at Fort Dix, NJ, and Fort McCoy, WI, for prisoner-of-war and counter-intelligence operations.

During Fiscal Year 1999, Naval Reserve air assets participated in Operations Southern Watch and Northern Watch, as well as counter-narcotics activities in the Caribbean. In addition, 470 individual Reservists provided support to ships deployed to five operations, including Counter-drug Operations, Great Lakes Cruise, and Carat. For military operations other than war, 374 Reservists participated in three operations: Southern Watch, Rim of the Pacific, UNITAS, Baltic Challenge, and Arctic Care. Naval Reserve units also participated in 35 joint exercises. A total of 2,561 Reservists were involved in these exercises, including both units and individuals. Aviation assets ranged from airborne reconnaissance to adversary, strike, combat search and rescue, electronic warfare, anti-submarine, and maritime patrol squadrons. The Naval Surface Reserve medical program held two exercises in which 600 Reservists participated.

The Marine Corps Reserve supported four operational missions during Fiscal Year 1999. For example, 140 Marines provided disaster relief to Honduras and the Dominican Republic.

A total of 20 Marines participated in Operation Northern Watch, enforcing the No-Fly Zone over Iraq; 96 Marines supported NATO forces in Kosovo; and 70 Marines provided civil affairs support to Operation Joint Forge, peacekeeping operations in Bosnia. Marine Reservists also supported counter-drug operations by providing aviation, reconnaissance and engineering operations to eight operations. Finally, the Marine Corps Reserve participated in 35 joint exercises, including Red Flag at Nellis AFB, NV, and Battle Griffin in Norway. A total of 3,857 Marine Reservists participated in these exercises.

The Air National Guard participated in Operation Allied Force, supporting operations in Kosovo with KC-135 and A-10 aircraft, along with Ground Tactical Air Control squadrons and both tactical and strategic airlift units. Ground mobile radar units also deployed to contingency areas in the Balkans and Southwest Asia. Guard units supported several other operational missions, including Operations Northern and Southern Watch, enforcing the No-Fly Zones over Iraq. To support these missions, the Guard provided 18 KC-135 tanker aircraft, with 376 personnel; 28 C-130 airlift aircraft and 827 personnel; 17 fighter aircraft, with 216 personnel; and one HC-130 refueler aircraft, with 10 personnel.

Air Force Reserve units flew more than 4,800 missions in Fiscal Year 1999, carrying more than 66,000 passengers and over 114 million pounds of cargo. These missions included search and rescue missions, space shuttle support, storm tracking, aeromedical evacuation, and aerial spraying. In addition, Air Force Reserve personnel deployed in support of 12 joint contingency operations, including Allied Force in Kosovo, and Northern and Southern Watch. Reserve units participated in a total of 13 joint exercises, including Battle Griffin, Foal Eagle, and Ulchi Focus Lens, the largest command and control exercise in the world. Reserve units provided 22 percent of the exercise support augmentation to Ulchi Focus Lens '99 in Korea. Reserve units also provided humanitarian support in the aftermath of Hurricane Mitch in Central America.

The Coast Guard Reserve participated in eight training exercises, and provided 562 Reservists. Port Security and Harbor Defense units were involved in exercises such as Foal Eagle and Rioex 99, a joint exercise at Camp Lejeune, NC. The Foal Eagle exercise represents the first time an Atlantic Area Port Security Unit was sent to an operational area in the Pacific. Finally, Reservists provided a total of 104,460 man-days in support of missions ranging from search and rescue to law enforcement and environmental protection.

Disaster Assistance and Community Assistance Programs

Helping local communities recover in the aftermath of natural disasters represent some of the most high-profile missions undertaken by the Reserve components. The disasters present an urgent, real-world need for skilled personnel and specialized equipment to assist in search and rescue, medical care, emergency shelters, and logistical support to provide food, clothing, and other necessities. Such emergencies also offer Guard and Reserve units a chance to exercise valuable mobilization skills, equipment operation, medical expertise, and a host of other specialties required for wartime or peacetime operations.

Beyond the real-world training opportunities, however, is the invaluable chance to serve the needs of the communities where members live and work. Disaster assistance operations showcase the "citizen soldier," allowing communities to see members of the Guard and Reserve in action, when and where they are needed most. This exposure helps forge a bond of mutual trust and respect between the citizens and the military members in their midst.

One of the largest disaster assistance efforts came in the wake of Hurricanes Mitch and Georges, which devastated several Central

American and Caribbean nations in late 1998. The hurricanes killed more than 9,000 people and left more than 3 million people homeless. The commander-in-chief of U.S. Southern Command mobilized both Active Duty and Reserve component forces to help in the recovery efforts. President Clinton called the resulting relief efforts "the largest military humanitarian assistance mission since the Berlin Airlift 50 years ago." Nearly 24,000 Guard and Reserve personnel provided disaster relief and humanitarian assistance to the region.

The Army National Guard provided 12,600 soldiers the Central American region, most of whom were members of engineer, support, and security forces. A total of 126 Army National Guard units from 41 states joined with 110 Army Reserve units comprised of 7,700 soldiers. Beginning in January 1999, a total of five Army National Guard engineer task forces deployed to the region to repair or build new clinics, bridges, water wells, dikes and levees, and roadways.

The Army National Guard also provided support to several domestic missions in Fiscal Year 1999, including disaster assistance after tornadoes, hurricanes, mudslides, floods, and winter storms. Nearly 82,000 mandays were used to support law enforcement and clean-up after hurricanes in Puerto Rico. More than 11,100 mandays were used to assist communities hit by tornadoes in Oklahoma in May 1999. Army National Guard units also assisted in fighting forest fires, provided law enforcement support, and assisted with the Special Olympics. A total of 166,359 mandays were used to support these missions.

However, it does not take a disaster to mobilize the talents and teamwork of Guard and Reserve units. Community assistance projects are another way in which the Reserve components can receive valuable training. The Innovative Readiness Training program allows military training to be conducted in civilian communities, with the incidental benefit of providing essential services to the community. The same engineering skills needed to construct a combat helicopter landing zone, for example, can be honed during construction of a community soccer field. In addition, many Innovative Readiness Training projects are joint efforts, undertaken by members of several Guard and Reserve units. Such cooperative efforts enhance the ability of Guardsmen and Reservists to work with members of other services toward a common goal. The Innovative Readiness Training Program operates within 50 states, territories and possessions, and the Commonwealth of Puerto Rico.

Innovative Readiness Training typically falls into one of three categories:

- **Engineering and Infrastructure**: This category is by far the largest and most commonly used category. Such projects often involve construction of hiking trails, roads, bridges, runways, taxiways, and recreation facilities, such as scout camps or picnic pavilions.
- **Medical, Healthcare and Human Services**: Such training may involve deploying medical and dental personnel to remote areas, such as in Alaska, to provide medical services where facilities are limited or non-existent.
- **Transportation**: The military has the capacity to move extremely large objects, like tanks, or sensitive cargo, such as missiles or ammunition. As a result, the military can also help communities with unusual transportation needs, such as moving dinosaur bones or a historic aircraft to a museum or restoration facility.

The Army National Guard performed 82 engineering and infrastructure projects in 15 states during Fiscal Year 1999. For example, the California National Guard continued construction of 66 miles of roads and fences along the border with Mexico in southern San Diego county as part of project Task Force Grizzly Border Road. In New York's Operation Straight Shoot, the National Guard constructed an outdoor firearms training range for a local police

department. Guard units also conducted 19 transportation projects in 7 states, including Operation Bones, which involved transporting a brontosaurus dinosaur skeleton from Cody, Wyoming, to the Museum of Natural History in Martinsville, Virginia. Finally, Army Guard units participated in 15 medical and human services projects in 12 states.

The Army Reserve conducted 32 engineering and infrastructure projects in 10 states. For example, in South Dakota, Army Reservists renovated a hangar at the Pierre Regional Airport and graded a road to the new Emergency Vehicle Operations Course at an abandoned airstrip. There were four Medical/Healthcare projects conducted in three states. One of these projects was Operation White Fang, during which dental specialists deployed to Alaska's Arctic Slope region to provide dental care in remote villages. Finally, there were three transportation projects in three states. Operation Warhawk involved the airlift of a rare 1942 Curtis P-40E Warhawk aircraft from Alaska's Umnak Island to an aviation museum in Anchorage. This project was supported by members of the Alaska Army and Air National Guard, the Army Reserve, and Marine Corps Reserve.

The Naval Reserve conducted 20 engineering and infrastructure projects in 12 states. Among these was renovation of the Old Capital Pumphouse on the western shore of the Anacostia River in the District of Columbia. There were two medical projects in two states. Other community outreach programs include the "Adopt-a-School" program, in which units provide tutorial and mentoring assistance to local schools; "Navy Kids," in which volunteers tutor students outside the schools every week; and Drug Education for Youth (DEFY), designed to provide military role models to encourage youngsters to avoid drugs.

The Marine Corps Reserve conducted six engineering and infrastructure projects in six states. One of these projects was Outdoor Odyssey at Roaring Run, PA, where Reservists renovated a former Boy Scout camp to provide a development and leadership academy for at-risk youths. Work included reconstruction of the electrical, water and sewer utility systems and construction of storage, restroom and shower facilities. Marine Reservists also conducted two medical projects in two states. One of these, Operation Lone Star, provided health services to the impoverished region along the Texas-Mexican border.

Air National Guard units participated in a total of 16 projects in four states. Many of those projects provided medical assistance to remote areas, such as in Alaska and Montana. Alaska National Guard personnel assisted in moving the P-40E Curtis Warhawk aircraft to Anchorage. Guard units also supported many of the projects listed under other services, such as Task Force Grizzly Border Road in California.

The Air Force Reserve conducted six engineering and infrastructure projects in five states. For example, Reserve units helped repair 50 miles of road on the Cheyenne River Sioux Reservation in Eagle Butte, South Dakota. Medical and dental specialists also augmented short-staffed health professionals at the Rosebud Indian Reservation Hospital in Rosebud, South Dakota.

The Coast Guard Reserve continued its public education efforts at each of the 45 Marine Safety Offices through their Sea Partners campaign. The program educates members of the public in marine environmental protection regulations and pollution prevention techniques.

Interstate Emergency Compacts

An interstate compact is a legal agreement between two or more states to clear the way for emergency responses across state lines. Compacts are designed to resolve legal and funding issues to speed access to National Guard assets during emergencies.

Three regional humanitarian compacts began the trend toward a nationwide agreement among states to provide emergency assistance to one another. The first was the Mutual Aid Compact, enacted in 1952 by the states of New York, New Jersey, and Pennsylvania. The second was the Southwestern Governors Compact, amended in 1992, which was signed by six states: Arizona, California, Colorado, New Mexico, Nevada, and Utah.

The third such compact was the Southern Regional Emergency Management Assistance Compact, signed by the 19-member Southern Governors' Association in August 1993. In January 1995, the Southern Governors' Association sought to open membership in this compact to all other states and territories. The association then sought federal ratification of the compact, which occurred in October 1996 when Congress ratified it as Public Law 104-321. This created the basis for a single, national compact, now called the Emergency Management Assistance Compact. As of August 1999, 29 states and territories have enacted this compact. Seven more states, including California and New York, are expected to sign in the near future.

Counter-Drug Operations

In 1989, Congress designated the Department of Defense to be the lead federal agency for detecting and monitoring illegal aerial and maritime flow of drugs into the United States. As a result, the military services have implemented an aggressive counter-drug program. The services have supported federal, state and local law enforcement agencies in their efforts to stem the transportation of illegal drugs into the country.

The Reserve components have played an active role in counter-drug operations, supporting several goals of the National Drug Control Strategy, including:

- Educating America's youth so they will be able to reject illegal drugs, as well as alcohol and tobacco products.
- Increasing the safety of America's citizens by substantially reducing drug-related crime and violence.
- Reducing the health and social costs to the public of illegal drug use.
- Shielding America's air, land, and sea frontiers from the drug threat.
- Breaking foreign and domestic drug sources of supply.

The Army contributes over 3,000 Active, Guard, and Reserve soldiers to the counter-drug effort on a daily basis. In addition, more than 300 soldiers and Army civilians are detailed or assigned to joint task forces and other federal agencies to coordinate counter-drug operations. These support operations include aerial and ground reconnaissance, road and fence construction projects along the Southwestern border, marijuana eradication, cargo inspection at ports of entry, transportation, translation, and intelligence analysis. In Fiscal Year 1999, the National Guard Bureau Governors' State Plans budget for counter-drug operations was $186.8 million. In Fiscal Year 2000, the state plans budget for counter-drug operations is expected to be 182.7million.

During Fiscal Year 1999, the Army Reserve conducted more than 150 counter-drug missions, primarily in the areas of intelligence analysis and linguistic support to law enforcement agencies, along with engineering construction support. Army Reserve members provided an estimated 21,400 mandays in support of counter-drug operations. The Army Reserve's counter-drug budget was $6 million in Fiscal Year 1999.

The Naval Reserve's aerial squadrons supported counter-drug operations with aircraft including the P-3C, E-2C, and LAMPS helicopter detachments. Two squadrons of E-2C aircraft flew more than 1,900 hours, contributing 180 days of dedicated counter-drug operations. LAMPS helicopter detachments were deployed for a total of 10 months and provided 874 hours of flight time. In addition, there were 4,483 flight hours for the P-3C

aircraft. Naval Reserve fast frigates provided 421 steaming days in direct support of counter-drug operations. However, this level of activity is expected to decrease slightly in Fiscal Year 2000 as the number of Reserve fast frigates drops from 10 to eight. Naval Special Warfare Reservists provided more than 840 days of support embarked on coastal patrol, augmenting planning calls and watch organizations conducting counter-drug missions.

The Marine Corps Reserve provided personnel to various law enforcement agencies to provide intelligence analysis of criminal operations in major cities such as Los Angeles, Houston, and Miami. Aircrews flew aerial reconnaissance missions to help local officials locate illicit drug manufacturing houses and marijuana fields. In addition, Marine Corps Reserve helicopters were frequently used to transport law enforcement personnel or to move harvested marijuana to burn pits. Marine Corps Reserve aircraft flew a total of 569 hours in support of these operations. Counter-drug operations are expected to continue in Fiscal Year 2000, primarily in the areas of intelligence analysis, helicopter reconnaissance, eradication missions in the Caribbean, and engineering construction support.

The Air National Guard provided aerial reconnaissance, observation, and surveillance capabilities to law enforcement agencies. To conduct these missions, the Air National Guard operates 11 fixed-wing aircraft equipped with optical cameras, low-light TV, and infrared sensors. Additionally, the Air National Guard supports demand-reduction programs throughout the country. The Air National Guard deployed forces to the U.S. Southern Command and the Joint Forces Command to support their detection and monitoring efforts. These forces included F-15 and F-16 fighter aircraft, ground-based radar, and airborne intelligence platforms.

The Air Force Reserve provided intelligence and linguist personnel, mobile training teams, and air missions to law enforcement agencies. In Fiscal Year 1999, Air Force Reserve Command provided an estimated 11,000 mandays, flew 60 missions, and conducted 15 mobile training team sessions. Support of counter-drug operations declined from previous years, primarily due to airlift and intelligence requirements for the air war in Kosovo from February to July. The Air Force Reserve expects to provide approximately 11,000 mandays and 70 missions for Fiscal Year 2000 counter-drug operations.

The Coast Guard expects to continue its interdiction of illegal narcotics enroute to the United States. Reservists augmented a wide range of Coast Guard counter-drug operations, providing staffing to cutters, air stations, small boats, and operations centers.

Joint Military Contact Teams

The post-Cold War era has seen a number of fledgling democracies emerging in countries that had been under authoritarian control. However, many of these countries are still struggling with the transition to democracy. Their leaders are dealing with issues ranging from civilian control of the military to human rights. The U.S. military has a unique cadre of specialists who can assist these emerging democracies in addressing their challenges. Joint Military Contact Teams serve an important function in helping these countries address their most urgent challenges. Military Liaison Teams made up of three to five members deploy to the countries and work with key host nation officials. In particular, members of the Reserve components have played a major role in working with these nations' military forces, offering the benefit of their experience and expertise. They have provided an outstanding example of the benefits of an American-style military, and have paved the way for their eventual participation in programs such as NATO's Partnership for Peace.

The National Guard has participated extensively in Joint Military Contact Teams, especially in Eastern Europe. National Guard personnel are members of military liaison

teams in 15 Eastern European countries, including Croatia, Estonia, Macedonia, Hungary, Poland and Ukraine. These members helped coordinate more than 9,000 military-to-military events last year. New opportunities are also on the horizon. For example, countries like Austria have expressed interest in establishing a relationship with the National Guard. In the Southern Command, the level of participation is expected to increase rapidly. SOUTHCOM's commander-in-chief wants to use the National Guard's State Partnership Program as one of his primary engagement tools in the region, based on the successful humanitarian assistance the Guard provided last year in the aftermath of hurricanes George and Mitch.

In addition, the National Guard has expanded its State Partnership Program to include the Pacific Theater and South America. The partnership program now includes 29 U.S. states, 1 U.S. territory, and 28 countries around the world. The Minuteman Fellows Program, now in its second year, has expanded beyond its original European boundaries to include worldwide theaters of operation. The cornerstones of this dynamic program are providing military support to civil authorities, and disaster response activities. In Fiscal Year 2000, more than 1,000 National Guardsmen and 1,200 host nation personnel are expected to participate in Minuteman Fellowship activities.

The Army Reserve had eight members on Joint Military Contact Teams in Fiscal Year 1999, along with 21 people assigned in a support role. At a planning conference in August 1999, the Army Reserve selected 13 potential events in which its members could participate in Fiscal Year 2000. These missions are being researched to identify which units and personnel could best support the requirements. This effort represents a major increase in Army Reserve participation.

The Naval Reserve has continued its high level of participation in military-to-military contact programs. Reserve members, both officer and enlisted, are actively participating in traveling teams. These teams range from the one- to two-week teams to the six-month military liaison teams. Certain professionals have proven to be extremely useful in assisting host nations in their transition to market-driven economies. For example, Reserve Civil Engineering Corps officers (Seabees) have provided quick, accurate environmental engineering assessments during one-week visits to these countries. In addition, Reservists have served as escort officers for foreign national military officers during their visits to the United States.

Members of the Marine Corps Reserve have actively supported a wide variety of Joint Military Contact Teams and military-to-military programs. Reservists participated in more than 100 training events last year. Most of these efforts involved Eastern European nations, where Reserve officers have played a vital role in working with former communist nations. For example, Marine Corps Reserve officers are on special tours of duty in Germany, Bulgaria, Estonia, Latvia, Macedonia, and Romania. In addition, Marine Corps Reserve officers have served as escort officers for hundreds of visits to the United States by former East Bloc military officers. Reserve participation is expected to increase by 10 to 15 percent next year.

The Air Force Reserve provided three officers and one NCO to the European Command, and one officer is serving as the deputy team chief in Hungary. The Air Force Reserve is interested in a higher level of participation, and has offered its services in the past. However, most of these positions are designated for other services' components, and so the Air Force Reserve is usually given the opportunity only when other components are unable to support their requirements.

The Coast Guard Reserve has not participated in these programs.

The Future of the Reserve Components

The nation's military Reserve components are likely to be called on with ever-increasing frequency in the coming decade. The years after the Cold War saw dramatic changes to the world in which the military operates. As the number of small-scale contingencies escalates around the world, Guardsmen and Reservists will continue to relieve the burden of high operational tempos among Active forces. Moreover, declining numbers of Active Duty forces mean that the Reserve components have been called on to take over many of their missions. In addition, Guardsmen and Reservists are stepping up to perform new missions, such as responding in the event of domestic terrorism. Whatever their missions, the Reserve components will continue to play a pivotal role in the military's Total Force.

The Army National Guard has developed a three-part campaign plan to manage change in the 21st Century. The Army National Guard will continue to integrate its combat structure and personnel into the Army. It will also employ emerging technologies to reduce traditional training challenges, such as time and distance. Third, the Army National Guard will seek ways to accomplish more missions in an environment of declining defense dollars. Future missions will likely include the mobilization of Army National Guard units for small-scale contingency operations, such as Bosnia and Kosovo. The Army will place greater reliance on high-priority Army National Guard units, such as enhanced Separate Brigades, to be front-line fighting forces. Guard units also will continue to be used extensively in humanitarian assistance missions, such as they were for flood relief operations in Central America in 1999. The Army National Guard has also assumed a major role in homeland defense. The forces required to respond to acts of terrorism involving weapons of mass destruction or information warfare will largely be Army National Guard forces.

The Army Reserve is committed to providing forces ready to deploy worldwide to perform actual wartime or contingency missions, rather than simply augmenting other units. Most Army Reserve forces are based in the continental United States. They are fully trained to Army standards on their own equipment and are able to meet rapid response requirements. The Army Reserve has the capacity to provide units and individuals trained to respond to the full range of military operations. The Army Reserve continues to provide a large portion of the Base Generating Force that includes training, Active component backfill, and base operations. Finally, the Army Reserve provides skilled individuals to augment and replace members of Army units engaged in combat operations. Reserve units' commitments have increased as the operational tempo of Active Army units has increased, and this trend is expected to continue.

The Naval Reserve will continue to explore new areas to provide peacetime support. The seamless integration of Active and Reserve components serves as a model for future force structure. Future missions for the Naval Reserve will concentrate on supporting the forward presence mission of the Navy.

The Marine Corps Reserve anticipates an increase in its participation in contingencies, such as peacekeeping, disaster relief, and counter-drug operations. These and other challenging commitments will be met with a responsive, versatile, and highly effective force in which the Reserve component is a fully integrated part.

The Air National Guard anticipates performing expanded roles in the Air Force's space, intelligence, and training missions. The Air National Guard helped develop the Expeditionary Aerospace Force concept and will be fully integrated with the Active forces and support structure. National defense policy has determined that the Reserve components will serve in power-projection roles on a full-time basis. Accordingly, the Air National

Guard expects to be called upon to deploy as a first-use force to contingencies or major theater wars.

The Air Force Reserve expects to accelerate its efforts to acquire new missions as the Active force reduces its ranks. It will target missions directly related to the Air Force Reserve's strengths: cost effectiveness and high experience levels. As competition for scarce resources escalates, the Air Force Reserve also expects to expand its integration into Active units, enabling Reservists to work side by side in all types of operations. The Air Force Reserve has moved ahead on its Future Total Force study, which will help ensure the integration of Air Reserve components into the Expeditionary Aerospace Force concept. Another major area of expansion has been in headquarters organizations, which are increasingly requesting Guard and Reserve positions. The result has been a migration of field grade officers and senior enlisted personnel from the unit level to higher headquarters.

The Coast Guard Reserve is continuing its efforts to increase its Selected Reserve strength, both by acquiring new members and accessing individuals leaving Active Duty. The number of individuals in the Selected Reserve ranks reached 8,000 before the end of Fiscal Year 1999. Reservists are expected to play a larger role in aviation, domestic port security, vessel maintenance, and internal information security. In addition, Reservists will be used to fill Active Duty positions to address personnel shortfalls.


SFOR

Funding

2

"Although U.S. forces continue to accomplish their missions splendidly, there are warning signs of potential problems. Recruiting and retention are increasingly difficult, readiness harder to maintain, and weapons modernization tougher to fund. This budget will address these warnings."

William S. Cohen
Secretary of Defense



Introduction

The Department of Defense is ushering in a new era in financial management, implementing the most comprehensive reform of financial systems in history. Improved financial management will mean that decision makers, both Active and Reserve, can more effectively allocate resources. They also will be able to better assess how well these funds are being spent, and whether they are achieving their intended purpose. Finally, these reforms will ensure that timely, accurate payments are provided to members of the Total Force at the lowest possible cost.

These reforms are aimed at streamlining and redesigning defense financial processes and organizations to make them more effective and less costly. Reserve financial programs represent a significant portion of this process and are an integral part of these reforms. The reforms further seek to fulfill the needs of the military leadership, satisfy statutory requirements, minimize the potential for fraud, and provide superior customer service. Some of the reforms include:

- Consolidation of financial operations and systems
- Strengthening internal controls
- Complying with federal accounting standards
- Adopting the best business practices

Until the 1990s, Active Duty and Reserve components relied on decentralized financial management. Most component organizations had their own pay and accounting systems, even though they were all subject to essentially the same laws and pay scales. Moreover, most of these systems were incompatible with one another, making data collection and cost comparisons extremely difficult. That scenario should be a thing of the past as new financial management initiatives are implemented. The Reserve components are included as full partners in this continuing transformation.

Changes are also underway in the overall budgeting process, designed to involve the Reserve components earlier in the process. The Reserve components must be active participants throughout the budget planning process. Decisions involving funding for the Active and Reserve components result primarily from the Planning, Programming and Budgeting System. This process is influenced by the National and Military Security Strategies, the Defense Planning Guidance, Program Decision Memoranda, and the comprehensive results of internal service support assessments. Specific service criteria are based on factors such as force structure, end strength, mission assignments, joint exercises, training requirements, unit conversions, and transition costs.

Resourcing Strategies

All Army components are funded to meet requirements based on the "first to fight" principle. The Army gives funding priority to units and individuals that are first to mobilize and deploy in support of combatant commands, using a technique known as "tiered resourcing." This means that not all units are provided with equal resources. While the Army National Guard's enhanced Separate Brigades are funded and equipped at higher levels, for example, lower-priority units are less well equipped. Tiered resourcing is designed to ensure that sufficient forces are available to respond to two simultaneous major theater wars. Lower-priority units are expected to have additional time before mobilization and deployment to enable them to increase their readiness level.

By contrast, the Navy, Marine Corps, Air Force and Coast Guard do not use tiered resourcing. Instead, all of their units are intended to be mission ready at all times. Consequently,

their budgeting process fully integrates both the Active and Reserve components, theoretically giving all components equal footing in obtaining the resources required to maintain combat readiness.

Modernization

One of the most important challenges facing all the services is weapons modernization. It remains critical to the nation's security that its armed forces be equipped with the most sophisticated weapons available. Maintaining technological superiority over any potential adversary has a proven deterrent effect in peacetime, and is absolutely critical in wartime. However, budgetary constraints have made it increasingly difficult to not only maintain existing forces but also modernize them.

Modernization is a particularly sensitive issue for the Reserve components, which have historically been equipped with less up-to-date weapons and equipment than the Active forces. With the declining pace of the post-Cold War military drawdown, fewer Active units are able to transfer their equipment to the Reserves. Reserve forces are in danger of becoming obsolete in the high-technology battlefield of tomorrow, unless they are given the resources to upgrade their own weapons and equipment.

The Reserve components have traditionally relied on congressional funding supplements, in the form of the National Guard and Reserve Equipment Appropriation (NGREA), to aid in their modernization efforts. However, these congressional funding supplements are slated to be eliminated in coming years. The Department of Defense has directed that the services be solely responsible for the equipment modernization needs of all their components, including the National Guard and Reserve. In theory, this would eliminate the need for Congress to add funds outside the normal budget process for National Guard and Reserve equipment needs. However, elimination of NGREA funding without the corresponding increase in parent service support would severely hamper Reserve components' ability to undertake equipment upgrades, training and modernization.

The Fiscal Year 1999 defense budget submission requested $257.3 billion in budget authority. Funding requests for programs in the budget were based on current estimates of inflation and the latest program execution information. As always, the top priority was to ensure that U.S. forces are prepared to fight and win. The Fiscal Year 1999 budget began full implementation of the department's comprehensive 1997 Quadrennial Defense Review. The review examined both security threats and opportunities facing the United States. Policy-makers then developed far-reaching recommendations for the military's force structure to enable more effective operations in the post-Cold War era.

A strong commitment to force readiness is reflected in the funding support for training, supplies, maintenance, and equipment. Reserve component readiness requirements are primarily funded through the Operation & Maintenance (O&M) accounts. Thus, providing sufficient O&M funding is a vital concern to all the military services, but especially the Reserve components, which have no other sources available to them for training and equipment. To overcome the funding challenges experienced by the Reserves in previous years, the Defense Department has made a concerted effort to increase support to the Reserves in the coming years.

The pressing need to find additional funding for new weapon systems has prompted the Defense Department to take a fresh look at the way it funds infrastructure requirements, such as facilities and utilities. Operation and Maintenance (O&M) funds are one of the chief sources of infrastructure funding. But if the department expects to fund new weapon systems at the current budget's spending levels, it may be forced to cut billions of dollars from its O&M accounts. That could result in major changes in the way O&M funds are used, or

require dramatic force reductions in a time of escalating operations tempo and increasing demand for Reserve component positions.

Force readiness also means meeting the needs of uniformed personnel and their families by supporting quality of life issues, such as equal pay and benefits for members of the Active and Reserve forces. The goals of ensuring force readiness and taking care of the men and women in uniform are complementary goals. Enabling military members to train rigorously and properly prepare for future missions is essential to preserving the high quality and morale of the military force. These intangible factors, more than any others, affect the overall readiness of America's Reserve components.

While weapons modernization is important to readiness, Secretary Cohen has also stressed that the long-term readiness of U.S. forces is being threatened by its excess facilities. The Department of Defense operates facilities and bases it no longer needs and cannot afford to maintain. Many bases have been closed in the past decade, but the pace of closure has not kept pace with the downsizing of America's military forces. Further consolidation of military facilities could free up sorely needed money and manpower.

The military has also reached a plateau in terms of its own downsizing. As a result, relatively little equipment is being transferred from Active forces to the Reserves. The Reserve components need additional procurement funds to provide desperately needed equipment. As a result, they must be included in future procurement plans if they are to be full partners in the Total Force. This means that the Reserve components must participate in the entire budget process at all levels.

With its strong support for both immediate force readiness and modernization, the Fiscal Year 1999 budget struck a balance between current and future defense needs, as recommended by the Quadrennial Defense Review. It also continued the department's commitment to enhancing the quality of life of the nation's military members and their families.

The exceptional readiness of America's armed forces is especially evident while they are deployed around the world. To preserve this high level of readiness, the Fiscal Year 1999 budget provided strong support for training, exercises, maintenance, supplies, and other essentials needed to keep the armed forces prepared to achieve their combat missions. Traditional operational indicators of readiness, such as the number of tank miles or flying hours, are projected to remain stable. When adjusted for today's smaller force sizes, Operation and Maintenance funding is well above 1980s levels. The budget also included strong funding for military pay, housing, medical services, child-care, and other important benefits.

The Reserve components' ability to perform as an integral part of the Total Force is directly related to their funded level of training. As Reserve component units are asked to perform more missions traditionally assigned to the Active force, funds are increasingly being diverted from their Operation and Maintenance accounts designated for training. The situation is exacerbated by budgetary spending caps, which mean that no additional funding can be made available to make up for training shortfalls. Thus, every additional demand placed on the Reserve components' limited resources further widens the training gap and aggravates training problems.

The Quadrennial Defense Review concluded that the Reserve components are essential to the success of U.S. defense strategy, and will be engaged in the full spectrum of military operations in coming years. The Fiscal Year 1999 budget execution reflects these conclusions, providing substantial funding to support both current readiness and future capabilities of the Reserve components. The Department has moved decisively to more effectively integrate its Active and Reserve components.

For example, Reserve component issues were given unprecedented attention during development of the budget. As a result, more than $200 million was added for Reserve component equipment, and more than $100 million was added for Army National Guard training operations. In addition, Secretary Cohen established new Guard and Reserve general officer positions aimed at enhancing the Reserve components' involvement in the defense management structure.

The Fiscal Year 1999 budget funded the creation of ten National Guard weapons of mass destruction civil support teams to respond to domestic incidents involving weapons of mass destruction. Two Army combat division headquarters were created to integrate Army National Guard brigades under an Active component headquarters for training and readiness oversight. Meanwhile, Reserve components have continued their extensive support of peacetime missions such as aerial refueling, strategic lift, counter-drug operations, and training exercises. Some combat elements of the Reserve components are gradually being converted to critically needed support units. Projected savings from the cuts to Reserve end strength, directed by the 1997 Quadrennial Defense Review, will go toward increased funding for new equipment, unit conversions and other Reserve component requirements.

Funding Challenges

Each of the Reserve components has expressed concerns over funding shortages and authorization levels in critical areas such as modernization of major weapon systems and adequately compensating its personnel.

The greatest funding challenge faced by the Army National Guard during Fiscal Year 1999 was how to pay for costly environmental programs at the Massachusetts Military Reservation and other environmental requirements. In addition, funding shortages and authorization levels made it extremely difficult to provide Army National Guard units with required full-time support personnel, both military technicians and Active Guard and Reserve personnel. Other funding concerns included inadequate operational tempo funds to maintain higher level collective training (platoon and above) within Army National Guard divisions, and too few flying hours to maintain crew proficiency. However, the Army has increased funding for the Army National Guard's flying hour program in Fiscal Year 2000, fully funding the required crew operational tempo at 9 hours. Military construction and Real Property Maintenance accounts continued a historical trend of being funded below required levels.

The Army Reserve faced a number of funding challenges during Fiscal Year 1999. One of the most important was insuring that sufficient training funds were available for Army Reserve units designated to support two Major Theater Wars. Other concerns involved funding shortages for spare and repair parts and information management systems. Funding shortfalls also existed for the recruiting and advertising budget and for local base communication for the direct customer payment program. The Army Reserve also found it difficult to fund the congressionally approved reinstatement of 1,000 Active Guard and Reserve (AGR) positions.

The Marine Corps Reserve faced a number of funding shortages in Fiscal Year 1999. There was an annual deficiency of $2.5 million resulting from the increased cost of maintaining an aging fleet of tactical equipment, as well as a $1.9 million deficiency for critical individual equipment. There was a $1.4 million shortfall for facility renovation and aircraft tiedowns associated with relocation of two helicopter squadrons from Marine Corps Air Station in El Toro, CA, to Edwards AFB, CA. Additional deficiencies resulted from increased costs associated with inter-service support agreements, leases, and tenant agreements with other services supporting Marine Reserve Training Centers. These agreements provide for engineering services, communications, utilities, and various

base support costs. Force restructuring in other Reserve components has meant that the Marine Corps Reserve is now responsible for paying all site maintenance costs that were once shared with Naval or Army Reserve units. These changes have occurred at sites in Alameda and Bakersfield, CA; Topeka, KS; Dayton, OH; and Chicopee, MA.

The Air National Guard continues to suffer from a general lack of funding for its major weapons systems. In theory, funding for maintaining and modernizing Reserve component systems is allocated at the same level as for the Active forces. However, this has typically not been the case. For example, the Air National Guard had difficulty obtaining sufficient funding in time for its aircraft to meet Global Air Navigation System requirements. In addition, the Air National Guard has struggled to equip mobility aircraft with adequate self-protection systems, while also attempting to address aging aircraft issues. Another major concern is the lack of precision guided munitions capability on many of the Air National Guard's combat aircraft. The Depot Level Reparable program faced two major obstacles in Fiscal Year 1999. The first was an across-the-board stock fund price increase of over 30 percent; the second was an increased number of scheduled time change requirements (regularly scheduled maintenance) on the aircraft. This meant that while the frequency of scheduled maintenance increased, the Air National Guard was actually able to afford less maintenance than before, since its maintenance budget failed to keep pace with price increases.

The Air Force Reserve has expressed concerns on a number of funding issues. Among these are obtaining adequate compensation and benefits for Reservists and their families, properly allocating equipment resources, and making appropriate long-term capital investments in military construction. The question of how to pay for any new benefits, equipment and facilities is an ongoing concern for the Air Force Reserve leadership. These issues are becoming increasingly important as the nation places greater reliance on the Reserve components. The Air Force Reserve is eager to assume new missions and tasks, but must receive sufficient funding and personnel authorizations to execute these missions.

The Coast Guard Reserve's greatest funding challenge is obtaining both authorization and funding to support a Selected Reserve strength of 12,293 positions, as validated in a 1997 review of roles and missions. This figure represents a significant increase from the current authorized strength level of 8,000 members, although this requirement is roughly equivalent to the Coast Guard's Selected Reserve strength as recently as 1991. The increased strength would help the Coast Guard meet its current national defense tasking, operational contingency requirements, and mission critical functions.

Reserve Component Training

Reserve component training is made up of four categories:

- **Inactive Duty Training (IDT)**: Authorized training performed by Guardsmen and Reservists not on Active Duty and performed in connection with the prescribed activities of their Reserve component. It consists of regularly scheduled training periods, additional training periods, and equivalent training.
- **Annual Training (AT):** The minimum period of training Guardsmen and Reservists must perform each year to satisfy their Reserve training requirements, generally 12 to 15 days. The primary purpose is to provide individual or unit readiness training, but it may also support Active component missions and requirements.
- **Initial Active Duty for Training (IADT):** A sub-category of Active Duty training used to provide basic military and technical skill training for new Guardsmen and Reservists.
- **Other Training Duty (OTD):** Training not covered under one of the preceding categories. It includes Active Duty for Special Work (ADSW) and Active Duty

for Training (ADT), used to provide educational courses or unit training for Guardsmen and Reservists. The primary purpose of ADT is to provide individual or unit readiness training, although it may also support Active component missions and requirements, such as mobilization or full-time support.

Reserve component training funds for Fiscal Years 1998 to 2000 are listed in Table 2-1.

Table 2-1
RESERVE COMPONENT TRAINING FUNDING
(Dollars in Millions)

Service	FY 1998	FY 1999	FY 2000[1]
Army National Guard			
Annual Training	563.1	591.8	570.7
Initial Active Duty Training	192.0	170.3	190.5
Other Training Duty	141.8	103.7	65.1
Inactive Duty Training	1,008.6	990.9	984.8
Army Reserve			
Annual Training	260.4	283.7	285.4
Initial Active Duty Training	144.0	116.5	112.5
Other Training Duty	121.7	31.3	27.5
Inactive Duty Training	617.5	633.8	664.3
Naval Reserve (Air)			
Annual Training	53.4	52.9	57.3
Initial Active Duty Training	0.0	0.0	0.0
Other Training Duty	15.9	13.0	17.3
Inactive Duty Training	151.5	153.2	157.3
Naval Reserve (Surface)			
Annual Training	138.2	136.0	147.5
Initial Active Duty Training	0.0	0.0	0.0
Other Training Duty	13.0	10.6	14.0
Inactive Duty Training	177.7	179.0	183.6
Marine Corps Reserve			
Annual Training	35.4	35.6	36.8
Initial Active Duty Training	54.4	55.1	59.2
Other Training Duty	32.7	38.7	32.3
Inactive Duty Training	96.0	97.5	100.8
Air National Guard			
Annual Training	231.7	248.5	251.5
Initial Active Duty Training	26.2	27.1	28.7
Other Training Duty	191.4	136.2	171.7
Inactive Duty Training	361.2	365.6	379.4
Air Force Reserve			
Annual Training	179.0	189.4	199.5
Initial Active Duty Training	6.6	4.4	11.3
Other Training Duty	329.5	350.9	197.0
Inactive Duty Training	300.8	311.4	311.2
Coast Guard Reserve			
Annual Training	10.8	10.2	11.4
Initial Active Duty Training	2.1	2.5	1.9
Other Training Duty	0.7	1.1	0.05
Inactive Duty Training	26.7	28.4	28.8

[1]Figures are estimates.
Source: The Reserve components.
Data as of September 30, 1999.

Reserve Component Training Shortfalls

In general, funding issues did not prevent the Reserve components from performing their primary training missions. While contingency operations did complicate training plans, relatively few training activities were canceled as a direct result of these operations. Nevertheless, some Reserve units were unable to accomplish all their planned readiness training activities because of contingency operations. The precise impact this will have on training funding is difficult to quantify.

The Department of Defense has made a concerted effort to increase support for the Reserve components, in part to overcome the funding shortfalls of previous years. The Future Years Defense Program budget maintains readiness levels necessary to meet mobilization requirements as outlined in the current National Military Strategy. Although funding shortfalls are likely to continue in the near term, the Reserve components anticipate that these will largely be addressed if the programmed outyear budget increases are fulfilled.

The Army National Guard received insufficient Operation and Maintenance funding in Fiscal Year 1999 to support its scheduled training requirements. In fact, the funding was inadequate to support platoon-level maneuver requirements, the basis for the Army Training Strategy. While Army National Guard enhanced Separate Brigades were funded at the required 278 tank-miles level, funding for Army National Guard divisions was only enough to support 157 tank-miles of operational tempo. This forced the divisions to scale back on their training events. In addition, the Army National Guard was forced to transfer more than $10 million from operational tempo accounts to fund environmental requirements at the Massachusetts Military Reservation, thereby further limiting the divisions' ability to support platoon-level training.

Likewise, the Army Reserve received insufficient Operation and Maintenance funds to support its programmed training requirements. Although real funding increased from Fiscal Year 1998 levels, cuts were made in two major accounts: the operations tempo for later deploying and power projection enabling units, and the Real Property Maintenance account. No training activities were canceled because of funding shortages, but the near-term readiness and infrastructure accounts continue to suffer the majority of the cuts. Participation in real-world contingency operations and the concurrent training benefit were the only factors that prevented the degradation of training activities for combat support and combat service support units.

The Naval Reserve's programmed training requirements were adequately funded during Fiscal Year 1999. There were no significant shortfalls, and no training activities had to be canceled for lack of funding. The continuing decline, in real terms, of overall funding levels has not affected readiness training so far. Likewise, participation in contingency operations has not prevented the accomplishment of training activities.

The Marine Corps Reserve's Operation and Maintenance funding was adequate to meet its annual training requirements. However, it should be noted that this was only possible because of a congressional enhancement to support joint exercises. Marine Reservists participated fully in all scheduled events and exercises, and there was no significant impact on readiness. No training activities were canceled due to funding shortages or participation in contingency operations. Nevertheless, there may be a significant impact on the Marine Reserve Forces' ability to support combatant command-directed exercises in future years if the commanders-in-chief matching funds account is not increased above currently projected levels.

The Air National Guard's Fiscal Year 1999 Operation and Maintenance funding was adequate to support all programmed training requirements. However, that was primarily because many units were unable to perform all their programmed flying training while participating in contingency operations. These operations helped alleviate the effects of shortages in training funds. There continues to be a general trend toward reduced training because of continued under-funding of spare parts and depot maintenance.

Like other Reserve components, the Air National Guard has received supplemental funding to cover the cost of its contingency operations. The Air National Guard does not program funds for contingency operations, nor does it plan to use training funds to support these operations. All Reserve components budget for training in support of wartime missions, and the impact of these contingency operations on training is difficult to quantify. The Air National Guard is fully integrated with the Air Force and is included in all Air Force contingency planning and funding requests. The Air National Guard is using internal resources to re-engineer its forces to meet its new "shaping" mission as directed in the Defense Planning Guidance. However, increased training requirements continue to increase Operation and Maintenance costs.

The Air Force Reserve's Operation and Maintenance funding in Fiscal Year 1999 was adequate to support its programmed training requirements.

The Coast Guard Reserve's Fiscal Year 1999 Operation and Maintenance funding was sufficient to meet training requirements. There were no significant shortages, and no scheduled training activities were canceled due to funding.

Funding shortfalls for each of the Reserve components are shown in Table 2-2.

Table 2-3 displays the budget authority for Reserve components for Fiscal Years 1998 through 2000.

Chart 2-1 reflects the Defense Department's total obligation authority for both Active and Reserve components. These percentages represent funding for both Operation and Maintenance and Military Personnel accounts.

Support of Active Duty Missions and Contingency Operations

Adequate funding support is critical to maintaining the readiness of the Reserve components. During Fiscal Year 1999 the Reserve components continued their extensive support of Active force contingency operations, humanitarian assistance, counter-drug missions, and training exercises. Reserve support was essential to the success of these missions, and would not have been possible without adequate funding.

The Reserve components do not set aside funding in their budgets for contingency operations. If Congress does not appropriate funds for such operations, they may have to be funded from the Active and Reserve forces' training accounts. Contingency operations' impact on training in Fiscal Year 1999 is difficult to quantify, and the amount of training funds diverted is difficult to capture.

Each Reserve component treats contingency funding in a slightly different way, particularly in its approach to funding volunteers and members activated involuntarily. Army National Guard members are funded by the Active component, using accounts established for Temporary Tours of Active Duty and presidential call-ups. The Army National Guard uses Temporary Tours of Active Duty when individual volunteers are needed to fill a specific requirement, but considers presidential call-ups more appropriate if the requirement is for units, rather than individuals.

Table 2-2
RESERVE COMPONENTS FUNDING SHORTFALLS
(Dollars in Millions)

Category/ Fiscal Year[1,2]	Army National Guard	Army Reserve	Naval Reserve	Marine Corps Reserve	Air National Guard	Air Force Reserve	Coast Guard Reserve
O&M Funding							
98	455.0	439.0	0.0	0.0	16.1	184.5	0.0
99	249.7	0.0	0.0	0.0	0.0	246.1	0.0
00	483.0	195.6	0.0	30.5	4.0	272.0	.5
Travel Funds							
98	0.0	0.0	0.0	0.0	0.0	0.0	0.0
99	0.0	0.0	0.0	0.0	0.0	0.0	0.0
00	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Medical Training							
98	0.0	0.0	0.0	0.0	1.0	0.0	0.0
99	0.0	0.0	0.0	0.0	1.0	0.0	0.0
00	0.0	0.0	0.0	0.0	1.3	0.0	0.0
Major Equipment							
98	0.0	1,400.0	441.0	106.1	50.0	0.8	9.2
99	0.0	1,700.0	596.0	110.0	13.1	30.0	9.2
00	0.0	282.9	0.0	102.0	40.7	20.0	10.2
Depot Maintenance							
98	226.0	50.0	64.0	1.5	5.9	49.7	0.0
99	174.0	43.0	25.3	1.9	59.2	32.1	0.0
00	41.0	3.4	28.2	3.1	42.0	31.1	0.0
Construction							
98	313.0	103.8	27.0	0.0	5.0	48.0	0.0
99	264.0	83.9	42.7	0.0	31.7	45.5	0.0
00	237.0	76.7	0.0	10.0	24.0	47.3	0.0
BRAC Impact							
98	0.0	0.0	0.0	0.0	0.0	0.0	0.0
99	0.0	0.0	0.0	0.0	0.0	0.0	0.0
00	0.0	0.0	0.0	0.0	2.8	0.0	0.0
Environment							
98	8.0	3.8	0.0	2.5	7.6	2.2	0.0
99	0.7	3.6	2.7	2.0	4.1	0.2	0.0
00	37.0	0.0	0.0	2.4	0.0	0.0	0.0
Miscellaneous							
98	0.0	0.0	0.0	17.3	0.0	0.0	5.5
99	75.0	0.0	0.0	66.3	0.0	0.0	6.5
00	0.0	10.0	0.0	10.0	0.0	0.0	10.7

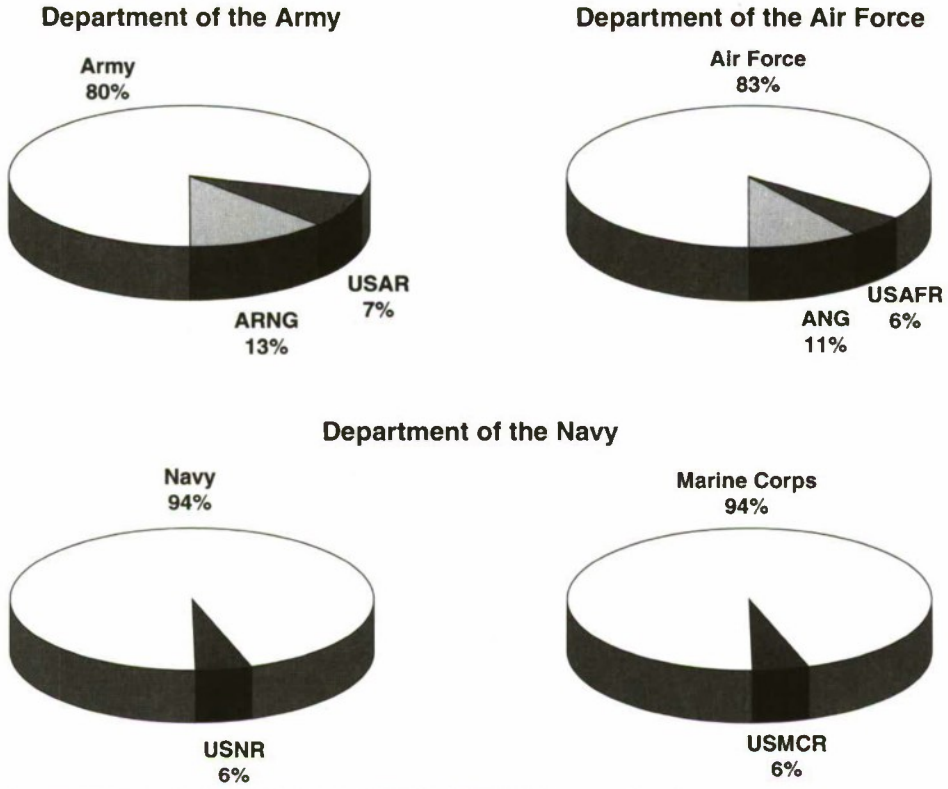
[1]Fiscal Year 2000 numbers are estimates.
[2]Marine Corps Reserve construction funding shortfalls are included with the Naval Reserve construction shortfall totals.
Sources: Office of the Assistant Secretary of Defense for Reserve Affairs and the Reserve components.
Data as of September 30, 1999.

Table 2-3
BUDGET AUTHORITY
(Dollars in Millions)

Service	FY 1998	FY 1999	FY 2000[1]
Army National Guard			
Personnel	3,459.0	3,636.2	3,605.2
Operation and Maintenance	2,447.0	2,805.6	3,145.0
Military Construction	122.1	151.3	236.2
Procurement[1]	592.8	1,037.1	981.3
Army Reserve			
Personnel	2,040.0	2,182.9	2,292.0
Operation and Maintenance	1,211.1	1,258.5	1,461.6
Military Construction	74.2	102.1	110.8
Procurement[1]	158.1	163.4	252.4
Naval Reserve			
Personnel	1,394.0	1,450.6	1,473.4
Operation and Maintenance	924.0	982.0	954.0
Military Construction	47.3	31.6	28.3
Procurement[1]	129.9	96.6	134.6
Marine Corps Reserve			
Personnel	394.7	401.3	412.7
Operation and Maintenance	116.4	127.0	138.2
Military Construction (included with NR)	(12.8)	(4.1)	(10.8)
Procurement[1]	124.8	91.6	109.9
Air National Guard			
Personnel	1,382.9	1,452.0	1,529.0
Operation and Maintenance	3,081.8	3,216.1	3,224.3
Military Construction	190.4	185.7	262.4
Procurement[1]	621.5	567.6	590.6
Air Force Reserve			
Personnel	802.9	856.7	892.6
Operation and Maintenance	1,653.3	1,790.2	1,773.3
Military Construction	30.2	34.4	64.1
Procurement[1]	311.5	219.4	210.1
Coast Guard Reserve			
Personnel	58.7	66.7	64.7
Operation and Maintenance	6.3	7.3	7.3
Military Construction	0.0	0.0	0.0
Procurement	0.0	0.0	0.0
Totals			
Personnel	9,532.2	10,046.4	10,269.6
Operation and Maintenance	9,439.9	10,186.7	10,703.7
Military Construction	464.2	505.1	701.8
Procurement[1]	1,938.6	2,175.7	2,278.9

[1]Procurement includes P-1R Exhibit amounts budgeted by the Services and NGREA funds.
Source: Office of the Under Secretary of Defense, Comptroller OUSD(C).
FY1998 and 1999 reflect end of year actual obligation data.
FY2000 is estimated data as of February 2000.

Chart 2-1
TOTAL OBLIGATION AUTHORITY



[1]Percentages represent Operation and Maintenance and Military Personnel accounts only.
Source: The Reserve components.
Data as of September 30, 1999.

The Army National Guard provided lower-priority units to support operations in Bosnia, Kosovo, and Southwest Asia. To ensure that these units would deploy at the required readiness levels, the Army National Guard funded many of their expenses "out of pocket." This trend indicates a need to reconsider the resource priority that the Army assigns to essential Army National Guard units supporting Smaller Scale Contingencies.

The Army Reserve funds soldiers who volunteer or are mobilized for contingency operations from the Active Duty Military Personnel Appropriations. Contingency operations that are not fully funded must be paid from the Army Reserve's Operation and Maintenance accounts, thereby reducing valuable training dollars. Near-term readiness suffers when program funds must be used to support these unprogrammed operations. The Army Reserve has traditionally supported contingency operations using presidential call-ups, rather than soliciting volunteers. Like other Reserve components, the Army Reserve does not plan or budget for contingency operations, but relies on Congress to provide funding support. As a result, training is frequently degraded, especially early in the fiscal year.

Likewise, the Navy does not budget for Reserve participation in contingency operations. Instead, minor contingency operations are funded from the Active Navy's operating accounts. The Office of the Secretary of Defense also executes an overseas contingency transfer

fund for use in such contingencies. In Fiscal Year 1999, the Naval Reserve used $14 million from that contingency account for manpower, aircraft and ship operations in support of Kosov and Southwest Asia contingencies. Major contingencies are funded by congressionally approved reprogramming actions or supplemental funding. It is difficult to assess how this has affected training. While any Active Duty tours generally help train individual Reservists for mobilization, there comes a point of diminishing returns. In addition, it is important to note that Reservists' assignments during contingency operations may be entirely different from their wartime assignments. Naval Reserve policy fully supports Reservists who volunteer for contingency operations, regardless of their duty status. The Navy and the Naval Reserve share equally in available contingency funding.

The Marine Corps allocates a limited amount of Military Personnel Marine Corps funds to pay for minor contingency operations. The National Command Authority would identify and fund larger contingency operations, such as Bosnia or Kosovo. Volunteer orders are funded with either existing funds or supplemental funds approved by Congress. These funds allow the Marine Corps Reserve to participate in contingency operations without having to sacrifice necessary training.

The Air National Guard is fully integrated into Air Force contingency operations. The Air Force funds Air National Guard contingencies for mandays, per diem, and flying hour costs. Operational costs differ from the training costs. While training can sometimes be accomplished concurrently with contingency operations, future budgets could be affected, because these lower costs are used to predict future requirements. While it would initially appear that deployments would cost more in terms of maintenance and training, the reverse is actually the case. In reality, operations costs for deployments tend to be less costly than home-station training. While deployments tend to involve more flying operations, they usually do not involve as many sorties as home station training, nor do they involve critical skills such as dropping bombs or firing missiles. In addition, deployments often use different maintenance standards, deferring as much maintenance as possible until the unit returns home. Thus, if these lower operating costs are used as the basis for future budgets, it could seriously undermine the units' future ability to obtain sufficient training. Compounding this impact is the surge or catch-up maintenance required upon return to home station, as well as the lost training time that must be made up.

The Air Force Reserve relies almost totally on volunteers to support contingency operations. As a result, very few Air Force Reservists have been called to duty by presidential call-ups. Air Force Reserve participation in contingency operations is reimbursed by the requesting Major Command. Active commands routinely solicit Reserve support, and fund their operations from Active Duty appropriations. Such operations cost $222 million in Fiscal Year 1999. Air Force Reserve funding may be used on occasion to support Active component missions when there is sufficient training opportunity for the Reservists. In these cases, units use their available training funds to pay for the operations. In general, the use of Active Duty appropriations does not affect the training budget. However, extensive use of Active Duty funds over the course of a fiscal year may eventually affect the Air Force Reserve's ability to fully execute its training budget.

Coast Guard Reserve members are fully integrated into the Active Coast Guard. Consequently, their response to contingency operations cannot be linked specifically with a Reserve component mission. Coast Guard Reservists are frequently required to supplement the Active Coast Guard, and their activities can then be funded by the Coast Guard's operating expense appropriation. However, Reservists often count their duty in contingencies toward satisfaction of their basic Reserve training requirements. When they do so, all or part of the cost of that deployment can be funded from the Coast Guard's Reserve appropriation.

Support of Active component missions and contingency operations, such as those in Kosovo and Southwest Asia, remains a priority for the Reserve components. The funding to support these special requirements are listed in Table 2-4.

Active and Reserve Component Comparisons

Tables 2-5 through 2-11 contain data cost comparisons between Active and Reserve forces, based on direct unit costs. These costs represent the total array of resources required to field and operate primary force elements during peacetime. It should be noted that Reserve unit costs are essentially identical with Active unit costs when they are mobilized and performing the same missions. The units of primary interest in these tables are the battalions, wings and squadrons. In general, direct unit costs are dictated by the costs associated with the unit's personnel, equipment, training, and operating tempo. Differences in these factors are the main reason why direct unit costs differ between Active and Reserve units.

The direct unit costs used to compare Active and Reserve forces are:

- **Manpower costs:** Pay and allowances; accrual for retirement pay.
- **Operating costs**: Fuel and other petroleum products; replenishment (spare) parts; consumable parts and supplies; unit-funded transportation to training; other consumables, such as ammunition and tactical missiles; unit-funded contract services; and other sources of intermediate maintenance.
- **Equipment costs:** Replacement, overhaul, or modification of mission and support equipment funded on a unit basis.

Table 2-4
SPECIAL REQUIREMENTS TO SUPPORT ACTIVE COMPONENT MISSIONS
(Dollars in Millions)

Service	FY 1998	FY 1999	FY 2000[1]
Army National Guard (Active Duty for Special Work/ADSW)	17.1	19.6	20.6
Army (Temporary Tour Active Duty/TTAD)	15.9	15.8	?
Army Reserve (Active Duty for Special Work/ADSW)	0.0	0.0	8.1
Navy (Military Personnel Navy/MPN ADSW)	18.0	24.5	28.8
Marine Corps (Active Duty for Special Work/ADSW)	14.8	15.3	19.0
Air National Guard (Military Personnel Account/MPA)	86.6	77.4*	100.1
Air Force Reserve (Military Personnel Account/MPA)	81.0	72.6*	101.9
Total	203.3	190.8	257.9

[1]Figures are estimates.
*Does not include Bosnia support.
Source: The Reserve components.
Data as of September 30, 1999.

Table 2-5
NAVY GUIDED MISSILE FRIGATE (FFG 7) DIRECT UNIT COSTS
(C3/ALO-3)
(Dollars in Millions)

	Active		Reserve	
	FY 1998	FY 1999	FY 1998	FY 1999
Manning				
Active Officer	16	16	9	9
Active Enlisted	198	198	77	77
TAR Officer	0	0	5	5
TAR Enlisted	0	0	71	71
SelRes Officer	0	0	4	4
SelRes Enlisted	0	0	45	45
Total	214	214	212	212
Operating Tempo Cost	2,700 hrs/yr (27 days/qtr)	2,700 hrs/yr (27 days/qtr)	1,350 hrs/yr (18 days/qtr)	1,350 hrs/yr (18 days/qtr)
Manpower	8.3	8.4	7.3	7.1
Operations				
Fuel	1.4	1.2	0.6	0.5
Materials	0.8	0.6	0.8	0.5
Purchased Services	0.4	0.3	0.4	0.3
Repair Parts	0.8	1.1	0.7	0.8
Subtotal	3.4	3.2	2.5	2.1
Annual Recurring	11.7	11.6	9.8	9.2
Equipment-Related				
Overhauls/Availabilities	3.0	1.7	3.0	3.2
Emergency Repairs	0.5	0.5	1.0	0.4
Intermediate Maintenance	0.3	0.4	0.4	0.4
Subtotal	3.8	2.6	4.4	4.0
Long-Term Average Unit Cost	15.5	13.2	14.2	13.2

Source: U.S. Navy.
Data as of September 30, 1999.

Future Challenges

All the Reserve components are being asked to increase their support of Active forces, a challenge that generally requires additional funding, manpower and equipment. The new global military environment also has necessitated a fundamental restructuring of many of these forces. At the same time, the Reserves are struggling to overcome years of underfunding of programs ranging from personnel to military construction. Finally, the Reserve components must be adequately funded to meet the demands of a challenging recruiting environment.

The Army National Guard's most significant funding challenge is fully funding an end-strength of 350,000 members and a force structure authorization of 388,000 positions. In addition, there is a strong need to increase the full-time support authorizations and fund

Table 2-6
NAVY F/A-18 DIRECT UNIT COSTS
(C3) NAVY (Unless otherwise noted)
(Dollars in Millions)

	Active		Reserve (Navy F-18)	
	FY 1998	FY 1999	FY 1998	FY 1999
Aircraft per Squadron	12	12	12	12
Total Flying Hours	3,555	3,555	3,164	2,857
Manning				
Active Officers	33	33	1	0
Active Enlisted	236	236	6	9
TAR/AR Officers	0	0	6	8
TAR/AR Enlisted	0	0	120	120
Drill Officers	0	0	22	21
Drill Enlisted	0	0	121	90
Total	269	269	276	248
		Cost (Millions — FY 98/99 Dollars)		
Manpower				
Active Military	11.5	9.3	0.3	0.3
Reserve Military	0	0	6.2	5.9
Subtotal	11.5	9.3	6.5	6.2
Unit Operations				
Fuel (POL)	3.6	3.5	3.2	2.3
Consumable Supplies	6.8	6.4	8.1	5.3
Training (munitions)				
Subtotal	10.4	9.9	11.3	8.4
Annual Recurring				
Equipment Related				
Modifications/Overhauls			6.0	9.2
Replacement				
Support Equipment			30.0	5.9
Primary Equipment				
Aircraft			282.9	282.9
Attrition Aircraft			0	0
Subtotal			318.9	298.0
Long-Term Average Unit Cost			335.5	309.4

Source: U.S. Navy.
Data as of September 30, 1999.

ground operational tempo at the platoon level. If funded, the programmed spending for Fiscal Years 2001 to 2005 would make significant improvements in the Army National Guard's overall program balance. It is imperative that the Army National Guard Division Redesign Phase II conversions be fully funded through Fiscal Year 2009. Other must-pay items include critical full-time support requirements of 23,500 Active Guard and Reserve (AGR) members, along with 25,500 military technicians. Finally, it is essential that military construction and

Table 2-7
NAVY P-3C DIRECT UNIT COSTS (C3)
(Dollars in Millions)

	Active		Reserve	
	FY 1998	FY 1999	FY 1998	FY 1999
Aircraft per Squadron	8	8	8	7
Total Flying Hours	5,201	5,201	2,604	2,586
Manning				
Active Officers	68	68	0	1
Active Enlisted	298	298	1	1
TAR/AR Officers	0	0	6	7
TAR/AR Enlisted	0	0	115	115
Drill Officers	0	0	68	64
Drill Enlisted	0	0	176	132
Total	366	366	367	319
		Cost (Millions — FY 98/99 Dollars)		
Manpower				
Active Military	16.3	16.7	0.1	0.1
Reserve Military	0	0	7.0	6.6
Subtotal	16.3	16.7	7.1	6.7
Unit Operations				
Fuel (POL)	3.2	3.2	1.9	1.6
Consumable Supplies	11.1	11.3	4.0	3.1
Training (munitions)			5.7	2.1
Subtotal	14.5	14.5	11.6	6.8
Annual Recurring	30.8	31.2	18.7	13.5
Equipment Related				
Modifications/Overhauls			6.0	13.2
Replacement				
Support Equipment			0.5	4.9
Primary Equipment				
Aircraft			167.3	146.4
Attrition Aircraft			0	0
Subtotal			173.8	164.5
Long-Term Average Unit Cost			192.5	178.0

Source: U.S. Navy.
Data as of September 30, 1999.

real property maintenance funding be fully supported and approved, to help reduce the rising backlogs in these programs. Without the necessary funding support, the Army National Guard will be unable to support its entire range of missions.

The Army Reserve's most significant funding challenges involve improving recruiting and retention, acquiring sufficient numbers of full-time support personnel, and providing adequate school training. In addition, funding for base operations and real property

Table 2-8
F/A-18 DIRECT UNIT COSTS
MARINE CORPS
(Dollars in Millions)

	Active		Reserve (Marine F-18)	
	FY 1998	FY 1999	FY 1998	FY 1999
Aircraft per Squadron	12	12	12	12
Total Flying Hours	4,401	4,142	2,984	2,984
Manning				
Active Officers	19	19	3	3
Active Enlisted	171	169	90	90
TAR/AR Officers	0	0	3	3
TAR/AR Enlisted	0	0	29	29
Drill Officers	0	0	15	17
Drill Enlisted	0	0	65	76
Total	190	188	205	218
		Cost (Millions — FY 98/99 Dollars)		
Manpower				
Active Military	6.5	10.3	0	0
Reserve Military	0	0	4.7	6.3
Subtotal	6.5	10.3	4.7	6.3
Unit Operations				
Fuel (POL)	4.2	3.6	2.8	2.8
Consumable Supplies	6.8	6.2	2.3	1.6
Training (munitions)	1.0	.9	3.6	3.2
Subtotal	12.0	10.7	8.7	7.6
Annual Recurring				
Equipment Related				
Modifications/Overhauls	3.2	3.4	6.0	5.3
Replacement				
Support Equipment	1.4	1.3	0.2	0.7
Primary Equipment				
Aircraft[1]				
Attrition Aircraft[2]				
Subtotal	4.6	4.7	6.2	6.0

[1]Fiscal Year 1999 replacement cost for F/A-18 is $44 million per aircraft.
[2]No attrition aircraft were procured in Fiscal Year 1999.
Source: U.S. Marine Corps.
Data as of September 30, 1999.

maintenance remains a concern. The success of the "tiered resourcing" technique has yielded an increase of more than $750 million of operations tempo funding over the outyears. Recent gains made in near-term readiness will rapidly vanish if these accounts are not fully funded.

The Naval Reserve has finally begun to overcome the funding shortfalls it experienced

Table 2-9
MARINE CORPS INFANTRY BATTALION DIRECT UNIT COSTS
(Dollars in Millions)

	Active				Reserve			
	Marine Corps		Navy		Marine Corps		Navy	
	FY 98	FY 99	FY 98	FY 99	FY 98	FY 99	FY 98	FY 99
Manning								
Active Officer	38	39			6	6		
Active Enlisted	765	765			34	34		
AR Officer					1	0		
TAR Officer								
AR Enlisted					16	17		
TAR Enlisted								
SELRES Officer					39	45		
SELRES Enlisted					753	855		
Total	803	804			849	957		
	Cost (Millions — FY 98/99 Dollars)							
Manpower	25.8	26.0			5.8	6.3		
Unit Operations	0.4	0.6			0.46	0.48		
Annual Recurring	26.2	26.6			6.05	6.78		
Equipment Related	0.1	0.2			0.3	0.4		
Long-Term Average Unit Cost	26.3	26.8			6.56	7.18		

Source: U.S. Marine Corps.
Data as of September 30, 1999.

in the last several years. Beginning in Fiscal Year 2001, the Naval Reserve will be sufficiently funded to carry out all of its assigned missions. However, other funding challenges remain. For example, force modernization is a continuing concern. The Naval Reserve has historically relied upon equipment from Active units to furnish its units, often supplemented by congressional funding adds. However, both of these sources have decreased in recent years. In fact, the trend is that the National Guard and Reserve Equipment Appropriation (NGREA) — a mainstay of Naval Reserve modernization — will ultimately be eliminated. This would force the Naval Reserve to rely almost entirely on the Active Navy's programming and budgeting process for its modernization programs. Reserve component budget share would have to increase to make up for the corresponding decrease in NGREA funding if the Naval Reserve is to maintain current readiness levels.

In other areas, recruiting and retention programs represent a significant new challenge as the Naval Reserve enters an uncertain recruiting environment. New information technology requirements represent another area in which the Naval Reserve expects to invest substantially in coming years.

The Marine Corps Reserve faces a number of funding challenges. These include obtaining funding needed to maintain aging equipment, reduce the backlog of maintenance and repair on facilities, provide corrosion control for vehicles, and eliminate shortages in newly

Table 2-10
F-16C/D DIRECT UNIT COSTS
(Dollars in Millions)

	Active		Reserve			
			Air Force Reserve		Air National Guard	
	FY 98	FY 99	FY 98	FY 99	FY 98	FY 99
Aircraft per Squadron	18	18	15	15	15	15
Total Flying Hours	5,670	6,426	3,720	3,708	3,996	3,996
Manning						
Active Officers	40	40	0	0	4	4
Active Enlisted	564	546	0	0	20	20
Drill Officers	0	0	31	30	25	25
Drill Enlisted	0	0	381	395	301	301
Civilians	11	11	200	190	155	155
Total	615	597	612	615	505	505
			Cost (Millions — FY 98/99 Dollars)			
Manpower						
Active Military	24.1	25.7	0	0	1.6	1.6
Reserve Military	0	0	3.5	3.6	2.8	2.8
Civilian	0.6	0.6	9.6	15.3	8.2	9.0
Total	24.7	26.3	13.1	18.9	12.6	13.4
Unit Operations						
Fuel	4.8	4.7	3.0	2.8	3.0	3.0
Consumable Supplies	1.8	1.4	1.5	1.6	1.2	1.4
Recoverable	7.2	7.1	6.2	9.6	5.4	6.4
Training (munitions)	0.4	1.2	0.0	0.0	0.7	0.2
Total	14.2	14.4	10.7	14.0	10.3	11.0
Annual Recurring Total	28.9	40.7	23.8	32.9	22.9	24.4
Equipment Related						
Modifications/Overhauls	15.3	3.2	1.5	1.3	0.4	0.9
Replacement						
Support Equipment	1.1	0.8	0.6	1.8	0.6	0.7
Total	16.4	4.0	2.1	3.1	1.0	1.6

Sources: U.S. Air Force, Air National Guard, and Air Force Reserve. Data as of September 30, 1999.

fielded individual equipment items. In addition, funds are needed to support host/tenant agreements at the Reserve Training Centers. It could require as much as $25 million annually to adequately address these issues.

The most daunting funding challenge facing the Air National Guard involves its efforts to reshape its force structure. The Defense Planning Guidance has directed that the Air National Guard evolve from its Cold War-era "train and respond" force into a modern "shape and respond" force, that is, a force involved in shaping the global military environment and augmenting the Active force in real world contingency operations. This Future Force initiative

Table 2-11
KC-135R DIRECT UNIT COSTS
(Dollars in Millions)

	Active		Reserve			
			Air Force Reserve		Air National Guard	
	FY 98	FY 99	FY 98	FY 99	FY 98	FY 99
Aircraft per Squadron	12	12	10	10	10	9
Total Flying Hours	3,672	3,672	2,947	3,009	2,976	2,788
Manning						
Active Officers	61	37	0	0	4	4
Active Enlisted	36	355	0	0	32	32
Drill Officers	0	0	60	60	60	60
Drill Enlisted	0	0	360	360	318	318
Civilians	8	8	203	202	202	202
Total	429	400	623	622	616	616
			Cost (Millions — FY 98/99 Dollars)			
Manpower						
Active Military	18.4	17.7	0	0	2.2	2.2
Reserve Military	0	0	3.9	4.0	3.7	3.8
Civilian	0.4	0.4	9.7	10.9	11.0	12.1
Total	18.8	18.1	13.6	14.9	16.9	18.1
Unit Operations						
Fuel4.6	8.2	5.9	2.8	4.0	3.9	3.7
Consumable Supplies	1.3	0.9	0.7	0.7	0.6	0.7
Recoverable	2.7	2.0	1.2	1.1	1.1	1.5
Total	12.2	8.8	4.6	5.8	6.0	5.9
Annual Recurring Total	31.0	26.9	18.2	20.7	23.0	24.0
Equipment Related						
Modifications/Overhauls	4.6	8.1	6.2	5.7	1.7	3.4
Replacement Support Equipment	0.3	0.3	0	0	0.2	0.2
Total	4.9	8.4	6.2	5.7	1.9	3.6

Sources: U.S. Air Force, Air National Guard, and Air Force Reserve. Data as of September 30, 1999.

involves replacing the Cold War-era force structure with a leaner, more mobile Total Force structure. The Air National Guard is also reconfiguring its units to meet the demands of the Air Force's newly implemented Expeditionary Aerospace Force concept.

At the same time, the Air National Guard must continue to allocate its funding among the readiness, modernization and people programs. Without additional resources, the Air National Guard's mission-capable and readiness ratings may suffer. The sustained economic growth of the commercial airline industry has placed the Air National Guard in the difficult position of competing with the private sector for the limited pool of trained military pilots. Additional funding is required to offset the

cost of the increased salary structures required to compete with the major airlines for new pilots and, more importantly, to retain current Guard pilots. The task of maintaining aging weapon systems is using more of the Air National Guard's available spare parts and depot maintenance resources. Without added funding, the Air National Guard's massive real property maintenance backlog will continue to escalate, and facilities will further deteriorate. Likewise, unless current fiscal constraints change, the Total Air Force's military construction program will remain stagnant, at levels far short of what is needed to provide adequate facilities.

The Air Force Reserve's major funding challenge will be a civilian pay shortage in Fiscal Year 2000, due mainly to variations between programmed work-year costs and actual execution costs. This funding shortfall hinders the Air Force Reserve's ability to execute its authorized work-year program. The shortfall is further compounded by one-time personnel separation costs resulting from privatization of some base support functions. Ongoing privatization efforts within the command have also resulted in significant contract cost requirements. Another concern involves keeping information technology current, so Reservists have access to the data critical to their missions. The funding for the Reserve associate training flying hour program is inadequate, because of a difference between the rate at which Air Force Reserve Command is funded and the rate being charged. Finally, The Air Force Reserve is programming additional funds for 593 Individual Mobilization Augmentees (IMAs).

The Coast Guard Reserve currently has an authorized strength of 8,000 Selected Reservists and is funded for 7,600 Selected Reservists in Fiscal Year 2000. A 1997 Roles and Missions Study concluded that 12,293 Selected Reserve members were needed. In the interim, it is imperative that funding be received commensurate with the authorized strength. The current budget does not support the statutory minimum of 48 drills and 12 days of Annual Training for 8,000 Selected Reservists.

Manpower, Personnel, and Force Structure

3

"Anyone who has doubts or reservations about the future generations of our country only need see the young men and women of our National Guard and Reserve to know that the leaders for the 21st Century are there."

Rudy de Leon
Under Secretary of Defense for Personnel and Readiness



Introduction

Members of the Reserve components are serving alongside their Active Duty counterparts throughout the world, supporting both contingencies and routine military operations. Active forces can maintain high operational levels for limited periods, but they cannot sustain them indefinitely unless they are augmented by Reserve component support.

As a result, Reserve component forces are increasingly being used to relieve heavily burdened Active Duty forces. Guardsmen and Reservists collectively performed approximately 12.5 million mandays of military duty in Fiscal Year 1999, roughly double the support provided in 1994. That represents the equivalent of about 35,000 full-time troops. This is the fourth consecutive year that the Reserve components have provided this level of support. Some of that increase was due to involuntary presidential call-ups associated with operations in Bosnia, Kosovo and Iraq. However, the greatest growth has been in routine operational support. Reserve component members provide this support in a variety of ways: voluntary and involuntary orders to Active Duty, two-week annual tours both in the U.S. and overseas, inactive duty, additional training periods, and Active Duty for Special Work.

Major General Thomas J. Plewes, Chief of the Army Reserve, said, "Our citizen-soldiers, the Army's link to the American people, who bring their civilian-acquired skills and expertise with them to the warfight, provide the Army with unparalleled support capabilities. Without the Army Reserve, the Army cannot do its missions." Guardsmen and Reservists played vital roles in Operations Joint Forge and Joint Guard in southern Europe. Similarly, the ongoing efforts to police Iraqi forces in Operations Northern Watch and Southern Watch could not be accomplished without Reserve component forces. Guardsmen and Reservists on annual tours provide all tactical airlift support for SOUTHCOM in Southwest Asia, as well as significant engineering, medical and special operations support. In the Pacific region, PACOM annually schedules Guardsmen and Reservists to participate in exercises. Moreover, Reserve component fighters and tankers rotate through contingency support taskings just as any Active Duty forces would. Guardsmen and Reservists are an essential part of any operation the U.S. armed forces undertake.

The following two graphs illustrate how the Reserve components enable the armed forces to "do more with less." Figure 3-1 shows how dramatically the numbers of both Active and Reserve forces have declined since the fall of the Berlin Wall. Active forces dropped by more than a third, while Reserve forces declined by nearly one-fourth. During that same period, however, the use of Reserve components has grown steadily, as shown in Figure 3-2.

Figure 3-1
THE TREND (FY86 – FY99)
(Active and Reserve End Strengths)

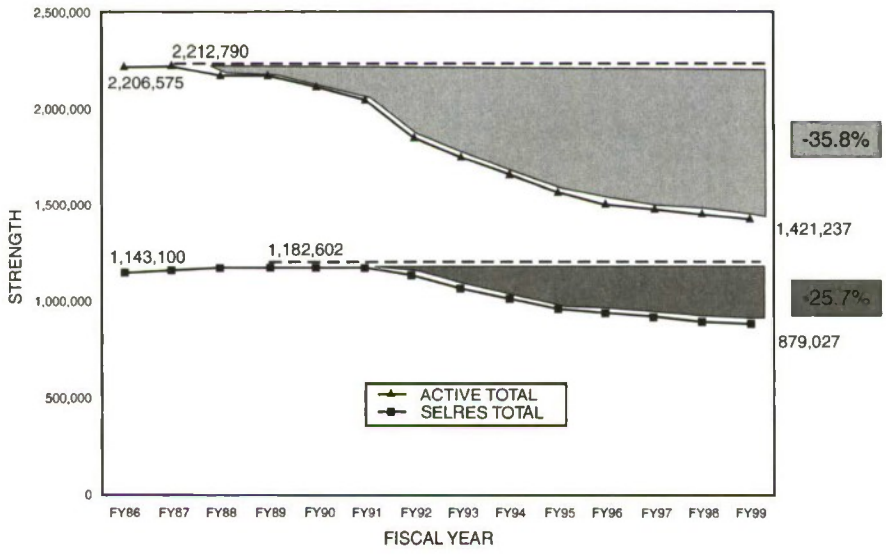
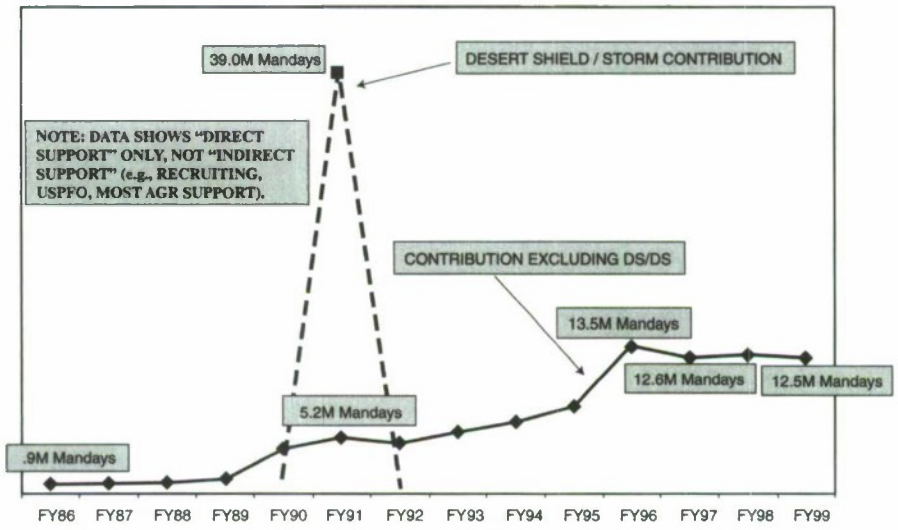


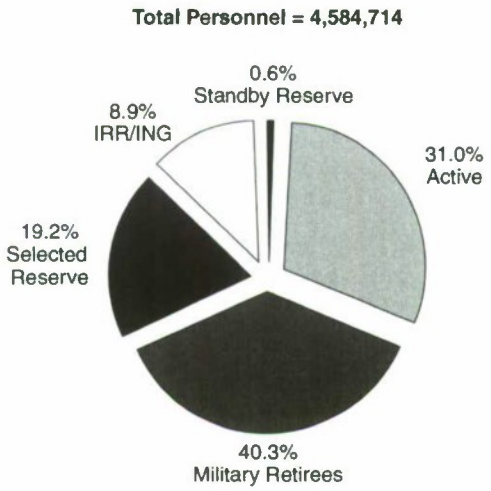
Figure 3-2
OUTPUT DELIVERED:
TOTAL FORCE CONTRIBUTION



Total Military Mobilization Personnel

Chart 3-1 provides the percentage of military personnel available for mobilization during Fiscal Year 1999. Table 3-1 shows the contributions of the Active and Reserve components to the Total Force.

Chart 3-1
TOTAL MILITARY
MOBILIZATION MANPOWER



Source: Office of the Assistant Secretary of Defense for Reserve Affairs.
Data as of September 30, 1997.

Composition of the Reserve Components

There are seven Reserve components: the Army National Guard, Army Reserve, Naval Reserve, Marine Corps Reserve, Air National Guard, Air Force Reserve, and Coast Guard Reserve.

Table 3-2 shows the composition of the Ready Reserve. Individuals serve in one of three manpower management categories:

- the **Ready Reserve**, which consists of the Selected Reserve, the Individual Ready Reserve, and the Inactive National Guard.
- the **Standby Reserve**.
- the **Retired Reserve**.

Standby Reserve

The Standby Reserve is made up of individuals who are designated key civilian employees, or who have a temporary disability or hardship. *Note*: There is no Standby Reserve in the Army National Guard or Air National Guard.

Members of the Standby Reserve can be involuntarily ordered to Active Duty in time of war or national emergency if there are not enough available Reservists in the Ready Reserve to meet requirements. Table 3-4 depicts the strength of the Standby Reserve for Fiscal Years 1998 and 1999.

Table 3-1
CONTRIBUTORS IN THE TOTAL MILITARY FORCE
(Strengths in Percentages)

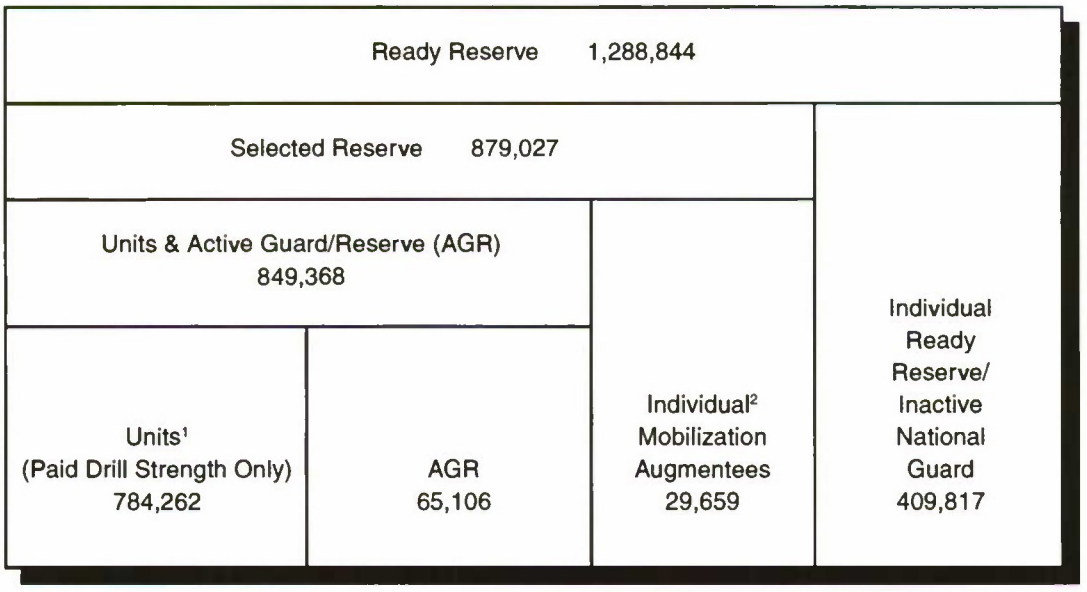
	Active	Reserve	ARNG	ANG	IRR	ING	Total
Army	38.9	16.8	29.0		14.9	0.4	100.0
Navy	65.9	15.8			18.3		100.0
Marine Corps	63.6	14.7			21.7		100.0
Air Force	60.9	12.1		17.8	9.2		100.0
Coast Guard	73.7	16.8			9.4		100.0

Excludes civilian employees (Army totals rounded to 100%).
Sources: Assistant Secretary of Defense for Reserve Affairs and the Coast Guard Reserve.
Data as of September 30, 1999.

Retired Reserve

The Retired Reserve consists of all Reserve officers and enlisted personnel who receive retired pay as a result of their Active Duty and/or Reserve service, or who have qualified for retired pay but have not yet reached age 60. All retired members who have completed at least 20 years of Active Duty remain subject to call-up to Active Duty by their service secretary.

Table 3-2
COMPOSITION OF THE READY RESERVE



[1]Includes training pipeline.
[2]Includes USCG IMAs.
Sources: Office of the Assistant Secretary of Defense for Reserve Affairs and the Reserve components.
Data as of September 30, 1999.

Table 3-3
SELECTED RESERVE AUTHORIZED/ASSIGNED END STRENGTHS

	FY 1998			FY 1999			FY 2000
Component	Authorized	Assigned	Fill Rate	Authorized	Assigned	Fill Rate	Authorized
Army National Guard	361,516	362,444	100.3%	357,223	357,469	100.1%	350,000
Army Reserve	208,000	204,968	98.5%	208,003	206,836	99.4%	205,000
Naval Reserve	94,294	93,171	98.8%	90,843	89,172	98.2%	90,288
Marine Corps Reserve	42,000	40,842	97.2%	40,018	39,953	99.8%	39,624
Air National Guard	108,002	108,096	100.1%	106,992	105,715	98.8%	106,678
Air Force Reserve	73,447	71,970	98.0%	74,243	71,772	96.7%	73,708
Coast Guard Reserve	8,000	7,587	94.8%	8,000	8,110	101.4%	8,000
Total	895,259	889,078	99.3%	885,322	879,027	99.3%	873,298

Source: Office of the Assistant Secretary of Defense for Reserve Affairs.
Data as of September 30, 1999.

Components of the Ready Reserve

The Ready Reserve contains three classifications of Reservists: the Selected Reserve, the Individual Ready Reserve, and the Inactive National Guard.

Selected Reserve

The Selected Reserve is made up of individuals and units that are essential to wartime missions. Selected Reservists have priority for training and equipment over Reservists in other categories.

The majority of Selected Reservists perform their training as part of a Reserve unit. However, some members of the Selected Reserve train as individuals. These include the Individual Mobilization Augmentees and Active Guard and Reserve (AGR) members.

- Individual Mobilization Augmentees (IMAs) are members of the Selected Reserve. The IMA program provides pre-trained individuals to augment Active Duty organizations. *Note*: The Army National Guard and the Air National Guard do not have IMA programs. IMAs are critical assets to commanders in both peacetime and wartime. First, they enable units to meet the requirements of a contingency or major war. They also provide highly specialized technical skills from previous military and civilian experience. In addition, IMAs often provide an element of continuity because they tend to rotate less frequently than their Active Duty counterparts. Table 3-6 shows the number of Reserve component IMAs assigned at the end of Fiscal Year 1999.

Table 3-4
STANDBY RESERVE

	FY 1998	FY 1999	% Change
Active			
DoD	1,866	1,942	+4.1%
US Coast Guard Reserve	3	3	N/C
Inactive			
DoD	26,897	26,022	-3.3%
US Coast Guard Reserve	154	173	+12.3%
Total	28,920	28,140	-2.7%

Source: Office of the Assistant Secretary of Defense for Reserve Affairs.
Data as of September 30, 1999.

Table 3-5
FULL-TIME SUPPORT PERSONNEL STRENGTHS

	Army National Guard	Army Reserve	Naval Reserve	Marine Corps Reserve	Air National Guard	Air Force Reserve	DoD Total	Coast Guard Reserve	Total
AGR/TAR Personnel[1,2]									
Required	40,827	21,517	15,590	2,559	10,930	1,134	92,557	70	92,627
Authorized	21,986	12,807	15,590	2,362	10,931	992	64,668	70	64,738
Assigned	21,912	12,983	15,875	2,317	10,973	981	65,041	65	65,106
Military Technicians[2]									
Required	23,815	10,347	N/A	N/A	25,750	9,733	69,645	N/A	69,645
Authorized	24,761	6,474	N/A	N/A	22,750	9,761	63,746	N/A	63,746
Assigned	23,578	6,355	N/A	N/A	22,892	9,470	62,295	N/A	62,295
Active Component[3]									
Required	320	603	6,402	4,096	727	700	12,848	403	13,251
Authorized	188	619	6,402	4,096	727	700	12,732	403	13,135
Assigned	184	463	6,402	4,222	731	751	12,753	346	13,099
Civil Service									
Required	527	1,579	2,099	157	1,616	5,374	11,352	91	11,443
Authorized	527	1,251	1,890	157	1,616	5,241	10,682	91	10,773
Assigned	461	1,169	1,803	157	1,448	5,220	10,258	83	10,341
Totals									
Required	65,489	34,046	24,091	6,812	39,023	16,941	186,402	564	186,966
Authorized	47,462	21,151	23,882	6,615	36,024	16,694	151,828	564	152,392
Shortfall	18,027	12,895	209	197	2,999	247	34,574	0	34,574
Percent Authorized of Required	72.47%	62.12%	99.13%	97.11%	92.31%	98.54%	81.45%	100.0%	81.51%
Assigned	46,135	20,970	24,080	6,696	36,044	16,422	150,347	494	150,841
FTS Authorizations as a Percent of Authorized End Strength	13.29%	10.17%	26.29%	16.53%	33.67%	22.49%	17.31%	7.05%	17.21%

[1]Includes AGRs in the Army and Air Force RCs, TARs and Can/Recs in the Naval Reserve, ARs in the Marine Corps Reserve, RPAs in the USCGR, and all RC officers and enlisted on Statutory Tours > 180 days. *USCGR AGR requirements are included as part of the AC requirement.
[2]Air National Guard AGR and MT positions can be filled by either status personnel. All ANG requirements beyond the AGR authorization level are shown as Military Technician requirements. USAR includes SOF technicians.
[3]Includes AC assigned or attached to RC organizations who provided support exclusively to the Reserve components.
Sources: Office of the Assistant Secretary of Defense for Reserve Affairs, and the Reserve components. Data as of September 30, 1999.

Full-Time Support

Full-Time Support Personnel are critical to the success of the Reserve components. They perform many of the everyday administrative, logistical, recruiting, retention, and operational responsibilities of Reserve units. That enables the unit's members to devote

Table 3-6
INDIVIDUAL MOBILIZATION AUGMENTEES

Component[1]	Officer			Enlisted			Total Assigned Off & Enl
	Required	Authorized	Assigned	Required	Authorized	Assigned	
Army Reserve	5,282	4,748	6,388	1,704	1,487	1,631	8,019
Naval Reserve[2]	213	199	202	11	8	9	211
Marine Corps Reserve	1,954	1,191	1,161	1,702	604	627	1,788
Air Force Reserve	7,951	6,970	6,797	6,857	5,802	5,634	12,431
Coast Guard Reserve[3]	1,155	1,155	1,155	6,055	6,055	6,055	7,210

[1]Neither the Army National Guard nor the Air National Guard has an IMA program.
[2]All Naval reservists assigned to IMA-type billets are Category A reservists (48 drills plus annual training).
[3]Based on Coast Guard Reserve restructuring, most Selected Reserves are IMAs.
Sources: Office of the Assistant Secretary of Defense for Reserve Affairs and the Reserve components. Data as of September 30, 1999.

the maximum time to training and other preparations for their wartime mission. Table 3-5 lists full-time support staff strength by category for each Reserve component.

There are four categories of full-time support personnel:

- Active Guard and Reserve (AGR) Personnel: National Guard or Reserve members who are on Active Duty, or full-time National Guard duty, for administration, recruiting, instruction, training, or in support of missions assigned to the Reserve components.
- Military Technicians: Dual-status civilian employees of the National Guard and Reserve who, as a condition of their employment, also are participating Reservists.
- Active Component: Active Duty personnel assigned or attached to Reserve component units to provide liaison between the Reserve and the Active components in administration, training, and maintenance support.
- Civil Service: Civilian government employees who work with and support the Reserve components.

The shortage of full-time support personnel represents a major concern for leaders of the Army National Guard and Army Reserve. Critical shortages exist in both the Active Guard and Reserve (AGR) and technician programs. There is a direct link between unit readiness and the level of full-time support provided to the Guard and Reserve. Full-time support personnel are critical to prepare units to meet readiness and deployment standards set by the Defense Planning Guidance.

As shown in Table 3-5, the ratio of authorizations to validated requirements has reached an all-time low of 55.7 percent for the Army National Guard and 62.1 percent for the Army Reserve. By contrast, the ratio of authorizations to requirements is at 99 percent for the Naval Reserve, 97 percent for the Marine Corps Reserve, 92 percent for the Air National Guard, 94 percent for the Air Force Reserve, and 100 percent for the Coast Guard Reserve. The Department of Defense is reviewing full-time support programs and procedures in an effort to reduce the gap between requirements and authorized manning levels in the Army National Guard and Army Reserve. Escalating global commitments require that the Reserve components are fully prepared to respond. Full-time support is a key to preparedness.

Individual Ready Reserve/ Inactive National Guard

These components of the Ready Reserve represent pools of pre-trained individuals who have already served in Active Duty units or in the Selected Reserve, and have either re-enlisted or have some portion of their military service obligation remaining. They are subject to involuntary recall to Active Duty to fulfill mobilization requirements.

Each Reserve component normally screens a certain percentage of its Individual Ready Reserve population each year to update the database in the case of mobilization. The screening can be done in person or by mail.

The Naval Reserve maintains Voluntary Training Units as part of the Individual Ready Reserve. More than 3,000 officers and 1,000 enlisted personnel perform inactive duty training for retirement points only, without receiving pay. They represent about 5 percent of all Naval Reservists who perform inactive duty training. The units train for general mobilization and provide direct support to Naval Reserve commands and activities. Additionally, these individuals support a variety of units performing communications security, intelligence, civil engineering, law, dentistry, and scientific research.

Table 3-7 reflects the change in the Individual Ready Reserve and Inactive National Guard populations from Fiscal Years 1997 to 1999.

Table 3-7
INDIVIDUAL READY RESERVE/ INACTIVE NATIONAL GUARD

	FY 1997	FY 1998	FY 1999	(97-99)	(98-99)
IRR	536,505	459,636	405,227	-24.5%	-11.8%
ING	4,729	4,714	4,590	-2.9%	-2.6%
	541,234	464,350	409,817	-24.3%	-11.7%

Source: Office of the Assistant Secretary of Defense for Reserve Affairs.
Data as of September 30, 1999.

Strength Management Programs

Recruiting and Retention

Several of the Reserve components had difficulty achieving their recruiting goals in Fiscal Year 1999. Reserve component accessions are presented in Table 3-8. Recruiting difficulties can be traced to a number of factors. Chief among these was the booming economy, which has created an extremely attractive civilian employment environment, and produced record low unemployment rates. In addition, the declining number of individuals leaving Active Duty has reduced the pool of prior-service members available to the Reserve components.

Finally, fewer youngsters are expressing interest in joining the military, even on a part-time basis in the Reserve components. A January 2000 report by the Center for Strategic and International Studies concluded, "For many of today's youth, enlisting in the military is an alien thought. With the number of veterans dwindling, local advocates and role models are fading in number."

The Department of Defense convened a Reserve Component Recruiting and Retention Task Force to discuss monthly progress toward meeting recruiting and retention goals. The task force also reviews the effectiveness of enlistment incentive programs. A Medical Working Group has also been organized to review incentives for health professionals. In general, the Defense Department is continuing to emphasize recruitment of qualified prior-service members, to take advantage of their training and expertise. Financial incentives are offered for those with critical skills.

Recruiting members for the Reserve components differs in several respects from Active Duty recruiting. For example, it is often constrained by where an individual lives and works. Unlike Active Duty members who are accustomed to frequent moves during a military career, Guardsmen and Reservists

have civilian job responsibilities in addition to their military duties. Many run their own businesses and cannot afford to move elsewhere simply to fulfill their military obligations. Therefore, recruiters must target their efforts in the regions where vacancies exist. Active Duty recruiters, by contrast, can essentially draw from a nationwide pool of candidates who can be reassigned as needed.

Moreover, Guardsmen and Reservists expect to continue their civilian career even after agreeing to join the Reserves. Thus, their military responsibilities may take a secondary role, behind their primary profession. Active Duty forces generally postpone their civilian education and career until after they leave military service.

Finally, potential Guardsmen and Reservists often have had prior-service experience, and so are more knowledgeable and selective about what positions they want to fill in the Reserves. While this is not as common as it was before the extensive drawdown of Active Duty forces in the early 1990s, it remains a major factor for recruiters to consider. Potential Active Duty members, by contrast, often have no prior experience, and can be trained to serve in a variety of fields, depending on the service's need at the time of their arrival.

To enhance recruiting success, Reserve components could consider offering benefit programs similar to those offered by civilian employers, such as health care, 401(k)-type savings plans, child care, and additional educational opportunities. The demographics of a given recruiting population will likely determine the extent and type of these benefits. In general, Reserve components can benefit from having access to flexible benefit programs. Flexibility allows choices that can not only complement the demographically influenced needs of its members, but also successfully compete with civilian employers' benefit programs.

One major new initiative now underway is a two-year test of whether certain recruiting functions could be more effectively handled by private recruiting firms. This initiative was first recommended by the Senate Armed Services Committee in its report to the National Defense Authorization Act of Fiscal Year 1999.

A management consultant will first review the entire recruiting process, compare it with that used in private industry, and recommend potential activities that could be eliminated or taken over by private firms. Among the areas under consideration for privatization are administrative and logistical support, telemarketing centers, recruiter training and initial processing of recruits into the military. The test will begin in Fiscal Year 2000 and run until Fiscal Year 2002, at an estimated cost of $2 million. Test results will then be reported to Congress.

The Army Reserve has already begun to explore outsourcing of their recruiting functions. For example, under the Army Career Alumni program, former military recruiters now in civilian status interview all soldiers leaving Active Duty and suggest they consider serving in the Reserves. These interviews were formerly done by Active Guard and Reserve (AGR) soldiers. Similarly, the Army Reserve is funding an outsourcing initiative for health professionals, under the auspices of Army Recruiting Command.

The Fiscal Year 1999 National Defense Authorization Act also directed a five-year test in which graduates of home schooling programs were considered to be high school graduates for enlistment purposes. The Defense Department and the services will evaluate the success of these recruits and recommend whether to permanently implement this change. The Center for Naval Analyses began the study in November 1999. Its goal is to identify ways to reach the home schooling market and evaluate its educational effectiveness.

The Army National Guard exceeded its recruiting goal for Fiscal Year 1999 by 132 recruits. Nevertheless, it plans to offer the new $8,000 enlistment bonus for selected recruits, such as those in hard-to-fill specialties in high priority units. Bonuses will also be restricted to those recruits whose aptitude test scores rank in the top three categories. In addition, the National Guard plans to equip recruiters with laptop computers, to increase their effectiveness and mobility. The National Guard plans to take full advantage of tuition assistance programs available under the Montgomery GI Bill to offer additional cash incentives for critical skill areas and high-priority units, as well as financial incentives to address the lieutenant shortage.

The Army Reserve experienced a shortfall of 10,549 recruits in Fiscal Year 1999. It was only through intensive retention efforts that the Army Reserve was able to meet its end-strength requirement. To address its recruiting shortfall, the Army Reserve plans to increase its cadre of 1,318 recruiters by 186, bringing the total to 1,504. It will also offer the $8,000 bonus for non-prior-service recruits, along with added financial incentives under the Montgomery GI Bill for both prior-service and non-prior-service recruits.

The Naval Reserve fell short of its congressionally mandated end-strength for Fiscal Year 1999 by 1,671 accessions. This was due primarily to the attractive civilian employment situation, and a higher than expected attrition rate. To address this shortfall, the Naval Reserve plans to increase the use of bonuses, and has programmed $70 million throughout the Future Years Defense Plan to use for incentives and added Montgomery GI Bill incentives. It also has programmed $2 million over the same time period for recruiting operations and advertising. The Naval Reserve plans to increase the number of recruiters, as well as renewing its emphasis on retention strategies, such as initiating a mentoring program.

The Marine Corps Reserve experienced a shortfall of 65 Marines against its authorized end strength. This was the result of several factors, including higher than expected attrition of both officers and enlisted from drilling Reserve units, and an inability to attract Marines to the Active Reserve program. The Marine Corps Reserve plans to implement a more aggressive retention campaign that will emphasize re-enlistment incentives. In addition, the Marine Corps Reserve will increase its recruiting of prior-service Marines.

The Air National Guard fell short of its end strength by 1,277 accessions. It plans to offer the $8,000 bonus to non-prior-service recruits in selected critical career fields. The Air National Guard also plans to offer additional Montgomery GI Bill benefits to critical career fields, and increase to $20,000 the amount offered under the Student Loan Repayment Program. Finally, it plans to add more recruiters to its force, as well as implementing a targeted national advertising campaign.

The Air Force Reserve experienced a shortfall of 2,471 accessions. It has boosted its advertising budget by $2 million, and has added 30 new recruiters. In addition, the Air Force Reserve plans to increase its emphasis on recruiting non-prior-service members, possibly using the $8,000 enlistment bonus. It has hired a new advertising agency, to help refine its recruiting message.

The Coast Guard Reserve met its recruiting goals and attained its authorized 8,000 end strength in Fiscal Year 1999. It has integrated its Reserve recruiting message into that of the Active force. The Coast Guard Reserve has a Reserve bonus program for new recruits, re-enlistments, and individuals formerly on Active Duty. It also is continuing to support mobile Reserve recruiters.

Attrition

It is in the Reserve components' best interest to retain quality personnel, because it eliminates the cost of recruiting and training

Table 3-8
RESERVE COMPONENT ACCESSIONS

Component	Officer[1]		Enlisted[1]		Total
	Prior Service	Non-prior Service	Prior Service	Non-prior Service	
Army National Guard	3,053	347	28,447	28,663	60,510
Army Reserve	8,363	234	30,125	13,484	52,206
Naval Reserve	2,950	282	15,251	2,641	21,124
Marine Corps Reserve	923	0	3,758	5,778	10,459
Air National Guard	1,150	58	4,930	3,467	9,605
Air Force Reserve	2,021	54	5,976	1,335	9,386
Coast Guard Reserve	179	37	1,865	448	2,529

[1]Fiscal Year 1999 DMDC G1 Report and the Reserve components.
Sources: Office of the Assistant Secretary of Defense for Reserve Affairs and the Reserve Components. Data as of September 30, 1999.

replacements. The cost of replacing a first-term enlistee varies widely. For example, the cost of replacing a first-term Coast Guard Reservist is approximately $19,305. By contrast, it costs $30,000 to replace a member of the Army National Guard, $42,000 for an Army Reservist, and $67,000 for an Air National Guard member. These cost estimates include pay and benefits, advertising, transportation, recruiter compensation and facilities support, medical and dental evaluations, uniforms, and training costs.

In assessing enlisted retention trends in the Reserve components, the Defense Department evaluates attrition rates rather than re-enlistment rates. Attrition is computed by dividing total losses for a fiscal year by the average personnel strength for that year. This metric is preferable to re-enlistment rates because only a small portion of the Reserve population is eligible for re-enlistment during any given year. In addition to monitoring attrition, the Department has decided to create attrition goals in order to enhance Reserve personnel management. The Reserve components are now defining attrition performance benchmarks for FY 2000 and beyond. These benchmarks are ceilings that attrition rates should not exceed.

The Army National Guard reduces attrition through its strength maintenance philosophy. This philosophy encompasses recruiting high-quality soldiers, reducing loss of first-term soldiers through attrition management, and retaining skill-qualified soldiers. A partnership now exists between Recruiting and Retention NCOs and unit commanders who share responsibility for developing and implementing effective strength management programs within their units.

The Army National Guard involuntarily discharged 142 members (134 enlisted, 8 officer) due to strength reductions in Fiscal Year 1999. A total of 36 members received separation pay for leaving with between six and 15 years of service. A total of 206 members with at least 20 years of service received separation pay. The Army National Guard is using its 15-year early retirement authority. A total of 491 members (397 enlisted, 94 officer) elected to use this authority. In Fiscal Year 2000, an estimated 190 members are expected to use this authority.

No members of the Army Reserve were involuntarily discharged due to strength reductions, nor did any personnel receive separation pay

in Fiscal Year 1999. The Army Reserve is currently offering early retirement to Active Guard and Reserve personnel who have a disability rating of less than 30 percent, and more than 15 but less than 20 years of federal service. Two officers and 9 enlisted members were released under this authority. There are currently 58 members being evaluated for disability by a medical evaluation board for possible early retirement in Fiscal Year 2000.

No members of the Marine Corps Reserve were involuntarily discharged due to strength reductions. Six Marines received separation pay in Fiscal Year 1999. A total of 34 Marines (28 enlisted, 6 officer) elected to use the early retirement authority, with 38 Marines projected to use the authority next year.

The Air National Guard offered early retirement benefits to just three Active Guard and Reserve (AGR) members in Fiscal Year 1999. Historically, early retirement benefits and voluntary separation incentives were offered to units or states that had net losses in AGR authorizations. In the future, however, these benefits will be used for force management actions resulting from unit closures, mission changes, and realignments associated with the new Expeditionary Aerospace Force concept.

No Air Force Reserve members were involuntarily discharged due to strength reductions. Just one individual received separation pay during Fiscal Year 1999 for leaving with between 6 and 15 years of satisfactory service. A total of 139 enlisted members received

Table 3-9
ATTRITION RATES

Fiscal Year 1998

	Average Strength			Losses			Attrition Rates (Percent)		
	Enlisted	Officer	Total	Enlisted	Officer	Total	Enlisted	Officer	Total
ARNG	324,002	39,715	363,717	59,186	4,249	63,435	18.3%	10.7%	17.4%
USAR	163,548	43,135	206,683	53,298	7,604	60,902	32.6%	17.6%	29.5%
USNR	74,245	19,507	93,752	19,527	3,265	22,792	26.3%	16.7%	24.3%
USMCR	36,978	4,403	41,381	10,956	1,279	12,235	29.6%	29.0%	29.6%
ANG	95,663	13,223	108,886	10,603	1,206	11,809	11.1%	9.1%	10.8%
USAFR	55,010	15,726	70,736	7,463	1,830	9,293	13.6%	11.6%	13.1%
USCGR	6,121	1,293	7,414	1,737	177	1,914	28.4%	13.7%	25.8%
TOTAL	755,567	137,002	892,569	162,770	19,610	182,380	21.5%	14.3%	20.4%

Fiscal Year 1999

	Average Strength			Losses			Attrition Rates (Percent)		
	Enlisted	Officer	Total	Enlisted	Officer	Total	Enlisted	Officer	Total
ARNG	320,514	38,615	359,129	59,141	4,262	63,403	18.5%	11.0%	17.7%
USAR	157,931	43,424	201,355	42,914	7,358	50,272	27.2%	16.9%	25.0%
USNR	72,270	19,126	91,396	21,530	3,740	25,270	29.8%	19.6%	27.6%
USMCR	36,382	4,101	40,483	11,080	1,175	12,255	30.5%	28.7%	30.3%
ANG	93,368	13,233	106,601	10,879	1,160	12,039	11.7%	8.8%	11.3%
USAFR	54,809	15,967	70,776	7,787	1,790	9,577	14.2%	11.2%	13.5%
USCGR	6,588	1,274	7,862	1,815	191	2,006	27.6%	15.0%	25.5%
TOTAL	741,862	135,740	877,602	155,146	19,676	174,822	20.9%	14.5%	19.9%

Sources: Office of the Assistant Secretary of Defense for Reserve Affairs and the Reserve components.
Data as of September 30, 1999.

separation pay for leaving with more than 20 years of service. A total of 60 members elected to use the early retirement authority, 49 of them for physical disqualification and 11 for strength reduction. An estimated 111 members projected to accept early retirement next year.

Medical Staffing

The recruitment of Reserve health professionals continues to be a major concern. Based on a skills inventory done every two years, Reserve components are currently under required strengths for specialties including surgeons, primary care physicians, oral surgeons, radiologists, and nurse anesthetists. In some specialties, staffing levels have fallen below the critical 80 percent level. Table 3-10 lists Selected Reserve medical strengths by specialty.

There are several reasons for personnel shortfalls in the medical field. In the medical field, more than in other career fields, the disparity between military and civilian compensation is a major problem. A physician or specialized nurse can make far more working an extra 16 hours in the private sector than training for a weekend with a Reserve unit. Moreover, ongoing medical training requirements frequently exceed the number of hours available during standard training periods. The 1996 U.S. Army Reserve Physicians' Survey suggested that physicians are attracted more by a sense of patriotism or service to country than by monetary incentives. Nevertheless, the financial impact of mobilization remains a prime reason why physicians leave the Reserves.

The 1996 survey of Army Reserve physicians indicated they would lose between $10,000 and $12,000 a month if they were to be deployed for more than 90 days. Moreover, the Uniformed Services Employment and Reemployment Rights Act, which protects the civilian jobs of Guardsmen and Reservists, does not apply to individuals who are self-employed, as are many physicians. In response, the Army has implemented a three-year test of a 90-day rotation policy for physicians, dentists, and nurse anesthetists mobilized under a Presidential Reserve Call-up.

Recruiting young health professionals during medical schooling has shown promise, since they are attracted by incentives to defray the cost of their medical training. However, the services must compete with HMOs, local communities, and other agencies who also recruit physicians and nurses during their training.

There is a proposal to allow the services to offer a stipend of $1,000 a month to students who have completed their second year of medical school. In addition, the Fiscal Year 1999 National Defense Authorization Act increased the student loan repayment incentive from $20,000 to $50,000, payable at a rate of up to $20,000 per year. Physicians receive one year of payment after they serve one year in the Reserves. Finally, the services are continuing to offer physicians special incentive payments of $10,000 per year for up to three years.

Personnel Support Programs

Family Readiness

The frequency and duration of Reserve component deployments continue to challenge both the members themselves and their families. The uncertainty associated with sudden deployments, such as presidential call-ups, underscores the need for an on-going system to prepare and support family members during mobilizations. Each of the Reserve components is addressing the challenge, often using volunteers to help provide training and assistance.

Over the past 14 years the National Guard Family Program has trained over 50,000 volunteers associated with members of the Army and Air National Guard. These volunteers then train other family members on all issues related to military service. The National Guard Bureau

Table 3-10
SELECTED RESERVE MEDICAL STRENGTHS

	Army National Guard		Army Reserve		Naval Reserve		Air National Guard		Air Force Reserve	
	Authorized	Assigned	Required	Assigned	Authorized	Assigned	Authorized	Assigned	Authorized	Assigned
Physicians										
General Surgery	21	37	324	395	124	98	0	23	61	56
General Medicine	795	348	118	196	135	180	98	74	87	68
Orthoped. Surgeon	21	15	238	136	97	59	0	10	26	41
All other Physician	230	301	1052	1177	873	777	363	333	558	534
Dentists										
Oral Surgeons	0	4	41	25	32	39	0	0	22	15
All Other Dentists	318	233	549	504	137	296	192	152	201	179
Veterinarians	8	22	83	169	0	0	0	0	0	0
Med. Service										
Clinic/non-admin.	198	280	625	1046	198	303	228	257	246	293
Administrative	991	729	1190	1725	179	156	228	307	564	604
Med. Specialist										
Physician Assist.	745	397	80	138	67	87	116	80	58	70
Other Specialists	2	25	274	382	31	76	0	2	60	58
Bio-Med Science	2	4	67	47	83	30	89	0	37	0
Nurses										
Nurse Anesthetist	42	30	576	520	96	104	0	3	83	107
Critical Care Nurse	21	86	1050	574	699	356	0	22	0	103
All Other Nurses	650	779	3874	5494	1527	1497	849	831	2320	2141
Total Officers	4044	3290	10141	12528	4278	4058	2163	2094	4323	4269
Enlisted										
LPN	185	373	4993	3616	0	0	0	0	0	0
All Other Enlisted	14781	17326	16744	16526	8527	6855	4896	4696	7251	7204
Total Enlisted	14966	17699	21737	20142	8527	6855	4896	4696	7251	7204
Total Officer and Enlisted	19010	20989	31878	32670	12805	10913	7059	6790	11574	11473

Sources: DMDC Health Manpower Personnel Data System Fiscal Year 1999 Statistics, and Assistant Secretary of Defense (Health Affairs).
Data as of September 30, 1999.

actively works with the Army Community Service and the Army National Guard Recruiting and Retention office and Air Force Family Centers to provide quality support to family members. The Army National Guard is the Army's lead agency to provide family assistance at every contingency level, as well as assisting military families not living near an Active Duty installation.

The National Guard Bureau has recently renewed its emphasis on Family Care plans, especially to insure that they are updated regularly to keep them current. Both the

Army and Air National Guard have also made a concerted effort to increase training in this area. Training for the 54 State Family Program Coordinators took place this year in Little Rock, Arkansas. Underscoring the importance of family support was the attendance of the Chief of the National Guard Bureau and directors of the Army and Air National Guard at a national workshop held in Dallas in August 1999. More than 450 people participated in this workshop, including National Guard Bureau Family Program delegates, Army and Air Guard leadership, and volunteers from the 54 states and territories.

Family support for Army Reservists' family members is provided locally. Members of the Individual Ready Reserve receive information not only when they are mobilized but also during their annual screening. An Army Reserve Web page provides a detailed listing of Family Readiness Office contacts. Specific programs available to inform family members include pre-deployment briefings, command family support council meetings, family support group meetings, unit level training, family days, the annual family conference, and a Strategic Planning Workshop. Detailed briefings and individual assistance is also provided to individual family members of Reservists upon mobilization.

Naval Reserve units are encouraged to have "family days" to brief families on activation and mobilization readiness. Families also receive assistance from Family Service Centers located at Mobilization Processing Sites during activation processing. Naval Reserve Family Ombudsmen serve as the link between family members and the command. They provide information and referral service for families before and during mobilization. LIFELines, a technology service using broadcast and Internet information, was expanded to include a Naval Reserve "store" in its "Quality of Life Mall." Mission Readiness booklets are provided to all Naval Reserve units and are designed to assist families in mobilization planning. Mission Readiness is also a large part of the Naval Reserve Ombudsman Training Course attended by every Naval Reserve Family Ombudsman.

The Commander of Marine Forces Reserve established the requirement for a Family Readiness Officer, Key Volunteer Coordinator, and Peacetime-Wartime Support Team at all of its 187 sites. Each of these members plays a key role in mobilization, helping to ensure personal and family readiness for Marines and their families. The support team, composed of pre-assigned and trained Marines, assumes responsibilities for the site when the unit is mobilized. This responsibility includes family readiness and continued support for the families.

Air Force Reserve Command hosted the Joint Services Family Readiness Matters Workshop in Phoenix, Ariz. This workshop, attended by family readiness staff from all services and Reserve components, focused on encouraging ideas to be shared across service boundaries. For Individual Mobilization Augmentees, the Headquarters Air Reserve Personnel Center provides the Individual Reserve Guide and other useful information on its Website to inform both the military members and their families on mobilization issues. The Air Force Reserve Command's Family Support Center program guidance was updated to include Senior Reserve membership on the Community Action Information Membership Board. As a result of an April 1998 survey by the Defense Department's Inspector General, the Air Force Reserve added the Family Care Program as a Special Interest Item during Unit Compliance Inspections conducted by Air Force Reserve Command. In addition, all units have been told to appoint a full-time staffer to monitor the Family Care Program. Information is also provided in the Military Personnel Flight Newsreel, and Air Force Reserve Command's Website contains a new Family Readiness Support section.

Each of the Coast Guard's deployable units has volunteers, often spouses, whose job is to keep families informed during unit deployments. However, the Coast Guard currently does not have the resources to provide a formal family mobilization care program for its Reservists. Members of the Selected Reserve are generally

given pre-mobilization planning instructions annually and are expected to share that information with their families. Family members of all Coast Guard components receive information periodically on a variety of topics relating to mobilization, such as wills, childcare, and eldercare. Reservists' families have full access to the Coast Guard's Work-Life staffs at any time, but especially during a unit's deployment.

Employer Support of the Guard and Reserve

The Reserve components now represent more than 50 percent of the nation's total available military personnel. As fully integrated partners in the Total Force, members of the Reserve components are spending more time away from the civilian workplace, training to maintain mission readiness and supporting a demanding operations tempo.

With the trend toward greater reliance on the Reserve components comes the potential for conflicts with their civilian employers. For years, employers have become accustomed to losing their employees for their two-week annual tours and one weekend a month. However, longer tours and more frequent deployments have begun to strain the relationship with companies that had previously supported the Guard and Reserve.

The National Committee for Employer Support of the Guard and Reserve was established by presidential proclamation in 1972 to promote cooperation and understanding between Guardsmen and Reservists and their civilian employers. Equally important, Employer Support of the Guard and Reserve (ESGR) assists in the resolution of conflicts arising from an employee's military commitment. As part of the Office of the Assistant Secretary of Defense for Reserve Affairs, ESGR also promotes public understanding of the Reserve components' critical role in national security. ESGR operates through a network of more than 4,500 volunteers throughout 54 committees located in each state, the District of Columbia, Guam, Puerto Rico and the Virgin Islands.

ESGR organizations are involved in a number of programs designed to strengthen the relationship between civilian employers and members of the Guard and Reserve. These programs include educational programs to encourage employers to support employee participation in the Reserve components, and to make them aware of federal and state laws governing the rights of Reservists and Guardsmen. They also involve programs designed to encourage interaction between civilian organizations and the military units in their community, such as awards and recognition programs and "Bosslifts" that bring employers to the military sites for orientation programs. A more detailed description of ESGR programs and services can be found at *www.esgr.org*.

ESGR offices offer the following functions:

- Operate programs directed at U.S. employers, employees, and communities that ensure understanding of the role of the National Guard and Reserve in the Total Force.
- Encourage employee participation in National Guard and Reserve training programs and on military duty, and promoting voluntary compliance with federal and state statutes governing employment rights of Reserve component members.
- Promote civilian and military personnel management practices that encourage membership in the National Guard or the Reserve. Recruit volunteer leaders to promote the development of employer personnel policies that accommodate employee participation in National Guard and Reserve activities.
- Encourage interaction between National Guard and Reserve units and their

communities to promote public understanding of the National Guard and Reserve. Promote partnerships between civilian organizations and military units in the community.

- Assist in preventing, resolving, or reducing employment-related problems that may result from National Guard or Reserve membership, training, or duty requirements.
- Assist in educating National Guard and Reserve members about their obligations and responsibilities to employers under the Uniformed Services Employment and Reemployment Rights Act (USERRA).
- Use the military chain of command to promote better understanding of the importance of maintaining positive working relations between employers and their Reserve component employees.

ESGR is committed to a comprehensive set of initiatives that will help reach these goals. For example, on July 6, 1998, the Secretary of Defense and the Secretary of Labor signed a memorandum calling on the leaders of all federal agencies employing civilians who serve in the National Guard and Reserve to "recognize and address any barriers to achieving their 'model employer' role." They also urged agencies to minimize or eliminate any "disadvantages to employment" that might result from such service. By the end of Fiscal Year 1999, all 14 Cabinet Secretaries had signed statements of support for their employees who participate in the National Guard and Reserve.

ESGR is working with the U.S. Chamber of Commerce to promote support for the Guard and Reserve among the nation's businesses. By the end of Fiscal Year 1999, some 788 chambers of commerce had signed Statements of Support for employee participation in the Reserve components. They represent about 375,000 members of the U.S. Chamber of Commerce.

ESGR has also strengthened its long-standing partnership with the Society for Human Resource Management, which represents more than 88,000 business. ESGR has joined with the society in a commitment to provide both employees and employers with information about their rights and responsibilities under USERRA.

Despite these initiatives, however, there is evidence of increasing concern in the business community about the growing amount of time being asked of their employees to fulfill their Guard and Reserve commitments. Many employers are unfamiliar with the changing roles of the Guard and Reserve in the post-Cold War era. For example, they are unaware that the Reserve components no longer simply wait in reserve until they are needed. Instead, they are routinely called to service more often and for longer periods.

Trained ESGR volunteers and the Ombudsman staff provide Guardsmen, Reservists, and their employers with information, counseling, and informal mediation on issues involving USERRA compliance. More than 95 percent of all such requests for assistance are resolved in this informal process. In Fiscal Year 1999, Ombudsman Services received 7,164 contacts from employers and Reserve component members, more than twice the number received in 1998. Of those contacts, 78 percent were from employees and 22 percent were from their employers. The increase may be due in part to a comprehensive ESGR marketing plan that has markedly increased awareness of its programs and services. In addition, Ombudsman Services has improved its reporting process, resulting in more complete data tabulation.

Ombudsman data from 1997 to 1999 indicates a rising level of concern about the increased absences of employees because of military duties. This parallels the overall increase in use of the Reserve components. Employers seem willing to continue accommodating two to four weeks of military leave per year for their employees. However, they

are increasingly resistant to longer absences and multiple mobilizations. In questionnaires submitted by employers attending ESGR activities, there seems to be rising concern over military support of humanitarian and peacekeeping missions. This may be a reflection of the general public's confusion over U.S. involvement in contingencies that do not appear to pose a direct threat to its national interests.

ESGR is participating in two programs to address employers' concerns about their Guard and Reserve employees. First, the Office of the Assistant Secretary of Defense for Reserve Affairs has initiated a survey to determine the level of employer support and knowledge about the Reserve components. At the direction of Manpower and Personnel, representatives from each of the Reserve components developed the survey instrument in Fiscal Year 1999. Questions are designed to find out employers' understanding of current laws and guidelines governing the employment of Guardsmen and Reservists. They will also explore the types of recruiting, hiring and employment practices that are being used in these organizations. The survey will be administered to about 2,000 employers early in Fiscal Year 2000.

The second initiative began in August 1999, when the ESGR National Chair convened a Senior Selected Reservist/Employer Focus Group. It was composed of National Guard and Reserve flag-level officers from each Reserve component, who also serve as senior executive-level civilian employers of National Guard and Reserve members. The Principal Deputy Assistant Secretary of Defense for Reserve Affairs directed the group to:

- Examine their experiences as "citizen soldiers" and identify keys to successfully balance the demands of a civilian career with Reserve component service.
- Share their perceptions regarding the challenges and obstacles that Reserve component members face in balancing career goals in both the military and civilian sector.

The focus group identified five major areas for further study. The national chair of ESGR is working with an executive committee to develop recommendations on those five areas. In addition, employer forums are being conducted at the five ESGR Regional Training Conferences to help develop a better understanding of how employer support is being affected by the Reserve components' increasing operations tempo.

Montgomery GI Bill

The Montgomery GI Bill for the Selected Reserve continues to be one of the major benefits used to recruit and retain Reserve component members. The entitlement has proven to be beneficial to both individuals and their Reserve component. Benefits apply to college degree programs, apprenticeship and technical training, flight training, and other training opportunities. Enrollment figures are shown in Table 3-11.

Table 3-11
MONTGOMERY GI BILL – SELECTED RESERVE

Component	Eligible	Applicants
Army National Guard	169,262	74,056
Army Reserve	67,647	36,071
Naval Reserve	33,534	12,544
Marine Corps Reserve	20,842	12,972
Air National Guard	69,700	29,221
Air Force Reserve	48,128	15,378
Coast Guard Reserve	2,928	1,250
Total	412,041	181,492

Source: Office of the Assistant Secretary of Defense for Reserve Affairs.
Data as of September 30, 1999.

Medical Programs

Dental Readiness

A voluntary dental insurance program for members of the Selected Reserve began in October 1997. The Selected Reserve Dental Insurance Plan covers only the service member, not dependents. The plan covers basic dental care and treatment, diagnostic services, preventive services, basic restorative services, and emergency oral examinations. This program was designed to be an affordable way for members of the Selected Reserve to obtain a government-subsidized dental plan to assist in maintaining dental readiness.

Despite this initiative, problems remain. For example, the plan does not cover all dental procedures. Moreover, Reserve dental resources are inadequate to screen all Reservists. The Army Reserve estimates it needs $10 million to remedy deficiencies in dental readiness. Finally, individual Reserve components do not have standardized screening procedures.

Personnel Identification

DNA analysis is now the preferred method of identifying the remains of military personnel. The Defense Department stopped accepting new panographs (x-rays of the teeth) in July 1997. Each of the services is in the process of collecting specimen samples from its members. These are typically blood or tissue samples, suitable for later DNA analysis, if necessary.

The Army National Guard had collected samples from approximately 68 percent of its members by the end of Fiscal Year 1999.

The Army Reserve has specimen samples on file for 51 percent of its Selected Reservists, and 58 percent of its Individual Ready Reserve. Its policy is to continue collecting samples during periodic physicals, with full compliance expected by the year 2002.

The Naval Reserve has a specimen sample on file for 91 percent of its Selected Reservists, but is not collecting samples from its Individual Ready Reservists. Specimen samples continue to be collected from new Reservists, as well as from the remaining 9 percent of Selected Reservists.

The Marine Corps Reserve has collected specimen samples from 88 percent of its Selected Reservists, and from 70 percent of its Individual Ready Reserve. It expects to have specimen samples from all Reservists well before the December 2002 deadline.

The Air National Guard has collected specimen samples from 62.8 percent of its members. It is continuing to collect samples during monthly unit training assemblies.

The Air Force Reserve has collected specimen samples from 56 percent of its unit Reservists. That figure is lower than in 1998, when it had collected samples from 67.8 percent of its members. That decrease is due to a high level of personnel turnover at the units. In addition, difficulties have been encountered in the transfer of members' medical records when they leave Active Duty and join the Reserve. However, the collection percentage is expected to improve when the Reserve Component Periodic Health Assessment is implemented, replacing the periodic physical every five years.

The Coast Guard Reserve began collecting specimen samples on its members in 1997. However, no collection percentages are available.

Medical Care

National Guard and Reserve members are fulfilling more and more military missions every year. The military has an obligation to Reserve component members who are injured or aggravate an existing medical condition, or become ill while performing military duty, regardless of the type or duration of that duty. Expanding the statutory authority to include

members who are injured, become ill or aggravate an injury, illness or disease while performing inactive duty training would ensure that Guard and Reserve members receive equitable medical and dental care. It would also ensure that their families have access to military health care if the member is on Active Duty for more than 30 days.

Before medical care can be provided or incapacitation pay awarded, however, there must be a formal determination that the injury or illness occurred in the line of duty. Several of the Reserve components have difficulty processing incapacitation claims quickly. This delays the eventual payment of incapacitation pay and often creates serious financial hardship for disabled members who are unable to return to their civilian jobs for an extended time.

The Army National Guard has experienced problems in preparing and processing Line of Duty investigations. These problems include insufficient medical or other supporting documentation, and difficulty obtaining police reports from motor vehicle accidents. On average, it takes two to five working days to process incapacitation cases. In most cases, members return to duty anywhere from one month to 16 months after their injury, depending on the severity of the injury.

The Army Reserve has experienced similar problems processing incapacitation claims. Both unit and headquarters personnel need additional training on proper submission procedures. On average, submissions are processed within six months. For the average case, members receive incapacitation pay for six months or less. In some cases, members were injured while on Inactive Duty, and it would have been more cost-effective for the government to have them placed on Active Duty, so they could continue receiving treatments at the local military installation. Since March 1993, the Army Reserve has retired 368 officers, 56 warrant officers, and 1,054 enlisted soldiers under the Temporary Special Retirement Qualification Authority. In Fiscal Year 1999, there were 89 members placed on the Temporary Disability Retirement List. An estimated 406 members have been placed on this disability retirement list since Fiscal Year 1995.

The Naval Reserve has experienced no major problems processing Line of Duty submissions. Incapacitation pay is normally processed within three working days, provided that all required documentation is included in the package. Processing may take longer, however, if documents are missing or officials are unable to verify an individual's earned income. During Fiscal Year 1999, there were seven individuals injured while on Active Duty for less than 30 days whose orders were extended to keep them on Active Duty for more than 31 days. In some emergencies, members injured while on Inactive Duty were hospitalized for heart attacks, strokes, or serious illnesses such as cancer. Their orders were extended to cover the period of their hospital stays.

In the Marine Corps Reserve, Line of Duty determinations are done at the unit level before being submitted to higher headquarters. On average, incapacitation payments begin within six weeks of the injury. Timely incapacitation payments generally depend on the promptness and accuracy with which the unit documents the wages a member earned or lost while incapacitated. Just half of all incapacitation claims are properly documented on the initial submittal. During Fiscal Year 1999, the number of cases lasting more than nine months has nearly doubled. Cases requiring review by a medical board take from 12 to 18 months to close. Delays in obtaining medical board reviews have caused a substantial number of cases to remain open far longer than normal. This means that incapacitation pay continues to be paid to members while they await finalization of their cases. The Marine Corps Reserve has had about 25 cases in which members were injured while on Active Duty, and it would have been beneficial to keep them on Active Duty while they received treatment, had this option been available.

In the Air National Guard, the first six months' pay are awarded at the unit level. Subsequently, it generally takes two and a half months to process an extension beyond the six-month point. The Air National Guard has had a number of problems processing incapacitation cases. For example, Air National Guard units do not have case managers with the necessary expertise to oversee the medical care and work restrictions for members injured on duty. As a result, associate health technicians generally become responsible for this oversight, despite their inadequate level of medical expertise. Also, the initial decision to award incapacitation pay is made at the unit, with no medical oversight until a request for an extension of the pay is made after six months. Documentation at this stage is often inadequate, lacking the information necessary to make an accurate medical ruling. In addition, many members remain on incapacitation pay for extended periods of time, because members are responsible for their own case management. On average, members receive incapacitation pay for 22 months. The Air National Guard may spend thousands of dollars paying for medical services that its members were not entitled to receive. The Air National Guard currently has 100 members assigned to the Temporary Disability Retirement List.

The Air Force Reserve has not experienced significant problems with Line of Duty determinations. On average, initial incapacitation claims are processed within two days, provided that all necessary documentation is available. Extension requests are processed within 49 days, on average. To prevent gaps in pay for members applying for extensions, the command notifies members approximately 60 days before benefits are due to expire. In Fiscal Year 1999, the Air Force Reserve processed 59 cases, compared with 80 cases in 1998. Of these 59 cases, 63 percent received payments for less than six months; 15 percent for less than a year; 10 percent for less than 18 months, and 12 percent for more than 18 months. There were a total of 48 cases in which members on orders for less than 30 days whose illness or injury required their orders to be extended to 31 days or more. In general, the Air Force Reserve would prefer voluntary retention on Active Duty for medical treatment. In the past two years, five individuals were placed on the Temporary Disability Retirement List.

The Coast Guard Reserve has experienced problems with Line of Duty determinations, particularly ensuring that units properly handle such incapacitation cases and adequately document the actual loss of civilian income. Problems have also arisen in accurately determining an individual's duty status. Members receive incapacitation pay for an average of two to three months.

Personnel Management Systems Automation

The Defense Integrated Military Human Resources System will be the single, fully-integrated, all-service, all-component military personnel and pay system, as recommended by the Defense Science Board Task Force on Military Personnel Information Management. On July 8, 1997, the Deputy Secretary of Defense established the Joint Requirements and Integration Office. All the services and the Defense Finance and Accounting Service will be involved in the implementation of this system, to ensure that it meets joint requirements. All associated requirements will be determined in a joint environment to incorporate best business practices.

The Army National Guard and the Army Reserve are implementing the Reserve Component Automation System, an automated information management system that supports their day-to-day office automation requirements. The system is being phased in over several years, with completion scheduled in Fiscal Year 2002. It will link more than 10,500 Guard and Reserve units at over 4,000 sites worldwide. It is currently implemented in 54 of the 94 commands. That means roughly 51,000 personal computers, or 90 percent, have been linked

to the system. When fully operational, the system will significantly enhance their mobilization preparedness and execution. But the system is already helping improve unit administration. For example, E-mail capability has reduced the time required to publish orders from 60 days to just two, as well as reducing mail and printing costs by 40 percent. Mobilized units in Bosnia were able to use E-mail to coordinate with their units and state area commands.

The Naval Reserve's automated data systems, Reserve Standard Training Administration and Readiness Support-Manpower and Reserve Headquarters System each underwent complete Y2K (Year 2000) testing in Fiscal Year 1999 and were certified Y2K-compliant. The Inactive Manpower and Personnel Management Information System, which operations under the Bureau of Naval Personnel, was also tested and certified as Y2K-compliant.

The Navy Standard Integrated Personnel System is the Navy's migration system supporting military personnel functions. This system will integrate and modernize data collection and processing capabilities to better meet the Navy's requirements. Its objective is to automate and integrate Navy field personnel and pay processes into a standard single point of entry system that will collect, store, and report personnel and pay data. This system will be operated in personnel and pay offices both ashore and afloat to support Active, Reserve, and retired military personnel. The Naval Reserve pay system was converted in July 1999 to the Defense Joint Military Pay System-Reserve Component, so that payment for all types of Reserve duty can be made through the integrated central pay system.

The Marine Corps Total Force System has a single, integrated personnel and pay system. All Active, Reserve, and retiree records are stored in a single database with a centralized processing site in St. Louis, Missouri. This system eliminated the requirement to pass redundant data between personnel and pay systems. Information is now in a central file that is updated daily and is accessible to both personnel and pay functions. Both Active and Reserve components of the Marine Corps are handled by this system. Consequently, there are no systems automation compatibility issues to highlight.

Both the Air National Guard and the Air Force Reserve use the Personnel Data System. This automated personnel system is managed by the Air Force Personnel Center at Randolph AFB, Texas. The Personnel Data System is a Total Force system, representing a centrally managed system containing the personnel data for all Active, Guard, Reserve and retired Air Force members. It also is compatible with the Defense Finance Accounting System. The Personnel Data System is being upgraded to improve its ability to meet daily personnel management needs. Testing is underway, with full implementation expected by December 2000.

The Coast Guard's automated personnel management information system includes integrated personnel data on both the Active and Reserve forces. In Fiscal Year 1999, development continued on the second-generation pay system, JUMPS II, which will be fully deployed by Fiscal Year 2002. Additional software and software upgrades have been implemented to improve database capabilities. The Reserve Training Assignment Support System, implemented in 1998, is already having a major impact on the service's ability to manage and process personnel assignments. This training assignment system will eventually be integrated with the JUMPS II system.

Equal Opportunity

Career Fields Open to Women

Women continue to play an important role in each of the Reserve components, as illustrated in Table 3-13. The number of women in the Total Force (both Active

and Reserve) has risen 4 percentage points in the past decade. The number of women in the senior enlisted ranks (grades E-7 to E-9) and in all officer ranks rose about 11 percent in that same period. Women now make up about 12 percent of all military leadership positions.

Recent years have seen a number of new career fields opened to women, thereby expanding their opportunities to serve. For example, during Fiscal Year 1999, the Navy opened its mine countermeasures and mine coastal hunter fields to women. However, the move currently affects only a limited number of vessels. As a result, the overall percentage of position open to women in the Navy remains unchanged from last year, as did the percentages in the other services. Women's representation in non-traditional career fields is steadily increasing, but remains most apparent in the more traditional career fields, such as medicine, administration and logistics. Table 3-12 shows the percentage of career fields and positions open to women.

Table 3-12
CAREER FIELDS AND POSITIONS NOW OPEN TO WOMEN

Component	Percent Career Fields Available	Percent Positions Available
Army	91	67
Navy	96	94
Marine Corps	93	62
Air Force	99	99
Coast Guard[1]	100	98

[1]Some Coast Guard cutters lack adequate facilities, which is being corrected.
Source: Under Secretary of Defense for Personnel and Readiness.
Data as of September 30, 1999.

Sexual Harassment

Sexual harassment is a form of discrimination. It represents inappropriate behavior that is not only counterproductive but is contrary to good order and discipline. The policy of the Reserve components is that sexual harassment is not tolerated. The Reserve components have increased the visibility and training pertaining to sexual harassment prevention and have implemented procedures for reporting sexual harassment complaints. Constant vigilance, education, and periodic training on the reporting and resolution process are essential to prevent sexual harassment. Commanders, supervisors, and managers have made it clear to their workers that sexual harassment is wrong and will not be tolerated.

During Fiscal Year 1999, the United States Army Reserve Command implemented the "Consideration of Others" program. Commanders are encouraged to use this program as a tool to emphasize that people must be treated with dignity and respect. The program includes sexual harassment and equal opportunity training.

The Naval Reserve Force's Inspector General received only one report of sexual harassment in Fiscal Year 1999, down from four the previous year. This is a dramatic indication of the effectiveness of the sexual harassment prevention program. The program consists of annual training, periodic updates, prominently displayed command policy statements, and in-service training for senior and junior leadership.

The Marine Corps views sexual harassment as a leadership issue. As such, the reporting process is more than simply a list of actions a Marine can take. It also encompasses training, education and on-scene Equal Opportunity Advisors for commanders. Initiatives designed to enhance these efforts include:

- Equal opportunity and sexual harassment issues are briefed at the Commanders Course, attended by both Active and Reserve commanders.
- Every commander has been required to appoint an equal opportunity representative and publish a policy

Table 3-13
WOMEN IN THE RESERVE COMPONENTS

	Officers		Enlisted			
	Selected Reserve	IRR/ING	Selected Reserve	IRR/ING	Total	Percent of Force
Army National Guard	3,422	42	34,185	498	38,147	10.5%
Army Reserve	10,803	8,290	39,907	28,864	87,864	22.5%
Naval Reserve	3,279	2,981	13,554	14,510	34,324	17.8%
Marine Corps Reserve	234	176	1,555	2,394	4,359	4.4%
Air National Guard	1,940	0	15,249	0	17,189	16.3%
Air Force Reserve	3,927	3,041	11,241	9,738	27,947	22.2%
Coast Guard Reserve	184	39	901	517	1,641	13.0%
Total	23,789	14,569	116,592	56,521	211,471	16.4%

Source: Office of the Assistant Secretary of Defense for Reserve Affairs. Data as of September 30, 1999.

letter that includes procedures for making a complaint without fear of reprisal or retaliation.

- A new Marine Corps Order on Sexual Harassment has been published, applying to both Active and Reserve components. This order more specifically defines what constitutes sexual harassment.
- All Marine Corps Reserve personnel, including sailors and civilians, must attend annual training on existing policies.

The National Guard Bureau instituted several measures to combat sexual harassment. For example, the Air National Guard requires all members to attend "EO-2000" training, an intense, four-hour small group discussion-based Equal Opportunity program. This training is designed to teach individuals about their roles and responsibilities in combating sexual harassment. The Army National Guard requires all members to attend "Consideration of Others" training. This training involves small group discussions on how to combat sexual harassment, and stresses the importance of treating everyone with dignity and respect. Army National Guard personnel are also required to receive semi-annual training sessions on preventing sexual harassment. Finally, the National Guard has adopted a "full-time values/part-time careers" vision that instills the concepts of professionalism and respect for others.

The Air Force Reserve has begun an intensive training program to include mandatory and specialized training for recruiters, first sergeants, squadron commanders, support group commanders, and other managers. The local Military Equal Opportunity Advisors continue to work with local commanders at all levels to ensure an environment free of illegal discrimination and sexual harassment.

Members of the Coast Guard are intensely aware of the need to eliminate sexual harassment and its influence. The Commandant of the Coast Guard continues to advise all members that harassment in any form will not be tolerated. All members of Team Coast Guard—Active Duty, Reserve, Auxiliary and civilian—receive annual training in awareness and prevention of sexual harassment.

Table 3-14
SEXUAL HARASSMENT COMPLAINTS

Component	Number of Complaints
Army National Guard	8
Army Reserve	18
Naval Reserve	1
Marine Corps Reserve	7
Air National Guard	3
Air Force Reserve	9
Coast Guard Reserve	Unavailable*

*The responsibility for investigating complaints of sexual harassment in the Coast Guard resides in the Departmental Office of Civil Rights (DOCR) of the Department of Transportation. This agency tracks both military and nonmilitary incidents, but does not identify cases by the component of military service (e.g., Reserve). Monitoring of complaint cases is the responsibility of the Civil Rights Director at Coast Guard Headquarters.
Data as of September 30, 1999.

Minorities in the Reserve Components

It is important that the Reserve components reflect the demographics of the communities in which their members live and work. Ideally, this diversity should be reflected across all ranks and career fields. The services are committed to boosting the number of minorities in all areas, and have initiated a number of innovative recruiting programs. The number of minorities in the Reserve components is indicated in Table 3-15.

The US Army Recruiting Command is aggressively pursuing minorities in the Regular Army and the Army Reserve through advertisements on television, radio and in print. Recently, CBS News aired a segment featuring a female Army Reserve Apache helicopter pilot. Hispanic men and women are featured on the cover of the November 1998 Army Reserve Benefits pamphlet, which is also published in Spanish. The Office of the Chief of Army Reserve participated in the 1999 Copa Telemundo, a youth soccer tournament and fiesta for boys age 15 to 19.

The Naval Reserve is actively recruiting ethnic minorities, but these efforts have been limited by accessions from prior-service and Reserve resources. Overall, the Naval Reserve is on track to meet its enlisted goal of 12 percent Hispanic and 5 percent Asian American/Pacific Islander by the year 2025. Black enlistment has exceeded the 12 percent goal.

The Marine Corps continues to exceed all diversity goals established by the Department of the Navy, recruiting 13 percent black, 13 percent Hispanic, and 5 percent from other minority groups. Marine Corps recruiting advertising focuses on quality recruits, with specific advertising aimed at quality minority and female recruits.

The Air National Guard's minority recruiting and career opportunities programs continue to be highlighted in advertising and recruiting initiatives. For example, two minority recruiters have been placed at two different historically black colleges. The Human Resource Quality Board addresses diversity initiatives from a national level. The Air National Guard also has a Human Resource Advisor at each state's headquarters. As a community-based force, the Air National Guard strives to mirror the communities in which it operates, which helps forge stronger bonds with these localities.

Air Force Reserve Command Recruiting continues to successfully attract minority applicants by actively recruiting in urban and rural zones, and attending cross-cultural conferences. The Air Force Reserve's success in recruiting minority applicants can also be attributed to its policy of opening virtually all of its career fields to both men and women.

The Coast Guard Reserve and Training Directorate has initiated a new community outreach program called "Compass." The program's goal is to seek out new service members from "all points on the diversity compass." The Compass program uses direct and indirect marketing initiatives to encourage women and minorities to join the Coast Guard and Coast Guard Reserve.

Table 3-15
MINORITIES IN THE READY RESERVE

	White	Black	Asian/Pacific Islander	American Indian/ Alaskan Native	Unknown/ Other	Total	Hispanic[1]
Army National Guard							
Male	260,749	46,210	3,920	2,118	10,898	323,895	22,868
Female	25,371	10,445	524	390	1,417	38,147	2,291
Unknown	0	0	0	0	17	17	0
Total	286,120	56,655	4,444	2,508	12,332	362,059	25,159
Army Reserve							
Male	219,978	54,950	6,381	1,464	19,746	302,519	20,820
Female	49,575	30,070	1,741	558	5,920	87,864	5,365
Unknown	10	4	1	0	338	353	2
Total	269,563	85,024	8,123	2,022	26,004	390,736	26,187
Naval Reserve							
Male	124,773	17,510	4,017	674	11,334	158,308	11,540
Female	23,792	6,686	783	236	2,827	34,324	2,413
Unknown	2	0	0	0	0	2	0
Total	148,567	24,196	4,800	910	14,161	192,634	13,953
Marine Corps Reserve							
Male	72,611	9,323	2,081	652	9,977	94,644	11,177
Female	2,995	718	84	69	493	4,359	529
Unknown	0	0	0	0	0	0	0
Total	75,606	10,041	2,165	721	10,470	99,003	11,706
Air National Guard							
Male	76,239	6,716	1,952	818	2,801	88,526	4,702
Female	13,257	2,695	330	207	700	17,189	899
Unknown	0	0	0	0	0	0	0
Total	89,496	9,411	2,282	1,025	3,501	105,715	5,601
Air Force Reserve							
Male	79,595	11,260	363	120	6,749	98,087	4,439
Female	20,301	5,382	116	43	2,105	27,947	1,143
Unknown	0	0	0	0	9	9	0
Total	99,896	16,642	479	163	8,863	126,043	5,582
Coast Guard Reserve[2]							
Male	9,483	455	265	202	608	11,013	607
Female	1,306	150	52	38	95	1,641	94
Unknown	0	0	0	0	0	0	0
Total	10,789	605	317	240	703	12,654	701
Total							
Male	843,428	146,424	18,979	6,048	62,113	1,076,992	76,153
Female	136,597	56,146	3,630	1541	13,557	211,471	12,734
Unknown	12	4	1	0	364	381	2
Total	980,037	202,574	22,610	7,589	76,034	1,288,844	88,889

[1]Figures for Hispanics are the sum of Hispanics reported in each racial/ethnic category.
[2]Coast Guard Reserve Hispanics are included in the other racial/ethnic categories.
Source: Office of the Assistant Secretary of Defense for Reserve Affairs.
Data as of September 30, 1999.

Force Structure

The military's mission has traditionally been to fight and win the nation's major wars. As a result, the force structure of both Active and Reserve components has been configured to support that mission. However, those roles began to change dramatically in the early 1990s, and the coming years will likely bring further shifts in the roles of the Reserve components. Reserve forces will be in great demand to take on non-traditional missions such as peacekeeping, humanitarian assistance, homeland defense, civil support, counter-drug and other non-combat operations.

The problem is that today's Reserve component forces are not structured for such contingencies. They remain configured for mobilization in the event of general war. Consequently, the challenge to integrate Active and Reserve forces becomes far more complex than in the past. Finding the proper balance between peacetime contributory support, crisis response, emerging missions, and wartime mobilization is particularly difficult. The focus must be on policies and procedures that produce the best mix of Active and Reserve forces to meet our national military strategy. Each service has initiated programs to help meet this challenge.

The Army has taken a number of steps to increase Guard and Reserve participation in its missions. For example, the Army is forming multi-component units that will include soldiers from other Army components. The intent is to use the appropriate mix of Active and Reserve soldiers to perform the unit's required peacetime missions at the lowest operational cost, and to ensure it can move quickly to wartime status when required.

Army National Guard force structure will undergo significant changes in Fiscal Year 2000. Authorized end strength will drop to 350,000. The Army National Guard will convert designated enhanced Separate Brigade and divisional units to Limited Division XXI design. Overstructure positions for high priority units are being reduced to 5 percent. State and Territorial Area Commands are reduced by 15 percent of discretionary positions. Army National Guard Division Redesign Study Phase 1 actions for participating units and the replacement combat support and combat service support structure also begins in Fiscal Year 2000.

The most significant changes in the Army National Guard's force structure during Fiscal Year 1999 involved the field artillery, air defense artillery and homeland defense organizations. The Army National Guard reorganized its 155mm self-propelled field artillery units. It also implemented the air defense initiative, redistributing limited resources from lower priority divisional battalions to enhanced Separate Brigade batteries. The Army National Guard also activated the first Weapons of Mass Destruction Civil Support Teams to respond to incidents involving weapons of mass destruction. These units are composed of approximately 80 percent Army National Guard members and 20 percent Air National Guard members.

The most significant force structure change for the Army Reserve in Fiscal Year 1999 was the inactivation of 45 medical, 7 military intelligence, and 8 maintenance units, which eliminated a total of 9,426 slots. In addition, 54 Army Reserve units were activated, most involving military intelligence, combat service support headquarters, and units assigned to the Army's 4th Infantry Division. There were 35 conversions involving primarily adjutant general and engineer units, and 87 inactivations. These adjustments decreased the Army Reserve's Selected Reserve military authorizations by approximately 10,000. The net impact on civilian authorizations was a decrease of approximately 300 spaces. The Army Reserve's authorized end strength in Fiscal Year 1999 was 208,000 Selected Reservists and 10,500 civilians.

The Commandant of the Marine Corps ordered a review of both Active and Reserve

force structure after the Quadrennial Defense Review. The goal was to define the most effective yet attainable force structure for the Marine Corps. Decisions involving specific structure reductions, realignments, and deactivations reflect a continuing effort to maximize the Marine Corps' warfighting ability while minimizing the number of support functions required.

The Air National Guard received 173 initial undergraduate pilot training slots in Fiscal Year 1999, up from 99 slots the previous year. The projected pilot shortage for most of the next decade made it imperative to increase the pipeline flow to help sustain the Guard's combat readiness. In addition, crew ratio changes have made it necessary to further increase annual pilot allocations from 173 to 197 beginning in Fiscal Year 2002. The increase is due to recent changes in the Guard's force structure needed to meet new Aerospace Expeditionary Force commitments. All the new pilot positions will go to airlift and tanker aircraft. In addition, air defense units should be capable of deploying worldwide and operating in all threat environments, and be trained and equipped to perform the air superiority mission.

Air Force Reserve units continued to transition to the C-17 aircraft as the C-141 is gradually retired from the inventory. A major concern in Fiscal Year 2000 is that the Air Force Reserve does not have a follow-on mission for some C-141 units. As a result, these Reserve units face either mission changes or closure. Active Duty C-17 units will absorb much of the airlift capacity.

Civilian Skills Management

Reserve members bring a vast array of specialized knowledge from their civilian professions. They are environmental specialists, computer experts, and television producers, among others. A Reserve unit may be able to save the government money by tapping the civilian experience base of these individuals. Each Reserve component is in the process of setting up an inventory of its members' civilian skills.

The Army National Guard set up the Civilian Acquired Skills Program to attract civilians with certain critical skills. Individuals with these skills may be exempt from initial training.

In April 1999 the Army Reserve launched a Web site, *www.citizen-soldier-skills.com*, to identify Reservists' civilian skills. The initiative may eventually be adapted for other Reserve components.

The Naval Reserve is developing a Naval Reserve Civilian Skills Database based on a database developed for the Army Reserve. This system will be accessible by personal computers so Reservists can update their civilian employment skills information from their home or unit.

The Marine Corps Reserve has developed a Reserve Career Management Team to develop a Reserve Career Management Support System. The system would integrate personnel, performance, foreign language, civilian education, and professional military education information. It would enable Reservists to provide self-reported information about their civilian and military expertise and foreign languages. The system would be similar to that used in Web-sites such as "Careers.Com."

The Air National Guard has begun resurrecting a policy known as Apprentice Knowledge Tests. Members with special skills or experience can take a comprehensive examination in specific career fields. If they meet or exceed established standards, the individuals can by-pass formal initial skills training in that career field.

The Air Force Reserve is developing a civilian skills database for all its Reservists. Previously, local databases were maintained only for Individual Mobilization Augmentees' civilian skills. However, there is a growing

demand for a more detailed civilian skills database that is accessible by all Air Force Reservists. Officials at the Air Reserve Personnel Center are investigating the possibility of using the new computerized personnel system to track this information.

The Coast Guard Reserve currently records a member's civilian job using a six-digit code based on the Labor Department's Dictionary of Occupational Titles. However, the system is cumbersome and does not provide the required level of detail. The Coast Guard is small enough that it can request specific skills using the Internet and word-of-mouth. As a long-term improvement, the Coast Guard is preparing to adapt the Joint Reserve Intelligence Planning Support System to help track and better access its Reservists' civilian skills.





Training and Readiness

4

"The National Guard must be prepared for our primary responsibility as the front-line, ready reserve defense force for America. It is the mission we have always had, and it remains our seminal responsibility."

Lt Gen Russell C. Davis
Chief, National Guard Bureau



Introduction

Trained and ready forces provide the flexibility necessary to shape the global environment and deter potential foes. They are capable of responding to the full spectrum of crises, from limited contingency operations to major wars. To optimize force training and readiness in today's fiscally constrained environment, the Department of Defense is committed to transforming the Active and Reserve forces into an integrated Total Force.

Gaining the confidence of the combatant commander-in-chief in the war-fighting abilities of assigned Reserve forces is critical to achieving a true Total Force. Therefore, it is essential that the Reserve components be trained, ready and available for operational and contingency planning. Each Reserve component has a slightly different approach to training and readiness, because of each service's unique mission and skill requirements. While Reserve components train to maintain readiness levels sufficient to meet wartime mission requirements, they are increasingly being asked to relieve Active forces performing peacekeeping duties

The opportunity for Reserve components to perform real-world missions generally improves unit readiness and training proficiency. However, repeated or lengthy peacetime operational missions can degrade Reserve component units' ability to perform their specified wartime missions. This is particularly true if the unit does not receive its wartime mission essential training.

Readiness

Readiness is a cumulative process that requires time and resources to develop and sustain. Achieving necessary readiness levels in today's dynamic political, fiscal, and operating environment presents a significant and ongoing challenge. These challenges fall into four key areas: attracting and retaining quality people, training the force, ensuring adequate levels of equipment, and maintaining that equipment.

Early in Fiscal Year 1999, General Henry H. Shelton, Chairman of the Joint Chiefs of Staff, addressed the readiness of the U.S. Total Force: "Right now the force is fundamentally sound, but the warning signs cannot and should not be ignored. Let me use an aviation analogy to describe our current situation. In my view, we have 'nosed over' and our readiness is descending. I believe that with the support of the Administration and Congress, we should apply corrective action now. We must 'pull back on the stick' and begin to climb before we find ourselves in a nosedive that might cause irreparable damage to this great force we have created, a nosedive that will take years to pull out of."

Later, in testimony before the Senate Armed Services Committee, members of the Joint Chiefs of Staff highlighted the improvements seen in Fiscal Year 2000, and suggested the negative readiness trends experienced in prior years had been arrested. General Shelton noted, "We're on firmer footing now than at this time last year." He told the committee, "Overall unit readiness is satisfactory." However, he also noted that unit readiness and mission-capable rates are declining because of older weapons and scarce spare parts. In addition, he cited general manpower shortages, as well as shortages of experienced personnel in critical areas.

Readiness Evaluations

All Reserve components use the Global Status of Resources and Training Systems (GSORTS) to provide commanders with a snapshot view of unit readiness. Over 9,500 Active, Guard and Reserve units report into

the GSORTS system. Units measure and report their readiness status in four distinct areas: personnel (P-level), equipment and supplies on hand (S-level), equipment condition (R-level) and training (T-level). Ultimately, an overall unit resource and training category (C-level) level is assigned to reflect a unit's ability to execute its designated wartime mission. GSORTS can accommodate additional service-unique readiness calculations, since each Reserve component also employs additional metrics to further evaluate unique aspects of its combat readiness.

Units Readiness Level Upon Mobilization

C-1	Can perform full wartime mission
C-2	Can perform most of wartime mission
C-3	Can perform some of wartime mission
C-4	Needs additional resources to perform wartime mission

The Army National Guard uses the Army's Unit Status Report to report into the GSORTS database. All units report this information on a quarterly basis, and also update important changes monthly. The Unit Status Report and Training Assessment Model provide quantitative data on resource levels and training indicators, and also serve as a forum for commanders to candidly state their views on their readiness levels. All multi-component units are required to report readiness information on a monthly basis. The Combat Training Center's program of constructive and live simulations give selected Army National Guard commanders a way to assess their unit's ability to perform its wartime mission, as described in its Mission Essential Task List.

The Army Reserve uses a variety of programs to measure and evaluate combat readiness. In addition to GSORTS reporting, Army Reserve programs include: Lanes Training, used for training smaller units on Mission Essential Task Lists; Training Assessment Models; Annual Training; command post and field training exercises; Joint Readiness Training Center and National Training Center rotations; and battle command training program exercises. Not all Army Reserve units received an evaluation during Fiscal Year 1999, due to budgetary constraints associated with the Defense Department's drawdown, plus ongoing real-world contingency operations.

The Naval Reserve is composed of both commissioned units and augmentation units. Commissioned units are self-contained, deployable assets with both personnel and mission equipment and hardware. Augmentation units are non-hardware units that provide trained manpower to Active Navy units. The readiness of Naval Reserve commissioned units is reported into the GSORTS database. Commissioned Naval Reserve units are evaluated under the same criteria as the Active Duty fleet. Naval Reserve units train with similar Active component training matrices and use the same readiness reporting metrics as fleet units. Naval Reserve units participate in exercises and operations that are directly related to their training matrix used to evaluate readiness under the GSORTS format. This is accomplished during Active Duty Training deployments or Annual Training periods.

Naval Reserve augmentation (non-hardware) units measure readiness based on the percent of authorized billets filled and the average percent of mobilization training completed. This information is reported into the Reserve Training Support System database maintained by the Commander, Naval Reserve Force. The Naval Reserve does not conduct Operational Readiness Evaluation-type inspections to measure readiness trends. Augmentation unit mobilization training requirements are platform-specific, established by the Active Duty gaining command.

Marine Corps Reserve units report into the GSORTS database. In addition, the Marine Corps Reserve further evaluates readiness utilizing the Combat Readiness Evaluation System, Commanding General's Inspection, Mobilization Operational Readiness Deployment Test, and mobilization exercises. The Combat Readiness Evaluation System was

established to provide the Marine Corps with an evaluation system based on mission performance standards. These standards are developed using the systems approach to training for the purpose of assisting commanders in developing the Mission Essential Task List that satisfies combat requirements. The Commanding General's Inspection measures the Reserve unit's ability to be administratively ready for combat upon mobilization. Marine Corps Reserve units are scheduled for such evaluations every two years. During Fiscal Year 1999, a total of 105 units were inspected. The Mobilization Operational Readiness Deployment Test measures a unit's ability to mobilize its personnel and assets after a mobilization call-up. Training and evaluation standards for Active and Reserve components are identical.

The Air National Guard uses two standard methods for measuring and testing unit combat readiness: Operational Readiness Inspections, and the GSORTS database. For both methods, the Air National Guard uses the same criteria as Active units. Operational Readiness Inspections are accomplished by teams of Active Duty personnel from the Major Commands, Numbered Air Forces, and augmentees from Air National Guard units. Flying and aeromedical evacuation units are also evaluated during aircrew standardization/evaluation examinations.

The combat readiness and mobilization training of Air Force Reserve units is evaluated in accordance with the Air Force inspection system. Operational Readiness Inspections are accomplished by gaining major commands every four years. These inspections measure units' combat readiness and their ability to mobilize and deploy. Medical units, which were previously evaluated by the Air Force Inspection Agency, are now included in Operational Readiness Inspections to ensure they meet their wartime assignments. Reserve units meet the same training standards and criteria required of an Active unit. Approximately 25 percent of Air Force Reserve units are evaluated each year. However, some Reserve associate units get inspected more often, as they contribute to the readiness inspections of their attached Active units, which are on a two-year inspection cycle. In addition, most Reserve units participate at least annually in some type of exercise as a part of normal operations.

More than 85 percent of Coast Guard Reservists are assigned to Active Component commands. These Reserve component-staffed, Active component units report their readiness through the GSORTS database. Coast Guard Reservists provide 95 percent of the critical waterside Coast Guard port security capability needed by the combatant commanders-in-chief. The Coast Guard uses GSORTS to monitor readiness of the six Reserve Port Security Units. During Fiscal Year 1999, updated GSORTS decision aids were distributed to each of these units to help commanders more accurately assess unit readiness.

Managed Readiness and Tiered Resourcing

Current Defense Department policy provides varying levels of resources to units according to their mission deployment priorities. For example, later-deploying units receive fewer resources, because the increased training time necessary to prepare them for deployment is available and acceptable. The Army manages resources to maintain the highest possible readiness levels in "first-to-fight" units, while maintaining the ability to deploy later-arriving units within prescribed timelines. The Navy and Marine Corps meet overseas presence and forward engagement requirements through a cyclical readiness system that aligns unit readiness levels with the predeployment training cycle. The Air Force generally maintains a high state of overall readiness due to its rapid response requirements in the initial phases of a major theater war or smaller-scale contingency.

The Defense Planning Guidance and the Army plan are used to develop "force packages" based on deployment timelines. All Army units

are prioritized into four force packages. This program establishes resourcing priorities for all units, enabling the Army National Guard to establish corresponding readiness goals. Priorities are revised as needed, based on changes in the Army National Guard's strategic force packaging, contingency requirements, deliberate war plans, and other policy guidance.

The Army Reserve manages all resources under the Tiered Resourcing System. There are five major categories of tiers, with tier one being the highest priority and tier five the lowest. The Army Reserve distributes personnel, funds, equipment and other resources to units based on these priorities. Tiered resource categories and strategy is expected to remain unchanged for Fiscal Year 2000, although there may be changes to individual tier level assignments.

The Army Reserve made a significant change to tiered resourcing early in Fiscal Year 1999. Tiered resourcing now strictly matches priorities in the Department of the Army Master Priority List. Tiered resourcing assignments directly correlate to Army Strategic Force Packaging assignments, and current Defense Planning Guidance. Other revisions to tiered resourcing during Fiscal Year 1999 were the result of changes to operational plans, unit activations or de-activations, and assignments of new Force Support Package units.

The Naval Reserve, Air National Guard, Air Force Reserve, Marine Corps Reserve and the Coast Guard Reserve do not use the managed readiness and tiered resourcing concept, because all units in those organizations are organized, trained, equipped, and inspected to the same readiness standards and resourcing priorities as their Active component counterparts.

Readiness Trends

In January 1999, the Joint Chiefs testified before Congress that readiness was deteriorating, and warned that a significant investment in coming years was necessary to avoid a "hollowing" of the force. Despite mounting anecdotal evidence of declining force readiness, traditional yardsticks such as the Global Status of Resources and Training Systems (GSORTS) continue to show high overall readiness. Generally, readiness levels of Reserve component units have remained stable over the past year. There has been criticism that the GSORTS reporting system developed during the Cold War is not sensitive enough to detect the strain of numerous peacekeeping operations. Language in the 1999 Defense Authorization Act directed the Department of Defense to improve readiness reporting and make readiness ratings more responsive to the current pace of peacetime operations.

Army National Guard readiness trends have remained relatively consistent over the past year. However, there have been slight declines in training and equipment readiness due to funding shortfalls and a critical shortage of full-time support staff. Unit readiness levels may be more accurately measured by Army Unit Status Report data. This data has indicated slight declines in most readiness resource areas during the past year. Most of these declines can be attributed to inadequate funding, lack of equipment modernization, and shortages of full-time support personnel.

Army Reserve readiness assessment visits and inspections during Fiscal Year 1999 indicate several consistent trends. First, leadership is critical to a unit's readiness. Strong leaders have shown the ability to drastically improve the readiness of weak units. Generally, the greater the fill level of full-time support personnel, the better the readiness of the unit. Not surprisingly, units with the highest resource priority are the units with the strongest readiness. Stationing units in supportable recruiting markets continues to be another key factor in achieving strong unit readiness.

Force turbulence continues to have a major impact on Army Reserve units, especially

when unit staffing requirements increase or major changes occur in career field requirements. In many cases, a significant increase in a unit's personnel requirements has lead to a substantial decline in its readiness. This is often caused by the market's inability to support the recruiting of sufficient personnel. Due to downsizing, many soldiers must travel great distances to and from drill locations. Lengthy travel requirements, without reimbursement for mileage or lodging, is a significant cause of attrition for soldiers located far from unit drill facilities. Units mobilized and deployed for overseas operations generally did not report major losses of personnel upon de-mobilization.

The Naval Reserve Force does not conduct periodic inspections to measure readiness trends. However, review of both commissioned and augmentation unit GSORTS and other readiness data indicates the force has remained substantially ready during Fiscal Year 1999.

No significant trends were noted in Marine Corps Reserve readiness during Fiscal Year 1999 inspections. However, increased emphasis on Total Force requirements and continued modernization is responsible for an overall readiness increase. Additionally, increased involvement to relieve the operational tempo of Active Duty units has improved the combat readiness of Marine Corps Reserve units.

Although Air National Guard units continue to maintain relatively high overall readiness levels, there has been a 4 percent decrease in overall unit readiness between Fiscal Years 1998 and 1999. This decline has been concentrated in the area of equipment on hand, and is directly attributable to shortages of Readiness Spares Packages, spare engines, and extended depot turnaround times.

All Air Force Reserve units that participated in an Operational Readiness Inspection during 1999 received ratings of Satisfactory or higher. A review of historical data indicates that readiness capacity has generally increased in each of the four major areas graded during these inspections: initial response, employment, mission support, and ability to survive and operate.

Coast Guard Reserve component capability has improved substantially during Fiscal Year 1999. Staffing reached the authorized allowance of 8,000 personnel. Unit readiness also continues to improve. Based on initial GSORTS reports, the readiness of the Port Security Units has improved. Until recently, there had been no measurement system capable of determining the overall readiness of the entire Reserve component. Data is now being collected as part of a baseline development process.

Active Duty Mission Support

Using Reserve forces to support Active Duty missions or provide operational tempo relief was first proposed in the Secretary of Defense's 1993 report entitled "Bottom-Up Review." The services have used their Reserve components to implement this concept in various ways. In Fiscal Year 1999, the Reserve components provided 11.46 million mandays in support of missions such as counter-drug operations, domestic emergencies, and exercise support. This compares with 11.93 million mandays in Fiscal Year 1998. These figures represent more than a ten-fold increase over comparable levels of support provided during the Cold War. Moreover, Reserve force end strength has declined by nearly one-fourth over this same period.

Using the Reserves for operational missions represents a fundamental shift in the way the Reserve components are employed. During the Cold War, Guardsmen and Reservists focused primarily on individual and unit training to enhance their readiness for the mobilization mission. Now, however, Reserve component units are increasingly seen as an option to relieve the current high operations tempo of Active Duty units. Such duty may provide unique training opportunities for Reserve units.

The impact of this increased support of the Active forces depends on the mission and type of Reserve unit involved. Because most Guard and Reserve units participate in operations tempo relief on a voluntary basis, the impact of such deployments is generally limited. Morale and retention remain high among the vast majority of units involved in higher tempo operations.

The use of Army National Guard units in support of the Operation Joint Guard/Joint Forge NATO peacekeeping mission in Bosnia has had a positive effect on both unit readiness and soldier retention. Conversely, negative effects on the employers and families appear to be reasonably limited. The Army National Guard has lessened the impact of its call-up in several ways. For example, it has established a proactive Employer Support of the Guard and Reserve (ESGR) program. Deployments are scheduled as far in advance as possible, to lessen the impact on civilian employers. The Army National Guard makes maximum use of volunteers to reduce the need for involuntary recalls. Also, units are mobilized once every five years, at most.

An Army Reserve survey of returning soldiers from Bosnia indicates that approximately 52 percent of soldiers would volunteer for future mobilizations; 35 percent said they were unlikely or very unlikely to volunteer. Almost 70 percent said they would not complain if called for future mobilizations; however, the unknown nature of future contingencies (such as the frequency, possibility of casualties, locations, and specific missions) could negatively affect the potential for voluntary recall to Active Duty. Over 66 percent of those surveyed said that the maximum period of mobilization should not exceed 180 days.

The Naval Reserve indicated that most employers and families of Selected Reserve personnel understand and accept the members' obligation to "drill" one weekend per month and perform two weeks of annual training. However, requiring members to serve on Active Duty beyond the usual two-week period is likely to have an impact that is directly related to the length of that service.

Every call to Active Duty, whether voluntary or involuntary, affects Marine Reservists. The impact of extended deployments on families and employers varies with the individual. Desert Storm/Shield showed how involuntary recalls to Active Duty can have a severe impact on a Marine's family and employment situation. However, planning and preparation, early notice, and communication with employers can help minimize the impact of being recalled to Active status.

Within the Air National Guard, there is concern about how increased operational tempo support is affecting members. As Air National Guard operations increase to offset the Active forces' operational tempo, recruiting and retention problems are likely to begin affecting the Reserve components, as well. The average National Guardsman is spending more than 26 days above the required 39 days of annual duty. This not only hurts retention, but also hampers the ability to recruit individuals leaving Active Duty. Increased recruitment of non-prior-service personnel will, in turn, increase training costs.

Within the Air Force Reserve, participation has increased significantly since the end of Desert Storm. Reservists now average 123 days per year for aircrews, and 61 days per year for support personnel. In Fiscal Year 1999, the Air Force spent $222 million to pay Reserve members for short-term temporary support, and it expects that figure to increase over the next year. Volunteerism has continued to remain high, with an average of 900 Reservists deploying every month. The involuntary recall of Reservists under presidential authority involved nearly 1,200 Reservists in support of Operation Allied Force. The volunteer rate remained steady during the period of presidential activation.

The Air Force now operates under the Aerospace Expeditionary Force concept. The Air Force Reserve has committed to fulfilling two of the 10 Expeditionary Aerospace Force requirements. The concept was designed to bring a measure of stability and predictability, so members can better plan family, employment, and military schedules. This will go a long way in restoring the balance of the "citizen airman." Average deployment tour lengths are projected to be 15 days.

The Coast Guard uses the "Team Coast Guard" policy of one command structure, one administrative structure, and one support structure to achieve an integrated work force. With a shrinking Active Duty workforce, the Coast Guard has continued to look for ways to more effectively employ Reservists in day-to-day operations. Unprecedented job opportunities in the private sector have strained the Coast Guard's ability to fill critical positions. The Coast Guard Reserve has been able to provide members for temporary service with needed skill sets. This ability to temporarily fill Active Duty gaps with Reservists allows the Active force time to make long-term adjustments and minimizes costly disruptions to the military personnel inventory.

Historically, there has never been a problem getting Reserve support and participation for major theater wars or any significant crisis. Families are generally supportive and the Uniformed Services Employment and Reemployment Rights Act (USERRA) provides some protection at their civilian jobs. Lately, however, the Reserve components as a whole are beginning to report difficulty in recruiting and retention. This may be an early indication of the stress imposed on some Reserve component units by the increased tempo of peacekeeping operations.

Readiness Impact of Increased Use of Reserves

The continued use of Reserve component units to support ongoing peacekeeping missions, such as those in Bosnia and Kosovo, has resulted in both voluntary and involuntary deployments of up to 270 days. The Reserve components generally have not experienced any significant negative impact on readiness because of the increased use of Reserve component units. In fact, some Reserve components have indicated a positive impact on certain units.

Readiness challenges exist for units assigned traditional "warfighting" missions, in that high intensity combat training is generally not available in real-world operational tempo relief missions. On the other hand, combat support and combat service support units can benefit greatly from the experience of performing their missions within a genuinely operational environment. Nevertheless, combat units will require a certain amount of reconstitution time between peacekeeping deployments to regain highly perishable skills.

To date, no state or territory has mobilized more than 10 percent of its Army National Guard force in support of contingency operations, and no major impacts have been noted. However, when portions of Modified Table of Equipment units (i.e., deployable units) are detailed for contingency operations, overall readiness of the parent unit is degraded.

At present, the current presidential call-ups have not had a significant negative impact on unit readiness for the Army Reserve. Reported unit readiness throughout the Army Reserve is at the highest levels in over four years. However, frequency and length of deployments are significant factors contributing to recruiting, retention, and unit readiness challenges for Army Reserve medical units. The United States Army Reserve Civil Affairs and Psychological Operations Command reported a slight decrease in unit readiness beginning in Fiscal Year 1998. This decrease was directly attributable to an overlap of personnel rotations to Operations Joint Guard and Joint Forge. Beginning in Fiscal Year 1999, the command has reported consistent improvement in unit readiness every quarter, and operational support requirements have been reduced by the Department of the Army.

However, since so many soldiers have already been mobilized for these operations, some civil affairs and psychological operations specialties within the senior grades have almost reached the point where there may be no-one in these grades available for continued presidential call-up.

The four current presidential call-ups have not had a noticeable impact on Marine Corps Reserve readiness. The Marine Corps has not recalled any units, relying exclusively on voluntary individual augmentation. The only exception is the two Civil Affairs Groups that have deployed detachments on volunteer orders. Although these groups have been in high demand, they have benefited from the experience they have gained during recent contingency operations.

Within the Air National Guard, there is evidence that short-term readiness is being affected. This is most noticeable in the airlift and fighter communities. When Guard units participate in a contingency, their missions are limited to contingency operations. Crew members do not have an opportunity to update and maintain periodic mission-essential warfighting qualifications and perishable flight skills. When aircrews return to home station, they require extensive training sorties to restore their mission-essential qualifications. The net effect is a short-term deterioration of readiness. It also has a significant impact on aircrews and maintenance personnel who must work hard after returning home to restore and maintain unit readiness.

The Naval Reserve, Air Force Reserve and Coast Guard Reserve have not experienced any discernible evidence of a negative impact on readiness resulting from increased support of contingency operations.

Readiness Challenges

Readiness challenges fall into four broad areas: personnel, training, equipment on-hand, and equipment condition. Each of the Reserve components also faces its own set of readiness challenges, because of their specific missions, weapon systems, training and mobilization requirements. Despite these differences, every Reserve component listed recruiting and retention as its greatest readiness challenge in Fiscal Year 1999.

Army National Guard Readiness Challenges

The Army National Guard is projected to meet its end strength of 357,000 soldiers. Its accession rate for non-prior-service individuals is at 102.9 percent, and its prior-service accession rate is 109.7 percent. The loss rate is 19.4 percent. The Army National Guard's success may be traced to its innovative strength maintenance philosophy. This philosophy dictates that its 2,600 Recruiting and Retention NCOs work in all three areas of recruiting, retention, and attrition management. The 54 states and territories have embraced this practice, and have formed partnerships between their units and the Recruiting and Retention force.

The Army National Guard is currently equipped at 82 percent of Modified Table of Equipment requirements across the force. Equipment compatibility ranges anywhere from incompatible to identical equipment. Overall, however, compatibility is gradually improving over time.

Army National Guard equipment is among the oldest in the force. Much of the equipment cascading from Active units does not meet the Army's transfer maintenance standards, thereby requiring a higher expenditure of Army National Guard funds. The level of required maintenance is high, making the equipment expensive to maintain. Moreover, the equipment is incompatible with Active units' modernized equipment, creating further training and operability disconnects. Funding for parts, maintenance manning, and facilities is significantly below the required level.

The biggest challenge for the Army National Guard involving equipment condition is how to upgrade inadequate maintenance facilities and their supporting infrastructure. The lack of construction dollars for adequately sized, modern facilities dramatically impacts both morale and unit readiness. It also reduces recruiting and retention levels, and inhibits productivity and quality of work. Approximately $5 billion would be needed to bring existing facilities to the level necessary to adequately maintain equipment.

Army Reserve Readiness Challenges

Retention of prior-service soldiers is crucial to maintaining a cadre of trained and ready soldiers. Incentives are essential to help retain enlisted soldiers. Losing one-third of end-strength annually greatly reduces the Army Reserve's ability to maintain training readiness. In addition, the strong economy and increased operational tempo make it difficult to recruit new soldiers. Less than 20 percent of the Army Reserve's enlisted strength is in the junior grades of E-3 and below. High turbulence in force structure causes additional imbalances in career specialty qualifications. Additional funding is needed to provide bonuses for critical skilled personnel and for affiliation with early deploying units.

The shortfall of qualified personnel in the Army School System battalions reduces the number of soldiers who can be trained in new career specialties. Some specialties require lengthy resident training, which most Reserve soldiers cannot afford. As a result, alternative training methods are needed, particularly in technical specialties. A vigorous, well-monitored program is needed for validating civilian skills and on the job training, as well as increased emphasis on distance learning course development. In addition, units chartered to conduct reclassification and leadership courses for the Army School System were not considered in the procurement of Automated Data Processing and new equipment packages. Left uncorrected, this situation can degrade training, diminish sustainability, and reduce readiness for early deploying units. The Army School System battalions require new equipment training so instructors will be current on the equipment being fielded to the units they support.

The Army equipping policy is to equip units according to "first to fight – first to support" priorities, even though the majority of contingency operation mobilizations draw from lower priority non-Force Support Package units. Unit operational shortages in major equipment items are being met through a combination of redistribution, procurement, and repair of unserviceable items.

The lack of depot maintenance is one of the Army Reserve's major challenges. The depot maintenance program is essential to providing support to operational war-fighting plans. It is a cost-effective program that enables the Army Reserve to overhaul, upgrade, and rebuild major equipment items. Congress has shown increasing interest in the Army Reserve's depot maintenance program. As a result, the program has shown substantial improvement. The Army Reserve's Fiscal Year 2000 depot maintenance program is funded at 80 percent of the force packages (FP I &II) requirements, and 60 percent of the remaining force packages requirement.

Most Army Reserve facilities are more than 30 years old. Unit structure, training space requirements, equipment storage requirements, and automation support requirements have all exponentially increased since most of these facilities were originally built. Inadequate funding to properly maintain, improve, or replace aging facilities remains one of the Army Reserve's biggest challenges.

Naval Reserve Readiness Challenges

Training remains a significant challenge for the Naval Reserve. Having Reservists available to attend long-term Active Duty courses remains

the top challenge. Due to civilian employment demands and other family considerations, Reservists are often unable to meet time requirements of formal schooling. In addition, it is often difficult to obtain course quotas for Reserve members to attend Active component schools. Setting valid training requirements is another obstacle. Active Duty gaining commands and program sponsors must provide realistic and attainable training requirements to the Reserves, along with increased funding for formal school courses. Other challenges include shortages of computers and related training hardware, and a lack of qualified instructors.

Marine Corps Reserve Readiness Challenges

The Marine Corps Reserve's most acute readiness challenge remains in the area of personnel. Like the Active force, the Selected Marine Corps Reserve faces its greatest challenge in recruiting, training, retraining, and retaining quality Marines. Recruiting pilots into the Reserves continues to be a problem across-the-board, but is especially acute in rotary wing aviation. Several programs have been established aimed at improving personal readiness across the force. Those programs include the Reserve Recruiting/Retention Task Force, which identifies specific recruiting problems facing the Reserves and recommends possible solutions. Operation Harvest focuses on encouraging Marines leaving Active Duty with critical career specialties to join the Marine Corps Reserve. The Reserve Alternative Training Task Force addresses shortages of critical specialties across the force and develops core courses to train Marines locally.

Marine Corps Reserve equipment condition readiness remains high. The Marine Corps Reserve's top priority is upgrading its fleet of 48 F/A-18A aircraft. This upgrade will give the Marine Reserve a lethal weapon system that is both operationally and logistically compatible with other F/A-18A/B/C's in theater. Reserve squadrons represent 33 percent of the single-seat fighter/attack capability in the Marine Corps. Operational plans task them to deploy in the early stages of a crisis to support the warfighting commanders-in-chief.

Air National Guard Readiness Challenges

The Air National Guard is facing one of its toughest challenges in the area of recruiting and retention. The strong economy and job market, a lower propensity to enlist, and severe competition among services for eligible recruits has affected the Air National Guard's ability to meet recruiting goals. The Air National Guard has shifted its focus to target recruiting. It has increased advertising funding, along with boosting the number of recruiting support days available to recruiting offices. The cost and time involved in replacing National Guardsman has also highlighted the need to improve retention statistics. New incentive programs are aimed at encouraging members to re-enlist. Another major challenge is ensuring that families understand the obligation and benefits of membership in the Air National Guard. Family support awareness has been increased throughout the Air National Guard from senior leadership downward.

The Air National Guard makes every effort to fill whatever training quotas it receives, but must deal with challenges such as timing of course availability, matching with civilian jobs and other issues. Quotas for advanced pilot training on specific aircraft were difficult to obtain in Fiscal Year 1999. This was primarily because of a shortage of instructors and equipment in the Air Education and Training Command, which provides the training. The problem is especially acute in the C-141 pilot field. Active Duty C-141s are being phased out, with a corresponding decrease in training, but Reserve component C-141s will continue to fly, and be retired at a later date. To address this training shortfall, the Air National Guard and Air Force Reserve have made a concerted effort to consolidate Reserve component training at Wright-Patterson AFB, Ohio.

Equipment poses a significant challenge to Air National Guard readiness. The Air National Guard flies the oldest aircraft in the Air Force inventory. Budget constraints often shortchange Guard programs and leave the force with a less than optimal ability to fly, fight and win. The Air National Guard's top modernization priority is the Precision Attack Targeting System, which will give its fighters a day and night precision strike capability. The next priority is the Fighter Data Link, required to implement data link and combat identification for the entire fleet. Both programs are critical to the Total Force. Air Defensive Systems are needed on all C-130s to adequately support the Aerospace Expeditionary Force concept. Modernization of the Air National Guard's F-15 and F-16 fleet are not keeping pace with those of the Active component.

Air Force Reserve Readiness Challenges

The Air Force Reserve is encountering the same recruiting and retention challenges as the Active forces. Its problems stem from two major factors: a shrinking Active force, from which the Reserve has traditionally drawn the bulk of its members, and a strong economy that offers more employment options for the potential non-prior service recruit. While the Reserve received a $2-million increase in advertising funds in Fiscal Year 1999, as well as 30 additional recruiters, these remedies will not be sufficient to meet the projected shortfalls. The Air Force Reserve reached 81.4 percent of its recruiting goal for Fiscal Year 1999. Although the command retention goal of 80 percent is being achieved across the force, retention remains a concern. The Air Force Reserve may be short as many as 419 pilots by Fiscal Year 2002, if no additional incentives are offered. Increased incentives represent a major tool with which to recruit and retain the personnel needed to meet the challenges of the next millennium.

Reservists generally have access to the same training opportunities as Active Duty personnel. However, because most are not full-time Reservists, they are often unable to take advantage of training and educational opportunities. More and more, training is being converted to distance learning. However, these techniques are effective only if adequate facilities conducive to distance learning are readily available, or members have access to computer or video teleconferencing equipment. That is not the case for the majority of traditional Reservists. As a result, many Reservists are limited to conventional training methods. This problem is compounded when conventional training is converted entirely to distance learning without considering what technology and facilities are available to the traditional Reservist.

Access to modern equipment promotes greater effectiveness, but with decreasing budgets, acquiring the latest equipment becomes a real readiness challenge. Reservists can best fulfill their role in the Total Force when their equipment is on equal par with that of the Active components. Nothing is more demoralizing than to have outdated or poorly maintained facilities and equipment. The Air Force Reserve strives to instill a sense of pride in the troops, but forcing them to live or work in undesirable facilities is counterproductive. The ability to maintain older equipment in excellent condition remains one of the hallmarks of Air Force Reserve Command. While challenges remain in obtaining some spare parts and assemblies, the Air Force Reserve's equipment service rate and mission capable rates consistently exceed expectations.

Coast Guard Reserve Readiness Challenges

Recruiting former Active Duty personnel has been the Coast Guard Reserve's highest priority, due to the previous three years' strength shortfall. Efforts have yielded notable gains, and the Coast Guard Reserve reached its authorized Selected Reserve strength of 8,000 late in Fiscal Year 1999. However, the 1998 Roles and Mission study identified a need for 12,293

members to meet current Coast Guard missions. Since then, the Coast Guard aviation program manager has sought 300 additional personnel. That means the demand for new recruits could expand considerably if the higher figure is authorized. Also, large losses are forecast over the next several years as the aging ranks of the Coast Guard's Selected Reserve reach peak levels. The majority of losses will come from individuals reaching age 60 or achieving retirement eligibility.

All Coast Guard training, both Active and Reserve, comes under the same organization, so differing qualification standards have been eliminated. Nevertheless, training program managers have made it a top priority to adapt all training courses to meet the special needs of Reservists and their limited availability to take extended periods away from their employers. Reservists may now attend specific segments of longer courses at Coast Guard training centers that traditionally were open only to the Active component. Expanded course schedules and offerings are placed on the Internet to increase availability to Reservists. The Coast Guard is committed to expanding joint training opportunities where it is practical to do so.

The Coast Guard Reserve no longer has direct control over equipment other than personal equipment. Nevertheless, adequate congressional funding for major equipment replacements and upgrades is essential for Reserve-staffed units. The Office of Reserve Affairs at Coast Guard Headquarters plays a pivotal advocacy role for Reservists, working closely with the Active component to ensure that equipment funding needs are met. For example, the Fiscal Year 1998 defense appropriation of $13.5 million alleviated a backlog of Port Security mission equipment needs and was a prime example of both components working together to achieve a major funding goal. No additional supplemental funding was available in Fiscal Year 1999 to support Port Security Unit equipment.

Reserve Training

The mission of each Reserve component is to provide units trained and available for Active Duty in case of war or national emergency. Each Reserve component trains both units and individuals using the standards of its parent service. With an average of just 39 training days available annually, unit commanders must strike a balance between members' individual training needs and the unit's wartime training requirements. Each unit has a pre-mobilization unit training goal established by its parent service and monitored by the Global Status of Resources and Training System (GSORTS) database. Once mobilized, units begin the post-mobilization phase of training to become proficient in their assigned missions before being deployed.

The Reserve components are increasing their investment in new training technologies, such as advanced distributed learning. This technology has the potential to tailor training to individual needs, and can also be provided wherever needed. It is ideally suited to Reserve units whose members are located throughout the country. In addition, Reserve components are increasingly turning to weapon system trainers and battle simulators to train their forces. These sophisticated systems help compensate for shortages of training ammunition, and decreased availability of training areas due to environmental concerns.

Training Concepts

The Army National Guard's "Vision 2010" training concept incorporates its individual, unit, and modernization training needs. Realistic, sustained, multi-echelon, and totally integrated training will be stressed at all levels. The Army National Guard considers a four-year training strategy to be the base for all units. For enhanced Separate Brigades, two four-year strategies are aligned together to synchronize an eight-year training cycle that culminates in a live fire Combat

Training Center rotation. The Army National Guard has fully implemented The Army School System. This system trains the Active Army, Army National Guard, and Army Reserve to a common standard.

Participation at the Combat Training Center is the Army's most challenging training event. Rotations through the center significantly enhance unit training readiness. The first year's training focuses on crew, squad, and platoon; the second year on platoon and company; the third year on the company and battalion task force; and the fourth year on company through brigade operations. For heavy and light enhanced Separate Brigades, training for the fifth year replicates the first year; the sixth year replicates the second year; the seventh year replicates the third year and incorporates combat support and combat service support training with augmentation units. Year eight training culminates in a live fire rotation at either the National Training Center or at the Joint Readiness Training Center. Leader training is conducted throughout the eight-year training cycle. The Army National Guard has developed and continues to refine training strategies that leverage limited training resources.

The Army Reserve has also integrated fully into The Army School System (TASS). The Army Reserve will provide individual institutional training to Active and Reserve soldiers by coupling the Total Army Distance Learning Program, TASS and Classroom XXI. This will produce an increase in readiness, cost savings and more training time for the soldier. When completed, Distance Learning classrooms will be available to approximately 95 percent of all soldiers, both Active and Reserve. Classroom modernization will also help the total Army achieve a continuous education model, in which courseware can be developed for use in TASS and Distance Learning facilities.

The Combined Arms Training Strategy is the Army's approach for current and future training of the force. It establishes requirements for unit, soldier, and leader training, and describes how the Army will train and sustain itself to a single standard. The Army Reserve has developed and updated several automated systems that will improve training management. The Battle Focused Training Management Software is designed to allow a company, battalion, or brigade/group commander to create and prepare a unit mission statement and Mission Essential Task List. The Army Reserve collective strategy calls for scheduling units into multi-echelon, multi-functional exercises. Another initiative is the Proof of Principle/ Hands-on Training program. This program was designed to prove that Army Reserve soldiers possess the technical capability to perform maintenance missions during inactive duty training periods.

The Naval Reserve emphasizes training on the same ships, aircraft, and equipment as the Active Navy to maintain war-fighting skills. The concept is implemented in many ways. Reserve personnel attend the same formal training courses and complete the same correspondence courses required of Active Navy personnel in comparable job specialties. Annual training and inactive duty training is focused on improving mobilization readiness. Reservists provide direct support and operational tempo relief using skills acquired during mobilization readiness training. Reservists participate in Active Navy fleet exercises and are evaluated for their performance. The Naval Reserve trains Reservists according to Total Force standards, ensuring a seamless integration into the Active Navy in the event of mobilization.

During Fiscal Year 1999, Marine Reservists were given greater opportunities to participate in real world and overseas training, by providing operations tempo relief to the Active Marine Corps. The Marine Corps Reserve has also developed training alternatives for Reserve Marines who lack proper specialty training, such as distance learning and on-the-job training. Mobile Training Teams have also been

formed to help Reserve Marines receive their required specialty training without extended absences from work or school. Reserve training opportunities are identified at Marine Corps Training and Exercise Planning conferences attended by operations and training staff from both the Active and Reserve components.

The Air National Guard continues to expand training access to its members with the emerging technologies of Distance Learning and Advanced Distributed Learning. Nearly all Air National Guard units now have satellite downlinks to the Air National Guard Warrior Network, along with fiber-optic capability and multimedia computers for training. The Air National Guard has joined with the Army National Guard to create an electronic classroom. This partnership will save millions of dollars by avoiding duplication of training systems. It will also give National Guard members immediate access to training courses. Another major focus during Fiscal Year 1999 was the ongoing review of ancillary training courses conducted by a joint team of experts from the Active Air Force, Air National Guard, and Air Force Reserve. Outdated courses will be updated and streamlined, or eliminated. These changes will give members more time to perform their primary skills while meeting their ancillary training requirements.

The Air Force is evolving into an expeditionary force to meet the demands of today's dynamic security environments. However, competing demands of career specialty training and mission-related training has often forced units to choose between warfighting training and other Air Force-mandated training. Balancing these priorities is having a profound effect on the ability to perform current and new missions, quality of life, maintaining manning levels, and recruiting efforts. In addition, while the expeditionary force concept provides stability in deployment scheduling, it creates new training challenges in the form of scheduling and standardization between the Active forces and the National Guard and Reserve.

Training Initiatives

During Fiscal Year 1999, the Army National Guard used the SIMITAR Training Exportable Program, now known as Tiger XXI, to improve the performance of Heavy Separate Brigades participating in National Training Center rotations. Tiger XXI combines innovations in live, virtual and constructive training to improve unit readiness and performance at the Combat Training Center. Tiger XXI's live and virtual training is focused at the battalion staff, company and platoon level. For the foreseeable future, Tiger XXI is the Army National Guard's primary innovative unit training program. For individual training the Army National Guard is continuing to develop a significant distance learning capability working with The Army School System nationwide to teach soldiers close to their home stations.

The Army Reserve focused its unit Annual Training toward collective training opportunities. During Fiscal Year 1999, Army Reserve units were more functionally aligned than ever before during Annual Training. Army Reserve Command developed new methods for accomplishing railroad and watercraft training. Nine additional schools were added to the Troop Program Unit Senior ROTC Force Replacement and Proof of Principle Program. The future trend for both Army Reserve unit and individual training is to be more mission-oriented in tactical environments.

The commander of the Naval Reserve Force has continued to support distribution of Computer Based Training Interactive Courseware to Naval Reserve fleet activities and shore establishments. Interactive Video Teletraining is fully operational at the Professional Development Center, Naval Support Activity, New Orleans, LA. This site is linked to 21 other shore sites scattered throughout the U.S. Additional information technology initiatives include the creation of a Reserve Information Technology Unit comprised of Reservists with recognized expertise in distributed learning and client/server networks.

The development of a Web-Based Course Reservation System will provide Reservists with 24 hours access and full visibility of course quota processing. The Navy Reserve will continue to leverage from Navy and industry efforts in the realm of distributed learning developments.

During Fiscal Year 1999, Marine Forces Reserve established the Reserve Alternative Training Task Force to identify career specialty mismatches within the Force. Alternative training solutions for Reserve Marines unable to attend the full-length training courses are in development. These initiatives include distance learning, alternative training tracks, and Mobile Training Teams. For example, Mobile Training Teams were established using Reserve marksmanship team members to assist Reserve units conducting re-qualification marksmanship classes. There were 36 Mobile Training sessions held this year for Selected Marine Corps Reserve units.

The Air National Guard established a new unit at Tyndall AFB, FL, and examined the possibility of an additional unit at Seymour Johnson AFB, NC, to augment instructor pilots for Active Duty Air Force F-15 and F-15E training units. Additional F-16 pilot training units are being established at the Air National Guard units at Kelly AFB, TX, and Springfield, OH. The recently converted F-15 school at Klamath Falls, OR, is expanding student production. The Air National Guard is negotiating with Air Mobility Command and Air Education and Training Command to establish a KC-135E training unit at Scott AFB, IL.

The Air Force Reserve completed the merger of the Law Enforcement and Security career fields into the single Security Forces career field at Homestead Air Reserve Base, FL. The merger permitted some tasks to be removed from the in-residence course, thereby allowing more flexibility for Reservists to attend. The Air Education and Training Command produced a distance learning/video tele-training version of the Personnel Craftsman, 7-level, in-residence course for use by Air Force Reserve Command. This was the first 7-level course converted to video tele-training. Air Force Reserve Headquarters has developed the Plans and Technologies/Distance Learning Web site to provide information on new Distance Learning initiatives within the command.

Coast Guard Training Centers continue to modify courses to meet the training needs of Reservists. For example, Reservists may now attend specific segments of longer courses traditionally open only to the Active component. Generic service training will expand to better meet the needs of Reservists. Distance and remote learning are still in their infancy, but are expected to add tremendous capabilities while sharply reducing traditional training costs. During Fiscal Year 1999, the Coast Guard Reserve completed transfer of the Port Security Unit Training Detachment from Camp Perry, OH, to the Marine Corps' Riverine Warfare Training Center of Excellence in Camp Lejeune, NC.

Pre- and Post-Mobilization Training

The primary focus of each of the Reserve components is accomplishing pre-mobilization training to meet post-mobilization training requirements based on the combatant command's mission. These requirements are linked to the deployment timelines set in the Operational Plans. Units deploying into a combat situation are required by law to be at the highest readiness level possible. The unit readiness status at the time of mobilization for a combat situation will determine the number of training steps and time required to train to combat standards to meet specific mission requirements.

When an Army National Guard or Army Reserve unit is mobilized, the length of time required to deploy to a combat situation is dependent on that unit's specific personnel, equipment, current state of training readiness, and the alignment of its Mission Essential Task List with the gaining command's mission requirements. Pre-mobilization training

is focused on completing the Mission Essential Task List. The average annual training period available is 39 days, which include 15 days of annual training plus 24 weekend training drills.

Post-mobilization training requirements for Army National Guard enhanced Separate Brigades illustrate these time-line variables. The post-mobilization non-training requirement is approximately 26 days. That includes initial readiness processing, as well as final maintenance, recovery, and preparation for loading. Depending upon theater-specific requirements and what stage of the new eight-year training cycle a particular brigade is in, its required post-mobilization training period can be as much as 64 days. Units at the peak of their training cycle, meaning they are either preparing for or recently returning from a major training center, require significantly less training time. All enhanced Separate Brigades are deployable within 90 days. However, actual deployment timelines will depend on the availability of strategic lift. Combat Service Support units are generally deployable within 10 days; divisions could deploy within 150 days.

The Marine Corps normally requires a minimum of 14 days of training and mobilization support before sending units into combat. Four to 14 days are required for units and members of the 4th Force Service Support Group and 4th Marine Aircraft Wing Support Squadron.

Air National Guard and Air Force Reserve forces train to a high level of readiness prior to mobilization and do not require a post-mobilization training period before going into combat. The Air Force fully integrates the Air National Guard and Air Force Reserve under the Deliberate Planning Process by ensuring their Air Reserve components are trained and equipped to perform their wartime mission. Additionally, the Air Force integrates its Air Reserve Components at the beginning of the contingency planning cycle. All Air Reserve Components are capable of deploying within 72 hours of notification.

The Coast Guard does not maintain Reserve component combat units, but does maintain six Port Security Units. These units require minimum preparation time to deploy, with the actual time dependent on specific requirements for the actual theater of operation.

Joint Operational Training

The Joint Staff oversees joint exercises in close coordination with the services. The Joint Staff hosts the annual Worldwide Scheduling Conference where commanders present their exercise programs and coordinate participation of both Active and Reserve forces in these training exercises.

Army National Guard and Army Reserve units have been integrated into virtually every joint exercise. Forces Command alone provides approximately 200 Reserve units and 20,000 Reserve soldiers in support of these exercises every year. During Fiscal Year 1999, training at Army major training centers fully exercised forces in performing mission-essential tasks with other services or under the operational control of a joint force commander. Training at major combat training centers such as the National Training Center, Battle Command Training Program, and the Joint Readiness Training Center provides brigades and battalions the opportunity to conduct realistic field training. These unit formations typically perform as part of a pure Army combat formation. However, the degree to which these formations interact with other services is also replicated at these centers. All 52 company-sized units that trained at the Joint Readiness Training Center this year received at least some exposure to joint operations. Similarly, the Battle Command Training Program replicates the degree to which corps and divisions typically interact with joint forces.

Army National Guard units participate in joint training at the Joint Readiness Training Center at Fort Polk, LA, as a part of the normal training rotation. The Joint Readiness Training

Center provides an advanced unit training environment for Army National Guard enhanced Separate Brigades, U.S. Army Special Operations Command, U.S. Air Force Special Operations Command, Air Mobility Command, and Air Combat Command. The center's training system is composed of a well-trained opposing force, skilled observers and controllers, complex tailored scenarios, and an instrumented battlefield. The center's joint training provides the Army National Guard with a unique opportunity to conduct operations as part of a Joint Task Force. It also enables commanders and their staffs to synchronize the actions of air, land, and sea forces to achieve tactical objectives with integrated operations.

A total of 91 Army Reserve units (5,228 soldiers) provided 118 rotation cells to the Joint Readiness Training Center at Fort Polk, LA. In Fiscal Year 1999, a total of 52 company-sized units participated in joint training at the center, with the number of units expected to increase during Fiscal Year 2000. Joint training at combat training centers directly exercises Army Reserve Echelons Above Corps Combat Support and Combat Service Support. Army Reserve units whose missions are designated Theater Opening Force Module and Reception, Staging, Onward Movement, and Integration will train in the same type of joint environment they would experience in real-world contingencies.

A total of 94 Marine Corps Reserve units were trained at major training centers this year. Nine of those units participated in joint exercises at major training centers. The Air Naval Gunfire Company participated in joint training at the Joint Readiness Training Center and units participated in joint training during Blue Flag at Nellis AFB, NV. The same number of Marine Corps Reserve units are expected to participate in joint training during Fiscal Year 2000.

Twenty-one of the Air National Guard's 33 flying units participated in major combat readiness training exercises during Fiscal Year 1999. Overall participation in exercises was lower than normal because of the Air National Guard's heavy participation in Operations Allied Force, Southern Watch, Northern Watch, and Shining Hope. A total of 4,064 Air National Guard personnel were involved in the presidential call-up of forces for these operations. Nevertheless, the Air National Guard trained more than 600 personnel and conducted 36 airlift training missions in the Global Patriot exercise. Aeromedical squadrons participated in Joint Readiness Training Center exercises conducted at Fort Polk, LA, providing aeromedical evacuation in a simulated wartime environment. Aeromedical Guard units also supported Bright Star, a multi-force allied coalition CENTCOM exercise.

Air Force Reserve units participated in several major joint readiness training exercises in Fiscal Year 1999. Among the largest of these was the annual New Horizons exercise, expanded this year to assist with hurricane recovery efforts in Honduras, El Salvador, Guatemala, Nicaragua, and the Dominican Republic. Air Force Reservists joined more than 20,000 Active Duty and National Guard members to help construct medical clinics and schools, drill water wells, and provide other medical and civil engineering support. Reservists also participated in Ulchi Focus Lens '99, joining 14,000 U.S. forces in South Korea for one of the world's largest computer simulated wargames. Other exercises included Iron Cobra, a Joint Chiefs of Staff training exercise in Egypt; Keen Sword, an annual defense training exercise in Japan; Joint Task Force 99-1, an exercise involving more than 24,000 military forces from Europe and South America; Aces South, an air defense exercise in Australia involving more than 100 Reservists. Air Force Reservists were also among the 700 military members who participated in astronaut rescue training in March.

Coast Guard Reserve Port Security Unit personnel participated in joint training in rear-area security, force protection, small boat tactics, and Air Force load planning. Training was done at Camp Pendleton, CA; Camp Lejeune, NC; Ft. Dix, NJ; and March Air Reserve Base, CA. Six Port Security Units and the Port Security Unit Training Detachment were involved in this joint training. Defense Department training

centers provide anti-terrorism and force protection tactical training not otherwise available in the Coast Guard. This training also ensures that deployable Port Security Units comply with all applicable regulations when transporting personnel and equipment via military aircraft.

Figure 4-1 lists all the operational missions and training exercises in which Reserve forces participated in Fiscal Year 1999.

Overseas Training

Overseas training provides some of the most effective training opportunities for Reserve units. The planning necessary for a Reserve unit to participate in an overseas training mission closely parallels that required for mobilization and deployment. In addition to exercising mobilization and operational plans, overseas deployment training strengthens relationships with potential wartime commands and provides the deploying units with geographical orientation. The majority of the Reserve components participated in overseas deployment training during Fiscal Year 1999.

The Army National Guard deployed more than 33,000 soldiers to overseas training in support of 21 Joint Chiefs of Staff exercises in Fiscal Year 1999. These overseas deployments also included nation assistance exercises, warfighting mission training, support and stability operations, and operational missions in direct support of a Unified Commander. In addition, more than 12,600 Army National Guard soldiers from 41 states and territories participated in expanded New Horizons exercises, providing disaster relief and humanitarian assistance for Central American nations ravaged by Hurricanes Mitch and Georges. Overseas deployment training provides an ideal opportunity for the Army National Guard to conduct high quality, multi-echelon training deployments while also relieving operations tempo for the Active forces.

Participation by Army Reserve units in the overseas deployment training program has increased in recent years. Units participate in humanitarian aid operations, perform nation-building activities, support peace operations and provide operational support to wartime commands. Many Reserve combat support and combat service support units with limited local resources obtain practical experience when deployed overseas to support "shaping missions," that is, missions designed to help shape the global military environment.

Both the Navy and Marine Corps Reserve provided units to support overseas humanitarian and operational exercises. A prime example of real-world training was the Naval Reserve medical support provided to Thailand as part of a humanitarian mission under exercise Cobra Gold. The Marine Corps Reserve's participation in exercise Battle Griffin in Norway provided unique training in cold weather operations and NATO interoperability. Exercise Baltic Challenge provided realistic peacekeeping training in a foreign nation. Participation in exercise New Horizons provided needed humanitarian and civil affairs assistance in Nicaragua, as well as providing excellent medical and dental training.

The men and women of the Air National Guard and Air Force Reserve continue to play a major role in the Air Force's on-going operations in Turkey, Bosnia, Southwest Asia, the Caribbean and Central America. Guardsmen and Reservists have been able to respond to all requests for overseas support using volunteers only. Relief missions provide Reserve component aircrews and support personnel with real-world training opportunities. However, overseas operational support missions do not necessarily provide Reserve aircrews with the kind of training necessary to maintain wartime readiness skills.

Overseas training helps Coast Guard Port Security Units and Harbor Defense Command Units become familiar with areas in which they are likely to deploy. Overseas training also enhances joint interoperability between the Coast Guard and its Defense Department counterparts.

Figure 4-1
TRAINING EXERCISES AND OPERATIONAL MISSIONS

AGILE LION
AIR WARRIOR I & II
ALLIED EFFORT
ALASKAN ROAD
ALLIED FORCE
ALLIED HARBOR
AMALGAM WARRIOR
AMEDDEX
ANNUALEX
ARCTIC CARE
ASCIET
BALANCE ANVIL
BALTOPS
BANGLADESH SAREX
BATTLE GRIFFIN
BEARING DUEL
BELL BUOY
BLUE ADVANCE
BLUE FLAG
BLUE GAME
BRIGHT STAR
CALL FORWARD
CAPABLE WARRIOR
CAPSTONE
CARAT
CARRIBEAN THUNDER
CASCADE PEAK
CAX 'S
CIDTRAIN
COBRA GOLD
COMBAT ARCHER
COMBAT HAMMER
COMPASS SCOUT
COMPTUEX
COOPERATIVE SPIRIT
COPE NORTH
COPE THUNDER
COPE TIGER
COPE WEST
CORNERSTONE
CORONET NIGHTHAWK
CORONET OAK
CRESCENT DAGGER
CROCODILE
CROSS SKE
DACT
DELIBERATE FORGE
DESERT FOX
DESERT RESCUE
DESTINED GLORY
DISTANT THUNDER
DOGFISH
DYNAMIC ACTION
DYNAMIC MIX
EAGER WRENCH
EAGER SENTRY
EASTERN READY
EFX
EL MORO CASTLE
EMERALD EXPRESS
EURO-FLOATER
EURO-SID
EXPRESS SWORD
FAST START
FLEET BATTLE EXPERIMENT 'E'
FLEETEX
FLEX ALERT
FLOWING PEN
FOAL EAGLE
FREEDOM BANNER
FTFEX
FUERZAS ALIADAS
FUERZAS DEFENZAS
GLOBAL GUARDIAN
GLOBAL PATRIOT
GLOBAL POWER
GOLDEN CARGO
GOLDEN COYOTE
GOLDEN KASTLE
GOLDEN MEDIC
GRECIAN FIREBOLT
GREEN FLAG
GUNSMOKE
HIGH CONT
HURRICANE GEORGES RELIEF
HURRICANE MITCH RELIEF
JOINT FORGE
JOINT GUARD
JOINT GUARDIAN
JRTC
JTF BRAVO
JTFEX
JUNIPER STALLION
KEEN EDGE
KEEN SWORD
KERNEL BLITZ
KEFLAVIK RESCUE
LITTORAL LIGHTENING
LIVE FIRE
LONESTAR
LUCKY SENTINAL
MAPLE FLAG
MATADOR
MISAWA ALERT
NATIVE FURY
NEON FALCON
NEW HORIZONS DOMINICA
NEW HORIZONS HONDURAS
NEW HORIZONS NICARAGUA
NEW HORIZONS PERU
NEW HORIZONS ST. KITT - NEVIS
NEW HORIZONS ST. LUCIA
NOBLE ANVIL
NORTHERN EDGE
NORTHERN LIGHTS
NORTHERN WATCH
NORTHERN VIKING
NORTHWIND
NUEVOS HORIZONTES
NWPAC WARGAMES
OKLAHOMA TORNADO RELIEF
OPTIMAL FOCUS
PACIFIC FLOATERS
PATRIOT DOWN UNDER
PATRIOT MARLIN
PATRIOT WOOD
PHOENIX DUKE
PHOENIX SCORPION
PKO SOUTH
PLATINUM WRENCH
POLEX
POSITIVE FORCE
PRAIRIE WARRIOR
RED FLAG
RIOEX
RIO BRAVO
RIO GRANDE
RIO LOBO
RIVERRINE
ROVING SANDS
RSO & I
SCORPION WIND
SEA HAWK
SENTRY ALOHA
SENTRY EAGLE
SHARP WEDGE
SHIELD SHARK
SHINING HOPE
SILENT THUNDER
SILVER SCIMITAR
SILVER SWORD
SINGAPORE FLING
SNOWBIRD
SOCEX
SOUTHERN WATCH
STANAVFORLANT
STEEL KNIGHT
STRIKE FIGHTER
STRONG RESOLVE
SUSTAIN HOPE
TANDEM THRUST
TEMPEST EXPRESS
TEMPO BRAVE
TRADEWINDS
TRAILBLAZER
TRANSAMERICA
TRANSLOTS
TRIDENT ARCH
TURBO CHALLENGE
ULCHI FOCUS LENS
ULTIMATE RESOLVE
UNIFIED CHARGER
UNIFIED ENDEAVOR
UNITAS
UNITED SPIRIT
UPHOLD DEMOCRACY
URBAN WARRIOR
VIKING STRIKE
WARFIGHTER
WILD BOAR
WINTER BASING
YAMA SUKURA
Y2K/TURBO

Source: The Reserve components.
Data as of September 30, 1999.

Reserve Aviation Training

The Army National Guard received too few training quotas to meet its requirements for warrant and commissioned officer Initial Entry Rotary Wing training during Fiscal Year 1999. Training requirements exceeded available training quotas by 96 slots, or nearly 67 percent. This shortfall was primarily due to changes in force structure and an average attrition rate of 7 to 10 percent among Army Guard aviators. A similar training shortfall is projected in Fiscal Year 2000. Likewise, training quotas for follow-on, refresher, and transition flight training also fell short of the need in Fiscal Year 1999. These training shortfalls were especially acute in the UH-60 program, which received just 205 of the 383 required, and the AH-64 program, which received just 10 of the 90 slots required. Such training shortfalls are expected to continue for the foreseeable future, based on funding projections.

The Army Reserve fell short of its total Fiscal Year 1999 training requirements. It was allocated just 32 initial undergraduate pilot training slots. While a total of 34 students graduated from pilot training, 11 officers were still awaiting training. Similarly, the number of training slots allocated for Fiscal Year 2000 does not meet the requirement. Ten initial undergraduate pilot training slots are projected against a requirement consisting of those 11 officers awaiting training and 25 additional officers awaiting assignment to the waiting list. By contrast, the Fiscal Year 2001 Flying Hour Program is adequately funded in the Defense budget. Training seat allocations will be critical to maintaining ready forces in the Army Reserve, especially in the CH-47 and AH-64 programs.

All pilots in the Naval and Marine Corps Reserve initially enter the Active component before joining their Reserve units. As a result, each naval aviator has completed undergraduate flight training and has had a tour with the Active component before joining a Reserve unit. Nevertheless, Reserve pilots do participate in refresher, conversion, and transition flight training on an "as required" basis. Trained pilots released from Active Duty adequately support the aviation requirements of the Naval and Marine Corps Reserve. However, Marine C-130 navigators are in short supply in both the Active and Reserve components. Two Marine Corps Reserve C-130 navigators received training in Fiscal Year 1999 to compensate for attrition. Six more Marine Reserve navigators are needed for squadrons to have one navigator for each authorized aircraft. Current Fiscal Year 2000 projections indicate that Marine Reserve C-130 navigator requirements will not be met. The Naval Reserve continues to have shortfalls in C-130 crew chiefs and loadmasters.

The Air National Guard received 173 initial undergraduate pilot training slots in Fiscal Year 1999. While that represents a dramatic increase over the 99 pilot slots received the previous year, it still failed to meet the Air National Guard's short-term requirements resulting from the shortage of Air Force training slots in the mid-1990s, coupled with a disturbing decrease in pilot retention. Current projections indicate that 173 pilot allocations per year will stabilize the Air National Guard's pilot ranks and sustain long-term readiness. On the navigator side, the Air National Guard received 33 navigator slots this year, but is having difficulty filling them due to a lack of applicants. That is largely due to the fact that improved technology is expected to eliminate the requirement for navigators in the future in all but a few specialized weapon systems.

Air National Guard allocations for follow-on training fell short of the pilot requirements for the F-16, KC-135, and C-130. F-16 training especially fell well short of the requirement, which then created a bow-wave of pilots awaiting follow-on training. Shortages are so severe that initiatives are underway to create additional interim and permanent training bases to offset Air Force training capacity shortfalls in the F-16. Follow-on training for KC-135 and C-130 aircraft also fell short of the requirement, though

not as severely as for the F-16. Initiatives are underway to establish follow-on training bases for the KC-135 and C-130 aircraft to offset training capacity shortfalls. The Air National Guard's pilot training requirements can be met only if additional funding is provided to increase follow-on training capacity.

In Fiscal Year 1999, 61 Air Force Reserve members completed Specialized Undergraduate Pilot Training, with 71 projected to attend next year. Four members completed Joint Undergraduate Navigator Training in Fiscal Year 1999, with one more scheduled to attend next year. While an adequate number of pilots are being trained, the number of navigators falls short of the projected requirement. The low number of applicants for joint navigator training can be attributed to ongoing conversions in both KC-135 and C-141 weapons systems that will eventually eliminate the need for navigators.

The Air Force Reserve used 179 non-initial flying training slots in Fiscal Year 1999, which met projected requirements. It has projected 281 non-initial flying training slots in Fiscal Year 2000. Projected funding levels for Reserve flight training programs in Fiscal Year 2001 and beyond should be adequate to meet projected requirements, based on end-strength requirements furnished by Air Force Reserve Command and its units.

Coast Guard aviation has no Reserve billets requiring flight training, and no flight-trained Reserve personnel were assigned. In Fiscal Year 1999, approximately 50 Reserve ground support personnel were assigned to Air Stations to support Active Duty aviation missions. However, projected funding levels will not permit the Reserves to continue providing ground support for Coast Guard aviation. Plans to add aviation personnel to the Coast Guard Reserve are in their infancy. Billets may be added that could result in increased Selected Reserve strength.

Advanced Distributed Learning

Distributed learning, which is also referred to as distance learning, is defined as structured learning that takes place without the physical presence of the instructor. It may draw upon resources that are physically distant from the location where learning is taking place. Distributed learning is enhanced with technology, and may include any correspondence course

Table 4-1
OVERSEAS TRAINING
(Units/Personnel)

Component	FY 1997		FY 1998		FY 1999	
	Cells/Units	Personnel	Cells/Units	Personnel	Cells/Units	Personnel
Army National Guard	1,603	22,626	1,314	22,706	1,437	32,277
Army Reserve	1,297	13,347	1,262	9,192	1,415	9,022
Naval Reserve	396	15,596	1,685	16,399	1,720	20,942
Marine Corps Reserve	179	5,268	176	3,780	168	4,052
Air National Guard	202	21,660	237	24,760	246	25,864
Air Force Reserve	502	11,874	562	14,354	596	13,350
Coast Guard Reserve	2	120	2	120	2	120
Total	4,181	90,491	4,738	91,311	5,430	95,352

Source: The Reserve components.
Data as of September 30, 1999.

materials, audio/videotapes, CD ROMs, audio/video teletraining, interactive television, and video conferencing. Advanced distributed learning leverages the full power of computer, information, and communication technologies through the use of common standards to provide learning that can be tailored to individual needs and delivered anywhere at any time.

Following the Persian Gulf War in 1991, studies by the General Accounting Office and testimony from the services confirmed that Reserve component units required additional access to training to achieve a greater degree of readiness. In the early 1990s, Congress provided funds for the National Guard to increase training access using distributed learning techniques. These funds were used to build prototype electronic classrooms and learning networks. In June 1998, the Total Force Distributed Learning Action Team was established, featuring Active and Reserve members, Joint Staff, Office of the Secretary of Defense, and Defense agencies. The team's mission is to advise and assist the Secretary on all aspects of distributed learning, so that Defense members have access to high quality and cost-effective education and training.

The Army National Guard's Distributed Learning Program provides functional requirements, courseware development, instructor training, and support services. Its Distributive Training Technology Project/GuardNet XXI provides the only network connecting all 54 states and territories. The project provides 189 Distance Learning classrooms, with the ultimate goal of 400 classrooms, along with an Integrated Information System. The project is designed to improve readiness, enhance command, control, and communications during state emergencies, and to share use of the distributed learning classrooms with local and federal government agencies.

The Army Reserve's long-term goal for distance learning is to provide current, standardized institutional training — and eventually virtual simulations and exercises — to all Army components, other services, and joint and international activities worldwide. The Army Reserve has aligned its program with the Total Army Distance Learning Program, which will eventually provide 861 distance learning classrooms to ensure that 85 percent of the force lives within 50 miles of an electronic classroom by 2006. Under an initiative known as Reserve Education and Learning (REAL), the Army Reserve plans to eventually have a "tiered" distance learning capability at or near every one of the 956 Army Reserve Centers. Evolving technology is ultimately expected to allow delivery of distance learning to every soldier's home, thereby providing greater access to members of the Individual Ready Reserve.

The Naval Reserve is working with the Naval Air Warfare Command Training Systems Division in Orlando, FL, to create an Advanced Distributed Learning Master Plan for the Naval Reserve. This plan will identify Advanced Distributed Learning requirements unique to the Naval Reserve, and provide a plan for inclusion in the Navy's Advanced Distributed Learning program. The intent is not to create a separate distributed learning program for the Reserves, but simply to clearly identify Reserve requirements so that the Navy's program meets the Reserves' needs. The program will eventually serve the entire Naval Reserve Force in all 50 states. However, the initial implementation will focus on the Midwest, where access to Navy training assets is far more limited than in coastal areas.

The Marine Corps Distance Learning Program encompasses all forms of distance learning. A major objective of the program is the implementation of MarineNet, a Marine Corps-wide, distributed intranet, supported by video teletraining. Access to the benefits of distributed learning will be available to all Marines, both Active and Reserve. For Reserve Marines, MarineNet will interface with the Reserve Network, which is already in place nationwide. During Fiscal Year 1999, a Memorandum of Understanding was completed between the National Guard Bureau and

the Marine Corps/Marine Corps Reserve. This agreement will guide future discussions regarding the shared use of the National Guard's Distributive Training Technology Project to improve access to education and training.

The Air National Guard's Distributed Learning program is now in its planning phase, defining and designing unit resources to support a Computer-Based Training program. The Air National Guard is preparing for delivery of Web-based training by the end of Fiscal Year 2000. The Air National Guard's Warrior Network compressed digital satellite system allows 202 Guard sites to receive broadcasts of 34 different topics from any of three uplink sites at the Air National Guard's Professional Education Center in Knoxville, TN; 1st Air Force Headquarters at Tyndall AFB, FL; and the Air National Guard Readiness Center at Andrews AFB, MD. The Army and Air Guard jointly formed a cross-functional Integrated Process Team to combine distance learning technologies and systems wherever possible, to reach the maximum number of National Guardsmen nationwide.

The Air Force Reserve continued to incorporate distance learning courseware as part of its individual training programs in Fiscal Year 1999. Its distance learning programs are integrated into those of the Air Force's training providers such as Air Education and Training Command, the Air Force Institute of Technology, and Air University. To further this integration, the Air Force Reserve is focusing on four main areas: establishing policy and guidance, integrating the use of distance learning, improving the availability of delivery systems, and promoting new and alternative distance learning delivery systems. Among the major concerns being addressed are: providing facilities for distance learning classrooms at Reserve centers; equipment availability at units and Reservists' homes; and pay and compensation for completing distance learning courses at home.

Training Equipment

In Fiscal Year 1999, the Army National Guard fielded a new Close Combat Tactical Trainer in South Carolina to train mounted maneuver forces in the region. The Army National Guard also received 19 M109A5 Howitzer Crew Trainers to support field artillery units across the force, 30 portable 4-lane Engagement Skills Trainers to support dismounted marksmanship, and 24 personal computer Janus suites to train battle staff operations. The Army National Guard contracted for 24 Abrams, Full-Crew, Interactive Skills Trainers XXI (A-FIST XXI) simulator prototype upgrades. The A-FIST XXI has the identical gunnery matrix as the Army's upgraded Conduct of Fire Trainer gunnery trainer. To train the maneuver force, the Army National Guard contracted for a prototype Re-host and Upgrade of SIMNET, scheduled to be delivered in 2000. Finally, the Army National Guard fielded the new version Janus 6.3.4 for training battle staffs in personnel, intelligence, operations and logistics.

In Fiscal Year 1999, the Army Reserve purchased the Beamhit Laser Marksmanship Training Systems. These systems are being evaluated for use as a basic marksmanship instruction and sustainment training device throughout the Army Reserve. The Beamhit is also being evaluated in conjunction with the Army Infantry School for use in basic rifle marksmanship instruction during initial entry training. All soldiers deploying to a hostile fire area must re-qualify prior to deployment. Basic marksmanship skills tend to deteriorate over time, so that without weapons simulators, an extraordinary amount of training time is required to prepare soldiers for deployment.

The Naval Reserve training equipment upgrades in Fiscal Year 1999 included: an additional Wet Damage Control Trainer, 12 embedded radar trainers, six littoral surveillance systems, and a video teleconferencing facility in Honolulu. Two aviation

trainers were transferred to the Naval Reserve: first, a P-3C Update III Sensor Station/Tactical Coordinator simulator was transferred to the Naval Air Reserve ASW Training Center in Willow Grove, PA; second, a P-3C Update II.5 Team Tactical Training was sent to NAS Jacksonville, FL. The HH-60H Night Vision Trainer and P-3C Tactical Team Trainer; Block Modification Upgrade Program simulators are included in the Defense budget for the year 2002.

The Marine Corps Reserve received software and hardware upgrades for the Individual Simulated Marksmanship Training devices during Fiscal Year 1999. Additionally, Marine Air Group 42, Detachment C, received an AH-1W simulator trainer at NAS Belle Chase, LA. In Fiscal Year 2000 and beyond, the Marine Corps Reserve plans to replace the aging CT-39 at Belle Chase with two CU-53s. It also plans to buy two KC-130 simulators, one for Marine Air Group 41 at Joint Reserve Base Ft. Worth, TX, and one for Marine Air Group 49, Detachment B, at Ft. Stewart, NY.

The Air National Guard completed installation of a video teleconferencing system for approximately 80 Air National Guard flying and support units during Fiscal Year 1999. Medical squadrons bought 88 Complete Care Mannequins, so each squadron will have a mannequin to use for medical training. For Fiscal Year 2000, the Air National Guard plans to install a store-and-forward training computer server at each Guard location. The server will provide up-to-date training to the users' desktop computer or an electronic classroom environment. The Air National Guard also plans to complete the installation of video teleconferencing systems to all remaining Guard sites.

In Fiscal Year 1999, the Air Force Reserve sent two A-10 Multi-task Trainers to Barksdale AFB, LA. The A-10 trainer was developed to provide primary simulation training on basic cockpit and emergency procedures. In Fiscal Year 2000, the Air Force Reserve will purchase a C-5 simulator for Westover Air Reserve Base, MA. This simulator's program has a unique visual capacity to train both air refueling and conventional air-land mission procedures. C-141 weapon system trainers will be moved to the Reserve over the next two years as they are upgraded to the C model configuration and the aircraft is retired from the Active forces. Additionally, the weapon system trainer and initial training for the C-130J aircraft will be located at Keesler AFB, MS.

The Coast Guard Reserve funded small arms simulation training systems for four Port Security Units during Fiscal Year 1999.

Training Challenges

Guard and Reserve commanders face the constant challenge of balancing the need for individual training with that of preparing units to meet their wartime missions. Moreover, the growing use of Reserve components to relieve Active Duty forces has placed an additional strain on limited Reserve training resources. Local shortages of simulators and other training equipment mean that individuals must travel off-site for needed training, with a resulting loss of training time and increased travel and TDY costs. Indeed, many Guardsmen and Reservists may be unable to complete individual training requirements because of insufficient course quotas or lengthy course requirements. Each of these issues not only contributes to a decline in training readiness, but may also affect morale and retention.

Army National Guard Training Challenges

Recent changes in the Army National Guard's gunnery requirements, as well as future force structure changes, require action today to support future training needs. The major impacts of shortages in training devices are the loss of time and required training. The Army National Guard's 139 Abrams trainers are rendered less effective by changes to the Army gunnery training strategy, and must be

upgraded to the A-FIST XXI standard. The A-FIST XXI is a low cost, computer-based, virtual gunnery trainer for the M1A1 main battle tank. Additionally, the Army National Guard will field 10 new Bradley battalions in the next four years. The result will be a critical shortage of Bradley Conduct of Fire Trainers to support required Bradley gunnery. The best solution is to purchase the FIST-Bradley XXI for use on the Bradley Fighting Vehicle. Four prototypes were built during Fiscal Year 1999.

The Army's Close Combat Tactical Trainer is the premier platoon maneuver training system. However, there are far too few trainers to meet requirements. Even if the Army National Guard received its projected 12 mobile platoon trainers, and fully used local Active trainers, one-third of its mounted combat force would still be without virtual platoon maneuver support.

Army Reserve Training Challenges

Shortages of qualified instructors in The Army School System battalions reduce the number of Army Reserve soldiers who can be trained in new career specialties. For instance, some specialties require lengthy resident training, which most Reserve soldiers cannot afford. As a result, alternative training methods are needed, particularly in technical specialties. A vigorous, well-monitored program is needed for validating civilian skills and on-the-job training, as well as increased emphasis on distance learning course development.

A majority of the Army's Combat Service Support force structure is in the Army Reserve, so it is vital to have logistics simulations to train those forces. However, there is a critical shortfall in funds required to sustain the Combat Service Support/Training Simulation System. Weapons simulators must be available at all Army Reserve centers, configured for the types of firearms authorized at the center.

Naval Reserve Training Challenges

The top challenge for the Naval Reserve is increasing attendance by Reservists at Active Duty courses. Active commands and program sponsors must provide realistic and attainable training requirements to the Reserves for formal schooling. Today's sailors respond very effectively to computerized training. The Commander of Naval Education and Training and Fleet school-houses are accelerating development of computer-based training courses, which requires that all Naval Reserve Activities be linked to distance learning systems. Shortages in Reserve simulator facilities force Reserve sailors to travel to fleet sites to train on equipment, resulting in both a loss of training time and excessive per diem costs.

Marine Corps Reserve Training Challenges

In general, Marine Corps Reserve funding is adequate for school quotas for prior-service Marines who join the Reserves. However, the challenge involves both the length of formal school courses and the time of year they are offered. The Marine Corps Reserve has been developing alternative specialty qualification programs using combinations of a two-week course during Annual Training, Mobile Training Teams during drill weekends, and monitored on-the-job training. Another challenge is how to pay for sending a Reserve rotary wing aviator to a training squadron for refresher or conversion training, at a cost of roughly $50,000, including per diem and travel. Home Site Training is the only economical solution to Refresher training requirements for the Reserve's population of experienced aviators.

Reserve aviation assets have been steadily falling behind the Active force in both capability and survivability. The most critical training equipment shortfalls in the Marine Corps Reserve include the CH-53E flight simulator, CH-46 flight simulator, and the Aviation Maintenance Training Continuum system. These shortages have degraded both

training and readiness, as well as the Reserves' ability to integrate with the Active force.

Air National Guard Training Challenges

The Air National Guard has continually been challenged to fill training quotas. This has been due in part to the difficulty of fitting available courses into civilian job schedules. In addition, the Air National Guard has suffered from a lack of travel funds. This has forced the Air National Guard to turn to other sources of training to meet its needs. The limited availability of video teleconferencing systems has placed a heavy burden on the Air National Guard's Warrior Network. The Air National Guard must compete with other services for air time on the satellite network, which severely undermines the dependability of this training system.

Air National Guard pilot training quotas were far short of the total requirement in Fiscal 1999. Another problem involves training for crews of the C-141 aircraft. Active Duty C-141s are being retired in the next few years, with a corresponding decrease in training availability. However, such training remains a requirement for the Reserves, whose C-141s will continue flying for several more years. Both the Air National Guard and Air Force Reserve have made a concerted effort to consolidate C-141 training at Wright-Patterson AFB, Ohio. Immediate funding is urgently needed for an F-15 flight simulator at Kingsley Field, Oregon. The continuing decline in the number of Active component medical facilities significantly reduces the training opportunities necessary for Air National Guard medical personnel to develop and maintain critical skills. Air National Guard medical squadrons have a significant shortfall in medical training equipment.

Air Force Reserve Training Challenges

The Air Force Reserve faces a significant shortfall in C-130J training equipment. This new aircraft is being procured with no air crew or maintenance-training systems included in the initial aircraft buy. The J model is a significantly different airplane from earlier models, and requires a new training system to meet the qualification and currency requirements. As a result, the training of initial maintenance cadre and aircrews is taking place on the aircraft instead of on training devices. This is not only a very costly and inefficient way to train personnel, but also diverts aircraft assets from operational missions. The C-130J program office has begun the process of buying the necessary C-130J training devices and courseware. However, to completely correct this shortfall, future program funding must include a fully operational Field Training Unit.

Coast Guard Reserve Training Challenges

All Coast Guard training for members of both the Active and Reserve components falls within the same organizational entity, thus eliminating the problem of differing qualification standards. The Coast Guard's top priority is to adapt all training courses to meet Reservists' needs, especially their inability to spend lengthy training periods away from their civilian employers.



Equipment 5

"If America is to retain the ability to protect its interests into the 21st Century, we owe it to our people to provide them with the best tools possible to do the job."

General Henry H. Shelton
Chairman of the Joint Chiefs of Staff



Introduction

Our national military strategy is based on the ability to project U.S. military forces globally and to sustain operational tempo in the theater upon deployment. A crucial element of this strategy is the increased reliance upon the Reserve components. They are key to fielding a fighting force capable of supporting multiple missions, from general war to peacekeeping and humanitarian operations. This strategy also requires that the forces be ready to go at a moment's notice.

Department of Defense policy requires that equipment be provided to units according to their planned wartime mission, regardless of their component. However, because resources are limited, the most modern equipment is usually provided to units that would deploy first in a crisis. Units deploying later generally must rely on older equipment, or obtain equipment from non-deploying units. The equipment gap between early and later deploying units may lead to problems with equipment compatibility and sustainability.

Typically, late deployers for an overseas warfighting mission are early deployers for peacetime engagements, such as peacekeeping or responding to natural disasters. Equipment requirements for warfighting missions may differ considerably from those of peacekeeping or natural disaster response. Nevertheless, with the growing use of Reserve assets to support such peacetime engagements, it is important that these units should be equipped to the same degree as traditional "first-to-fight" units.

The Reserve components are currently equipped to meet the mobilization requirements of the national military strategy. However, significant equipment incompatibilities exist between the Active and Reserve forces. The Department of Defense plans to spend nearly $6.6 billion for Reserve component equipment between 1999 and 2002 to address the issue of Reserve equipment shortages and incompatibilities.

In addition, by 2002 the Active forces plan to transfer $2.67 billion worth of equipment to the Reserve components, a process known as "cascading." However, during that same time, the Reserves will withdraw nearly $3.93 billion in aging or obsolete equipment from its inventory.

Service Equipment Policies

The Reserve components have relied on the National Guard and Reserve Equipment Appropriation (NGREA) as a funding lifeline to enhance Reserve component mission requirements. Several years ago, the Department of Defense reiterated its policy that parent services were solely responsible for funding the equipment needs of their Reserve components, thus eliminating the need for Congress to add funding outside the formal budget process to support Guard and Reserve equipment needs. Since 1997, NGREA funding has diminished significantly, and this decline is expected to continue.

However, the reality of implementing this initiative has proven to be far more difficult than expected. Top line budget constraints mean that the Active forces are hard-pressed to find sufficient funding for their own equipment needs, let alone those of the Reserve components. Therefore, elimination of this congressional equipment appropriation without a corresponding increase in parent service support severely hampers Reserve component upgrades, training, and modernization.

The goal of the Army Equipping Policy is to produce modern, fully equipped forces capable of deploying as components of a unified command or joint task force. The Army's policy uses a two-step approach to balance total Army readiness against the needs of early deploying units. First,

units must have sufficient equipment to meet minimum readiness standards. Second, the Army fills unit equipment requirements according to priorities set by the Department of the Army Master Priority List.

The Army maintains a series of organizational designs to achieve operational compatibility between different types and levels of units. Every effort is made to equip and modernize the forces so that they remain an integrated team. Because of funding shortfalls, incremental improvements are based on the "first to fight" principle, so that forces that will see combat first are given priority and receive the most modern equipment.

The National Guard and Reserve Equipment Appropriation (NGREA) has been successfully used to reduce equipment shortages in high-priority units. Recent declines in NGREA funding have required the Army to program additional procurement dollars for the Reserve components. NGREA funding is used by the Army Guard to fund items peculiar to the Army Guard, or which are not included in the normal defense budget process. Increased procurement funding remains instrumental in funding equipment to improve unit readiness. NGREA has been a tremendous asset in providing the flexibility to modernize Guard and Reserve equipment, and as a result has helped improve equipment readiness rates.

Equipping the Naval Reserve represents an essential element in maintaining an effective and modern warfighting force. Naval Reserve units will be equipped to accomplish all assigned missions and will have an equipment distribution program that is balanced, sustainable, and responsive to mission requirements. New and combat-serviceable equipment is distributed to units scheduled to deploy first.

The Naval Reserve normally acquires equipment in one of two ways. The primary source is the cascading of equipment assets from the Active force to the Reserves. Second, to procure new equipment, the Naval Reserve relies heavily on Navy procurement, the National Guard and Reserve Equipment Appropriation, and other congressional funding add-ons.

The Marine Corps Systems Command programs for all equipment requirements, regardless of whether it will be fielded with the Active force or the Reserves. Occasionally, an Approved Acquisition Objective cannot be completed within a single fiscal year. This may occur because of funding shortages, or because the contractor cannot produce enough of the items in time. As a result, the service is unable to provide equipment to all units at once. In those cases, equipment is generally fielded to one unit at a time, as it becomes available. Funding shortfalls for the Marine Corps Reserve are currently addressed by Marine Corps Systems Command via the normal defense budgeting process. In the past the Marine Corps Reserve has received additional funding through the National Guard and Reserve Equipment Appropriation.

The Air Force uses a centralized logistics system to support its equipment. This system determines requirements and distributes equipment without distinction to component, provided the mission priority assigned is the same. While Air Combat Command attempts to follow the "first-to-fight" policy, it is unable to maintain this as standard practice. In order for all Total Force concepts to be put into practice, the Air National Guard should receive new equipment simultaneous with the Active component. Budget limitations have created a disparity between Active and Reserve component funding. Reserve component forces are usually included in the original budget proposals, but as budget cuts occur, the Reserve component forces often are cut from the program. This forces Reserve units scheduled for deployment to "share" equipment, while each Active unit is fully equipped.

The Air Force has implemented the Expeditionary Aerospace Force concept in an effort to stabilize mission tasking for Air Force warfighters. However, this concept presents a challenge for Reserve components, since their overall operations tempo will increase. It will also require an eventual funding increase to modernize equipment and ensure a smooth integration with the Active Duty Air Force.

The Coast Guard is a fully integrated force. Both Active and Reserve components are equipped at the same rate through a single supply chain-of-command.

Major Equipment Acquisition and Modernization

The readiness levels of the Reserve components depend on modern equipment being available. Adequate funding levels for Guard and Reserve equipment are becoming increasingly critical. Reserve components are being called on to perform a greater share of day-to-day missions as well as to relieve the high operational tempo for Active Duty forces. Compatible equipment is essential to reduce logistics costs and to enable Active and Reserve units to train together. The equipment readiness goal is to ensure that the Reserve components have compatible equipment to enable mission accomplishment side-by-side with Active forces and coalition partners. Table 5-1 shows the value of available equipment versus wartime requirements for each Reserve component.

The Army National Guard received several pieces of major equipment in Fiscal Year 1999. Although the Army National Guard is not yet fully equipped, the increased spending levels demonstrate the Army's determination to address equipment shortages and incompatibilities. The Department of the Army funded and delivered the following items: 17 UH-60A Blackhawk helicopters; 6 Multiple-Launch Rocket Systems; tactical vehicles, including 153 heavy equipment transporter systems, 305 line haul tractor trucks, 70 bulkhaul trucks, 50 high mobility trailers, 96 demountable cargo beds, and 48 palletized load system trucks.

Communications and electronics equipment included 5,000 single-channel airborne radio systems, 110 advanced field artillery tactical data systems, 126 artillery muzzle velocity systems, and a Reserve component automation system. Other equipment included 264 light smoke vehicles, 394 generator sets, 394 floodlight sets, 13 20- ton dump trucks, and 5 hydraulic excavators. Weapons and tracked combat vehicles included 1,525 machine guns, 522 grenade launchers, and 2,047 tracked combat vehicle weapons.

In the past, National Guard and Reserve Equipment funding has been used to purchase essential items that directly affect unit readiness. For example, NGREA equipment funding helped fill shortages in high-priority Army Guard units, such as the enhanced Separate Brigades, and light and medium truck companies. It also provided simulators and trainers for combat and combat support weapons systems, including Armor Fully Integrated System Trainer, Engagement Skills Trainer, and other system training devices.

Army Reserve equipment deliveries from Active Army units continued in the sequence set by the Department of the Army Master Priority List. While this helps resolve some compatibility issues, low-priority units still do not receive the equipment they need to be compatible with Active units. The Army procurement budget provided the following equipment during Fiscal Year 1999: 10 conveyors, 12 armored vehicle launched bridges, 12 volcano mine dispensers, 1,470 single-channel airborne radios, 11 generators, 24 smoke generators, 3,026 squad automatic weapons, 24,637 M40 protective masks and 630 M42 protective masks, 19 palletized load system trailers, 32 M41 PATS (Protective Assessment Test System for M40 gas masks), 57 dump trucks, 31 wheel-mounted cranes, 288 modern burn units, and 11 shower units.

Table 5-1
MAJOR EQUIPMENT ON-HAND
(Dollars in Millions)

(On-hand quantities include authorized substitute equipment as appropriate.)

Component	Year	Wartime Requirement	On-Hand	Percent On-Hand vs. Required
Army National Guard	FY 2000	44,968	38,672	86%
	FY 1999	45,051	41,535	92%
	FY 1998	41,472	33,779	81%
	FY 1997	37,800	35,900	95%
Army Reserve	FY 2000	7,814	6,641	85%
	FY 1999	7,669	6,423	84%
	FY 1998	7,669	5,729	75%
	FY 1997	8,300	6,400	77%
Naval Reserve	FY 2000	17,207	16,603	96%
	FY 1999	18,546	18,230	98%
	FY 1998	17,735	17,201	97%
	FY 1997	23,100	22,400	97%
Marine Corps Reserve	FY 2000	6,038	5,978	99%
	FY 1999	5,900	5,604	95%
	FY 1998	5,497	5,354	97%
	FY 1997	5,000	4,800	96%
Air National Guard	FY 2000	39,994	39,732	99%
	FY 1999	37,000	37,000	100%
	FY 1998	33,131	33,698	102%
	FY 1997	34,200	33,700	99%
Air Force Reserve	FY 2000	15,791	15,633	99%
	FY 1999	14,932	14,914	100%
	FY 1998	13,244	13,356	101%
	FY 1997	13,800	13,700	99%
Total	FY 2000	131,812	123,259	94%
	FY 1999	129,098	123,706	96%
	FY 1998	118,748	109,117	92%
	FY 1997	122,200	116,900	96%

Sources: FY 1998 Report of Reserve Policy Board and FY 2001 National Guard and Reserve Equipment Report.

The Army Reserve used Fiscal Year 1999 equipment funds to purchase equipment to support the Army's modernization plans. For example, common bridge transporter conversion kits will modernize its new multi-role bridge companies and 69 glider kits will update older truck tractors. The Reserve equipment appropriation provides the Army Reserve with the flexibility needed to obtain critical combat support equipment, but parent service

funding levels still fall short of essential equipment requirements.

The Naval Reserve's modernization efforts were assisted by funding additions in Fiscal Year 1999 that enabled the purchase a CH-60 helicopter, fast frigate guided missile upgrade, mobile inshore undersea warfare system improvements, and a littoral (coastal) surveillance system. These additions to the Navy's equipment accounts have allowed the Naval Reserve to maintain a satisfactory equipment modernization program despite a rapid decline in Reserve equipment funding.

Funds needed for day-to-day operations and readiness are forced to compete with the resources required for modernization. As a result of such funding constraints, the Navy is facing continued shortfalls in the modernization arena. In general, the Navy's Total Force Policy focuses on funding Reserve requirements by giving preference to compatibility and maintainability while tailoring modernization to its highest priority missions.

The National Guard and Reserve Equipment Appropriation has helped the Naval Reserve purchase new equipment and modernize its forces. Until recently this appropriation was a major source of the Naval Reserve's funding for new equipment. In Fiscal Year 1999 the Naval Reserve received $60 million in equipment funding, which was used to purchase a C-40A transport aircraft to replace the Navy's aging C-9 aircraft. The funds also supported the continued modernization of F/A-18A aircraft. Also purchased were vehicles, communications and support equipment for Naval Reserve expeditionary forces. Although the NGREA equipment appropriation has been steadily declining in recent years, eliminating it altogether would have a significant readiness impact unless there was a corresponding increase in funding from the parent service.

The Marine Corps procurement budget provided delivery to the United States Marine Corps Reserve the following items in Fiscal Year 1999: 12 Javelin weapon systems, 28 tactical data networks, 310 data automated communication terminals; 136 HUMMWV A2s, and 2 tactical air operation modules.

The Marine Corps Reserve used Fiscal Year 1999 Reserve equipment appropriation funds to modernize its forces. Engineer Change Proposal No. 583 will enable the F/A-18 "A" model aircraft to have the same warfighting capabilities as the "C" models. This upgrade is programmed as a multi-year program; however, the current funding profile over the Future Years Defense Plan is not sufficient to meet funding requirements. In addition, there are serious concerns with the decrease in the National Guard and Reserve Equipment Appropriation unless there is a corresponding increase in parent service support. Purchase of common end user computer equipment purchased will allow the Marine Corps Reserve to provide support to Reservists in 191 locations nationwide.

The Air National Guard used its Fiscal Year 1999 National Guard and Reserve Equipment Appropriation funds to purchase a C-130J cargo aircraft, considered vital to modernizing its tactical airlift capability, and to purchase various combat upgrades to the F-16, F-15, A-10 and C-130 aircraft.

The Air Force Reserve used its equipment funding to purchase top priority items for command aircraft and equipment. Fiscal Year 1999 purchases included a SATCOM ground station, F-16 precision attack targeting system, A-10 situation awareness data link, life support equipment, and night vision devices.

During Fiscal Year 1999, the United States Coast Guard Reserve completed standardization of its inventory of 44 transportable port security boats, including 33 new boats and 11 existing hulls. All equipment and electronics on the boats were upgraded with the latest technology. Other major

equipment that was modernized included vehicles, generators, and command and control equipment. Other equipment purchases included deployable medical equipment, electronic test equipment and tools, extreme cold weather gear, field kitchens for six port security units, personnel chemical and biological protective equipment for three port security units, personal safety equipment, engineering tools, weapons, machine gun mounts, and spare parts.

Although combatant commanders have indicated that the requirement for Coast Guard and harbor defense is greater than the currently authorized capabilities, no funds have been identified to increase the number of Port Security Units or restore base funding to compensate operating bases for these units. The Coast Guard is responsible for all equipment; as a result, its Reserve component received no equipment funds in Fiscal Year 1999.

Table 5-2 shows Reserve equipment accounts for Fiscal Years 1996 through 1999 and projected funding levels for Fiscal Year 2000. Figure 5-1 shows the type of equipment purchased by each of the Reserve components using these equipment funds.

Major Equipment Transfers

Only a small amount of equipment was transferred from Active units to the Reserves during Fiscal Year 1999. The Naval Reserve received two mine-hunter ships and eight F/A 18 aircraft. The primary source of equipment for lower-priority Army National Guard units will continue to be the cascading of equipment from Active Duty Army units as their equipment is modernized. There is currently a shortage of Operation and Maintenance (O&M) funds in Active accounts. These funds are needed to bring redistributed equipment up to required maintenance standards before it is transferred to the Reserves. O&M funds are also needed by the Reserve components to extend functional life and upgrade equipment. Additionally, O&M funds are needed to pay transfer transportation costs and buy associated support equipment. Figure 5-2 lists the major equipment items transferred from the Active to the Reserve components in Fiscal Year 1999.

Equipment Modification and Conversion Programs

The Army National Guard operates several tactical wheeled vehicle sustainment repair

Table 5-2
NATIONAL GUARD AND RESERVE EQUIPMENT APPROPRIATIONS
(Dollars in Millions)

Component	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000
Army National Guard	110.0	100.8	68.8	20.0	29.8
Army Reserve	90.0	113.7	73.7	20.0	29.8
Naval Reserve	40.0	199.7	78.7	60.0	19.9
Marine Corps Reserve	100.0	102.8	73.7	20.0	19.9
Air National Guard	271.0	224.3	302.9	212.0	29.8
Air Force Reserve	176.0	39.6	49.2	20.0	19.9
Total	787.0	780.9	647.0	352.0	149.1

Sources: USD Comptroller and the Reserve components.
Data as of February 2000.

Figure 5-1
MAJOR EQUIPMENT ITEMS PURCHASED WITH FY 1999 NGREA FUNDS

Army National Guard
- HEMITT Tankers, M978
- SINGARS Radios
- AFIST Crew Gunnery Trainer
- 22 ½ T Semi-trailer, M871
- AEROMED Hoist
- T-801 Engine Upgrade, UH-1

Army Reserve
- HEMTT Commo Bridge Transporter
- M915 Truck Tractor ESP
- AN/PVS 7D Night Vision Goggles
- HMMWV Contact Maintenance Truck

Naval Reserve
- C-40A Aircraft
- F/A-18A Upgrades, ECP-560
- Expeditionary Warfare Equip
- Navy Coastal Warfare Equip
- P-3C Update III Kits

Marine Corps Reserve
- F/A-18A ECP 583
- Common End User Computers

Air National Guard
- C-130J Aircraft
- F-16 PATS
- F-15A/B Fighter Data Link
- Night Vision Imaging Systems, F-15/F-16
- A-10 SADL

Air Force Reserve
- WC-130J SATCOM Ground Station
- F-16 PATS
- A-10 SADL
- Aircrew Life Support Equipment
- C-130 Night Vision Cockpit
- F-16 LGB Support Equip

Source: FY 2001 National Guard & Reserve Equipment Report.

sites. In Fiscal Year 1999 the Texas site converted 350 HMMWV M1037 to M998, and the Maine site converted 120 HMMWV M996 to M998. At the depot level, the Army National Guard delayed two programs due to lack of funding: the M9 Armored Combat

Figure 5-2
MAJOR EQUIPMENT TRANSFERRED IN FY 1999 FROM ACTIVE TO RESERVE COMPONENT

Army National Guard
- M16A2 Rifles
- Carrier, Smoke Generator
- Truck, Fork Lift, 4K
- Tractor, Full Tracked, Low Speed

Army Reserve
- Generator Set, 10KW
- Generator Power Plant, 60KW, TQG
- SINCGARS Radios
- HMMWV

Naval Reserve
- Coastal Mine Hunter (MHC) Ships
- F/A-18A aircraft

Marine Corps Reserve
- None

Air National Guard
- None

Air Force Reserve
- C-130H Airlift Aircraft
- MC-130E Special Operations Aircraft

Source: FY 2001 National Guard & Reserve Equipment Report.

Earthmover and the M60 Armored Vehicle Launched Bridge MWO.

In Fiscal Year 1999 the Army Reserve converted 30 5-ton cargo trucks to 5-ton dropside trucks; 139 generators from gasoline engines to diesel engines; 60 M915 line haul tractors to the M915A4 model line haul tractor; 295 gasoline engine compressors to the diesel engine variation; 180 M1037 HMMWVs (shelter carriers) to M998 (standard HMMWV); refurbished 41 bath and shower units; 27 heavy expanded mobility tactical trucks to common bridge transporters; and 43 M967A1 fuel tankers to M967A1 multi-functional fuel tankers. The Army Reserve also modified nine M101A1 trailers to the M101A2 model, nine M101A2 trailers to M101A3 and 12 Armored Vehicle Launched Bridge MLC 70 upgrades. The M109 shop van conversion was delayed.

In the Naval Reserve, major equipment modifications underway are the F/A-18A avionics upgrade; P-3C upgrades to Update III; upgrade of mobile inshore undersea warfare vans; and radar upgrades to a Reserve guided missile frigate. All Naval Reserve major modifications and upgrades were funded by either the Reserve equipment appropriation or congressional add-ons. The Navy funds lesser upgrades for Reserve aircraft that involve operational safety improvement program modifications. The Navy expects to continue funding all future operational safety requirements for Reserve aircraft.

The Marine Corps Reserve modified 100 generators in Fiscal Year 1999 and purchased 300 more kits to complete the modification. Older generators (10 to 60 kilowatts) are being converted on a replacement basis to tactical quiet generators. The Pulse-Jet Air System modification was completed on the M1A1 vehicles during Fiscal Year 1999. The Marine Corps Reserve plans to modify its road grader with a laser-guided plane leveling system. Night vision devices will be converted to the AN/PVS-7D and the 25-ton crane will be converted from R12 Freon to a newer, oil-based refrigerant.

The Air National Guard (ANG) unit at Kingsley Field, Oregon, continued its conversion from F-16s to F-15s to become an F-15 Formal Training Unit. All F-15 aircraft thus far have come from other Guard units. The San Juan, Puerto Rico, ANG continued its conversion from F-16s to 8 C-130Es from ANG excess due to ongoing C-130J conversions. Baltimore, MD, ANG continued its conversion from C-130Es to eight new C-130J aircraft. They received two new aircraft in 1999, with the remainder to be delivered in Fiscal Year 2000. Also in Fiscal Year 2000, the Harrisburg, PA, ANG unit will receive the first two C-130Js to be converted to EC-130Js over the next three to five years, replacing aging EC-130Es. Quonset Point, RI, ANG will begin converting from C-130Es to C-130J-30s with Fiscal Year 1999 funding. They are projected to receive their first three new aircraft in Fiscal Year 2002.

Six ANG F-16 squadrons began or continued converting from North American Air Defense Command (NORAD) air defense alert missions to become general purpose (air to ground) fighter squadrons, as directed by the 1997 Quadrennial Defense Review. These units are in Fargo, ND; Duluth, MN; Atlantic City, NJ; Houston, TX; Great Falls, MT.; and Burlington, VT. Each unit is being equipped with Electronic Counter-Measures pods received from Active Duty excess.

The McEntire Air National Guard Base, SC, unit is converting to the High Speed Anti-radiation Missile targeting system pods to further increase their general-purpose fighter capability. Two ANG F-16 units, in Richmond, VA, and Selfridge ANGB, MI, have begun converting to Tactical Aerial Reconnaissance Systems, a reconnaissance capability that will be unique to the ANG. Eventually five ANG F-16 units will have this combat capability. Des Moines, IA, has become the third ANG F-16 unit to add medium altitude navigation

and targeting infrared for night pods, but program mission and test equipment shortages still exist.

Modernization of the entire KC-135R air refueling fleet continues. All KC-135 aircraft will receive glass cockpits, allowing reduced flight crew manning and adding flight safety improvements to include traffic alerting and ground proximity warning systems. ANG C-141s at Memphis, TN, and Jackson, MS, along with C-5s at Stewart ANGB, NY, have also begun converting to the enhanced glass cockpits.

An ANG Intelligence Squadron in Reno, NV, has begun receiving new digital ground station equipment for communicating near real-time theater reconnaissance imagery. A Command and Control Squadron was established in Cheyenne, WY, using equipment from the Active Air Force. Eight Air Support Operations Squadrons are being established in ANG units in Washington, North Carolina, Illinois, Louisiana, Idaho, New York, Georgia, and Mississippi.

Air Force Reserve aircraft are normally fully included in all Air Force modification programs. Unfortunately, this policy is under stress due to severe budget cuts in the modification program in recent years. The Air Force and the Air Force Reserve are being forced to decide which aircraft are modified and which are not. Until this year, that has meant scaling back Air Force initiatives and delaying modifications and installations until future years. Few programs have had to be canceled outright, but with Air Force modification lines now facing mounting pressure, the resulting delays are essentially program cancellations.

Despite these obstacles, the Air Force goal remains full mission compatibility. With congressional support, the Air Force Reserve has been able to continue these initiatives: purchasing equipment such as the F-16 precision attack targeting systems; the situational awareness data link for F-16 and A-10 aircraft; electronic warfare management systems for F-16s and A-10s; and the HH-60 aircraft self-protection system. The next initiative is a low-cost advanced color display for the A-10 and F-16 fleet.

The Coast Guard Reserve modified 11 transportable port security boats to match the configuration of the 11 newest boats, including engines and electronics equipment. Messing and berthing equipment for all Port Security Units were standardized, including tents and power generators.

Major Equipment Shortages

All the Reserve components are experiencing some equipment shortages. Figure 5-3 lists equipment shortages for each Reserve component, including both funded and unfunded items. Shortages of modern equipment mean that Reserve components must operate with equipment that may be incompatible with Active forces' equipment. Experience has shown that commanders are reluctant to mobilize units with incompatible equipment for joint operations. Also, Active forces no longer offer training on some of the out-dated equipment systems, so the Reserves are forced to provide their own training. Equipment shortages reduce a unit's ability to train, reducing its readiness and ability to respond to contingencies. Equipment shortages also hurt morale, retention, and recruiting efforts. However, equipment shortages appear likely to continue.

Obsolete or Incompatible Equipment

All the Reserve components have obsolete and incompatible equipment, to varying degrees. Both the Active and Reserve components have programs to solve this problem. Nevertheless, both are hampered by a lack of resources to upgrade or purchase new equipment. Lack of resources also hampers the unit and depot maintenance necessary to maintain incompatible equipment. With the accelerating pace of advances in military technology, Reserve forces with outdated equipment are in danger

Figure 5-3
MAJOR EQUIPMENT SHORTAGES

Army National Guard
- All Terrain Lifter (ATLAS)
- Grader MTZD Heavy
- Truck Utility - HMMWV
- SINCGARS
- Apache AH-64A
- Truck Cargo, HEMTT
- M1A1 Mods
- Bradley Fighting Vehicle
- UH-1 Sustainment
- M9 Ace Combat Earth Mover
- FAASV-Field Artillery Ammo Supply Vehicle
- Tractor Full Tracked Low Speed T9
- Roller Vibratory
- Striker
- Avenger
- Army Data Distribution System
- UH-1 Blackhawk
- Light Medium Tactical Vehicle
- Medium Tactical Vehicle
- Paladin, M109A6
- Multiple Launch Rocket System
- Night Vision Goggles (AN/PVS-7D)
- Generators (3KW)

Army Reserve
- FLTV 2.5-TON TRUCK M1078
- FMTV 5-TON TRUCK, M1088
- High Mobility Medium Wheeled Vehicle (HMMWV)
- Firetruck, HEMTT
- Helicopter CH-47 CHINOOK
- Truck tractor, M915A3
- Night Vision Goggles PVS-7
- Tractor, Yard
- All Terrain Lifter Articulated System (ATLAS) 10K
- Hydraulic Excavator
- RT Container Handler, 53K
- Generator Set, TRL MTD 6OKW
- HMMWV Contact Maint Trk Kits
- Welding Shop, Trailer MTD
- Light Equipment Transport Truck M916A1
- Generator Set Diesel TQG
- Global Positioning System
- Container Assembly Refrigeration 9K BTU
- Smoke Generator, COYOTE, M-60
- Modern Burner Unit
- Roller Vibratory
- HF Radio
- Super HF Triband Terminal, STAR-T

Naval Reserve
- C-40A Transport Aircraft
- COMNAVRESFOR IT Infrastructure
- P-3C AIP/BMUP Kits
- Naval Coastal Warfare/Expeditionary Equipment
- F/A-18A Upgrade (ECP-560R1) and Targeting Pods
- F-5 Avionics Modernization
- Joint Forces Air Component Commander (JFACC) Units
- C-130T Avionics Modernization
- Forward Looking Infrared (FLIR) Kits for SH-60Bs
- HH-60H NVG/FLIR/Hellfire Trainer
- P-3C Synthetic Aperture Radar (SAR)
- P-3C Counter Drug Upgrades
- F-5 Global Positioning System (GPS)
- F-5 Radar Upgrade
- Computer Based Training for Maintenance and Aircrews
- P-3C Operational Flight Trainer (OFT) Upgrade
- P-3C Update III Simulator
- P-3C Trainer Upgrade
- Reserve Aircraft Modernization
- C-9 Upgrades

Marine Corps Reserve
- NBC Equipment
- Common End User Computer Equipment
- Cargo Handler
- M1A1 Dehumidifiers
- Controlled Environment Shelters
- Quadcon
- Pallet Container
- Containerized laundry unit
- Special Application Scoped Rifle
- FA-18A, ECP-583
- CH-53 HNVS
- KC-130T Avionics Upgrades
- AN/AAS-38 FLIR
- AH-1W Night Targeting System
- AN/FCC-100 Multiplexor
- GCP-2A Infrared Target Marker
- Aviation Maintenance Training Continuum
- CH-46 Flight Simulator

continued on page 118

Figure 5-3 continued

Air National Guard

Precision Strike
- F-16 PATS
- HMCS/HOBM Integration
- B-1 Weapons Module
- H/C-130 FLIR

Data Link/Combat ID
- A-10 SADL
- C-130/KC-135 Carry-on SADL
- SADL Gateways/Integration
- F-16 Color Displays
- F-15 AVTR
- B-1 BLOS
- JTIDS for SAOC

24-Hour Operations
- Night Vision Goggles
- C-130H2 NVIS Upgrade
- 8.33 kHz Radios for C-141
- 8.33 kHz Radios for C-22

Enhanced Survivability
- Covert Flare Capability
  - F-15 BOL IR
  - F-16 PIDS Universal
- ALR-69 Antenna Optimizaiton
  - F-16/A-10
  - HC-130 IEWS
  - C-130 Armor
  - HH-60 SPS

Sustainment Supportability
- KC-135E Engine Upgrade
- A-10 Re-engine
  - Structures
  - Engines
- F-16 Block 42 Re-engine
- F-15/F-16 Fleet, 220E Engine Kits

New Acquisitions
- F-16C
- C-130J
- EC-130J
- KC-X Analysis of Alternatives
- C-22 Replacement
- C-38 Aircraft

Air Force Reserve
- HC-130 NCALS
- C-141 8.33 Khz Radio
- F-16 Color Display
- Scope Shield II Tactical Radios
- ALQ-131 1553 Data Bus
- C-130H3 ATS, Engineering Changes
- A-10 ADI Replacement
- HH-60 FLIR upgrade
- A-10 Weather Avoidance System
- HC-130 Radar Replacement
- B-52 Bomb Bay Camera
- F-16 Helmet Mounted Cueing
- Motor Vehicles for MED UTCs
- MC-130E Combat Talon I Radar Replacement
- HH-60 Flight Engineer's Safety Mod
- Precision Locating & ID/ALR-69 (PLAID)
- Intrusion Detection System
- A-10 UTD - Engineering Changes
- Trunked LMR
- Snow Removal Vehicles
- Flightline VSS
- Utility Truck
- Truck Tractors
- C-130 Carry-on SADL
- KC-135 Engine Kits
- C-130J Training Equipment

Coast Guard Reserve
- Port Security Equipment for two Units
  - Special Interest Equipment
  - Non-major Items
- Personal Gear (HDCUs & NCW Groups)

Source: FY 2001 National Guard & Reserve Equipment Report.

of becoming obsolete on the battlefields of tomorrow. It is important that the Reserve components have a long-term financial planning mechanism to systematically provide for improvements and modifications. Figure 5-4 lists obsolete and incompatible equipment in the Reserve components during Fiscal Year 1999.

Automated Logistics Management Systems

Implementing new logistics systems and upgrading existing systems continues throughout the Reserve components. When the Active and Reserve components both operate the

same systems, reliability, maintainability, and compatibility are all increased, while costs are lowered.

At the end of Fiscal Year 1999, 72 percent of the Army National Guard's authorized logistics information management systems were operational, as were 70 percent of those in the Army Reserve. All systems are Standard Army Management Information Systems, which will permit the Army National Guard and Army Reserve to interface with the Active Army. However, the systems are not totally compatible, because of funding shortfalls to train, maintain, and staff the systems full-time.

The Naval Reserve operates two logistics information systems: the Controlled Equipage Inventory System (CEIS) and the Joint Aviation Logistics Information System (JALIS). As of

Figure 5-4
OBSOLETE OR INCOMPATIBLE EQUIPMENT

Army National Guard
- Trucks, 2½ ton
- Trucks, 5 ton
- CUCVs
- M1 Tank
- M2/3 Bradley Fighting Vehicle
- M113 Armored Personnel Carrier
- M105 Howitzer
- Heavy Equipment Truck
- UH-1 Helicopter
- AH-1 Attack Helicopter
- PVS-5 Night Vision Goggles

Army Reserve
- Dolly Sets
- Yard Truck
- Maintenance Contact Truck
- 2½ ton trucks (M-35)
- 25 ton Crane
- 75 ton Asphalt, mixing plant
- Trailers
- 20 Ton dump truck
- 3/5/10 KW Generators
- Floodlight, Trailer mounted
- Boat Cradles
- Medical sets
- Forklift, 4K, RT
- 12 Series Radios
- Washing Plant
- Laundry and Bath units
- Material handling equipment
- Yard truck
- Bridge transporter
- Compactors, Plate/high speed

Naval Reserve
- Older models of F/A-18A aircraft
- P-3C Aircraft
- SH-2G Helicopter
- H-3 Helicopter
- Logistical support equipment
- Communication equipment

Marine Corps Reserve
- F/A-18A w/o ECP 583
- CH-53E w/o HNVS
- KC-130T w/o Avionics Mods
- 2½ & 5 ton Trucks
- Older version HMMWVs
- Engineer Support Items

Air National Guard
- Older F-15 Aircraft
- Older F-16 Aircraft
- Older B-1 Aircraft
- Mobile Approach Control System (MPN-14K)

Air Force Reserve
- Older C-130E Aircraft
- Older KC-135E engines
- Communications and televideo security systems

Source: FY 2001 National Guard & Reserve Equipment Report.

July 1999, JALIS had been updated from older systems and was implemented at all six JALIS sites. The CEIS is used for Reserve Ashore property accountability, but is not compatible with the Active component. The system will be replaced by the Defense Property Accounting System by Fiscal Year 2001.

The Marine Corps Reserve uses the same logistics information systems as the Active component. The Marine Corps has five major on-going programs involving automated logistics information systems. One such program is the Joint Force Requirements Generator, which has been designated to pass Time Phased Force Deployment Data to the Joint Operation Planning and Execution System.

The Air National Guard and Air Force Reserve operate the same logistics automated management system used by the Active component. The system is continually undergoing upgrades that are passed to both the Active and Reserve communities. The Guard Information Analysis Network (Guardian) is a new web-based program currently operational in the Analysis arena. It will eventually encompass the disciplines of supply, depot-level repair, transportation and engines. It is a variant of the Air Force's Multi-Echelon Resource and Logistics Information Network (MERLIN) program that is able to view details down to the unit level. The Air Force Reserve has made the procurement of hardware for the Logistics Network a top priority. Both Air Reserve components also use the Cargo Movement Operations System. This system allows Traffic Management Offices to send specific logistics support items precisely when and where they are needed, and provides real-time cargo delivery status information. Another automated system used by both Active and Reserve force is the on-line Vehicle Interactive Management System, a stand-alone, PC-based system used to manage and maintain vehicle fleets.

The Coast Guard Reserve uses the same logistics information systems as the Active component. During overseas deployments, Coast Guard Port Security Units rely on their supporting Defense Department service to obtain replacement parts and supplies when commercial sources are unavailable.

Depot Maintenance

Depot maintenance is a critical part of the equipment readiness equation. It is used to provide more extensive maintenance on equipment than can be done at the unit level. Depot maintenance facilities also are capable of performing some equipment upgrades, to help modernize outdated equipment. In February 1999, Congress redefined what constitutes depot maintenance work: "Material maintenance or repair requiring the overhaul, upgrading, or rebuilding of parts, assemblies, or sub-assemblies, and the testing and reclamation of equipment as necessary, regardless of the source of funds . . . or the location at which the [work] is performed."

The Army National Guard had succeeded in significantly reducing its backlog of depot maintenance work in recent years. However, this backlog may grow again as the Army implements the congressional redefinition of depot maintenance work. Other issues are the amount of outdated equipment in the Reserve component inventory and the increased demands of maintaining an aging equipment fleet. Some Active component upgrade programs, such as the Abrams tank, do not currently include the Army National Guard.

One source of Army Reserve equipment is cascaded equipment from Active units. However, this equipment tends to be older and in poor condition. Without depot maintenance, it would be virtually impossible for the Army Reserve to bring this aging equipment back to usable condition and maintain it until well into the 21st Century. This balanced program uses Army depots and public and private industrial bases. Some equipment

systems, such as the Army Reserve's tactical wheeled vehicles, are not included in the Active component's depot maintenance backlog. Budget constraints have forced the Army to fund less than the full depot maintenance requirement. The Army Reserve does not have sufficient depot maintenance funding to repair its tactical wheeled vehicle equipment. In some cases, the Reserve components have been forced to use operational funds to provide temporary maintenance solutions, with a subsequent impact on both operations and maintenance. The Army Reserve is presently working closely with Army National Guard in developing a depot-level program for the overall truck fleet.

Congress has shown increasing interest in the Naval Reserve's depot maintenance program. As a result of the increased Fiscal Year 1999 funding level, both airframe and engine processing improved dramatically. Overall, depot maintenance funding is adequate for the Marine Corps Reserve, Air National Guard, and the Air Force Reserve. Nevertheless, unfunded requirements will continue to affect readiness rates, as well as aircraft and engine availability. Table 5-3 lists the unfunded depot maintenance requirements for each of the Reserve components.

Table 5-3
UNFUNDED DEPOT MAINTENANCE REQUIREMENTS
(Dollars in Millions)

Component	FY 1998	FY 1999	FY 2000
Army National Guard	230.0	195.1	40.9
Army Reserve	50.0	43.0	3.4
Naval Reserve	43.2	44.5	28.2
Marine Corps Reserve	1.5	1.2	3.1
Air National Guard	5.3	26.0	29.9
Air Force Reserve	50.2	43.1	26.3
Total	379.4	352.2	136.4

Source: Office of the Assistant Secretary of Defense for Reserve Affairs.
Data as of September 30, 1999.

Organizational Maintenance

The Army National Guard has implemented numerous initiatives to enhance maintenance and reduce maintenance backlogs. The Controlled Humidity Preservation Program evolved from concept to full-scale implementation in Fiscal Year 1998. By storing equipment in environmentally controlled facilities, operational maintenance and services are deferred, thereby reducing the demand on declining maintenance budgets and staff. The Army National Guard also gains efficiencies by consolidating equipment and mechanics at fewer but larger maintenance activities.

Army National Guard local units are using traditional Guardsmen in Direct Support and General Support maintenance units during Inactive Duty Training and Annual Training periods. The cross-training of personnel within maintenance-related career fields allows flexibility in assigning personnel to repair equipment. The maintenance backlogs are primarily due to shortages of funds for spare parts, and a lack of full-time maintenance technicians.

The Army Reserve has implemented several initiatives to reduce their organizational maintenance backlog. These initiatives include using contractors or temporary hires, implementing one-stop maintenance operations, using Army Reserve soldiers to perform Active Duty Special Work and Active Duty for Training, and using Army Reserve Maintenance Units during Inactive Duty Training and Annual Training. In addition, the Army Reserve has detailed personnel to different work sites, or moved work to where personnel are available. These actions have resulted in increased readiness, a smaller maintenance backlog, and better-trained soldiers. Another program being considered for implementation is the Strategic Storage Site/Controlled Humidity Storage concept, planned for implementation in Fiscal Year 2002. Significant reductions in maintenance backlogs are likely to occur, especially if there is an increase in full-time staffing in maintenance facilities.

The Naval Reserve has no major organizational maintenance backlogs at this time and continues to employ preventive methods at the unit level to prevent any backlogs from developing. The Marine Corps Reserve makes extensive use of outsourcing, inter-service support agreements, and memoranda of agreement to help relieve organizational maintenance backlogs at local Reserve sites.

For the Air National Guard, modifications for the C-5 and C-141 aircraft are projected to reduce maintenance backlogs considerably, primarily because of more reliable components and maintenance efficiency. The Air National Guard is also requesting additional mandays to meet mission requirements and reduce aircraft downtime.

The funding outlook for the Air Force Reserve Depot Purchased Equipment Maintenance appears to be adequate. If funding continues at this level, Air Force Reserve Command can effectively manage the Programmed Depot Maintenance requirements into the future.

In Fiscal Year 1999 the Coast Guard Reserve used standardization of equipment for Port Security Units and an Operational Logistic Support Plan to help reduce existing organizational maintenance backlogs. Additionally, the Coast Guard is developing a Memorandum of Understanding to support and equip the Coast Guard Reserve's Port Security Units with spare parts allowances and inventories. This memorandum will convert the Port Security Units' equipment to standard Coast Guard equipment and allow them to be logistically supported and managed through centralized supply points.

Future Challenges

The dynamic global environment requires that military forces have the added flexibility of modern systems. The increasing demands on the military to respond to small-scale contingencies around the world require that Reserve components be capable, ready forces properly equipped to perform their missions. Similarly, the increased employment of Reserve forces in support of operational missions has highlighted the importance of compatible equipment. Therefore, it is essential that the Reserve components continue their modernization.

Current equipment policies need to be reviewed in light of the broader spectrum of future Reserve component missions. Cascading, or redistribution of equipment from the Active component, remains one of the primary methods of providing modern equipment to the Reserve components. The ultimate goal of cascading should be that the Reserve components receive fully operational equipment. However, the current equipping process for the Reserve components lacks both a strategic and long-range plan to ensure that the components are modernized at a pace that matches the objectives outlined in the national military strategy.

Ensuring that the Reserve components are included in the planning, programming and budgeting process is critical to meeting their equipment needs and maintaining unit readiness. While this integration process has improved in recent years, much remains to be done. Both the Active and Reserve components must actively recognize and support equipment resource requirements throughout the planning and budgeting cycles, while providing the Reserve components greater involvement in the requirements identification process. The active participation of the Reserve component chiefs and directors on the Program Review Groups and Defense Resources Board should ensure that Reserve equipment issues are considered during the review process.

Another issue that must be addressed is the Reserve forces' dependence on the National Guard and Reserve Equipment Appropriation to fill shortfalls reflected in the programming

cycle. Equipment shortfalls will severely limit the combat readiness of this essential force. The possible elimination of this appropriation could place a severe burden on Reserve forces. Forced to rely solely on parent services that are also operating under severe budget constraints, the Reserve forces are likely to lose out completely and be unable to meet their readiness requirements. In the long run, it makes budgetary sense to fully fund the Reserve forces. Properly trained and equipped Reserve forces provide a cost-effective alternative to relieve the current operational and personnel strains on the Active forces.



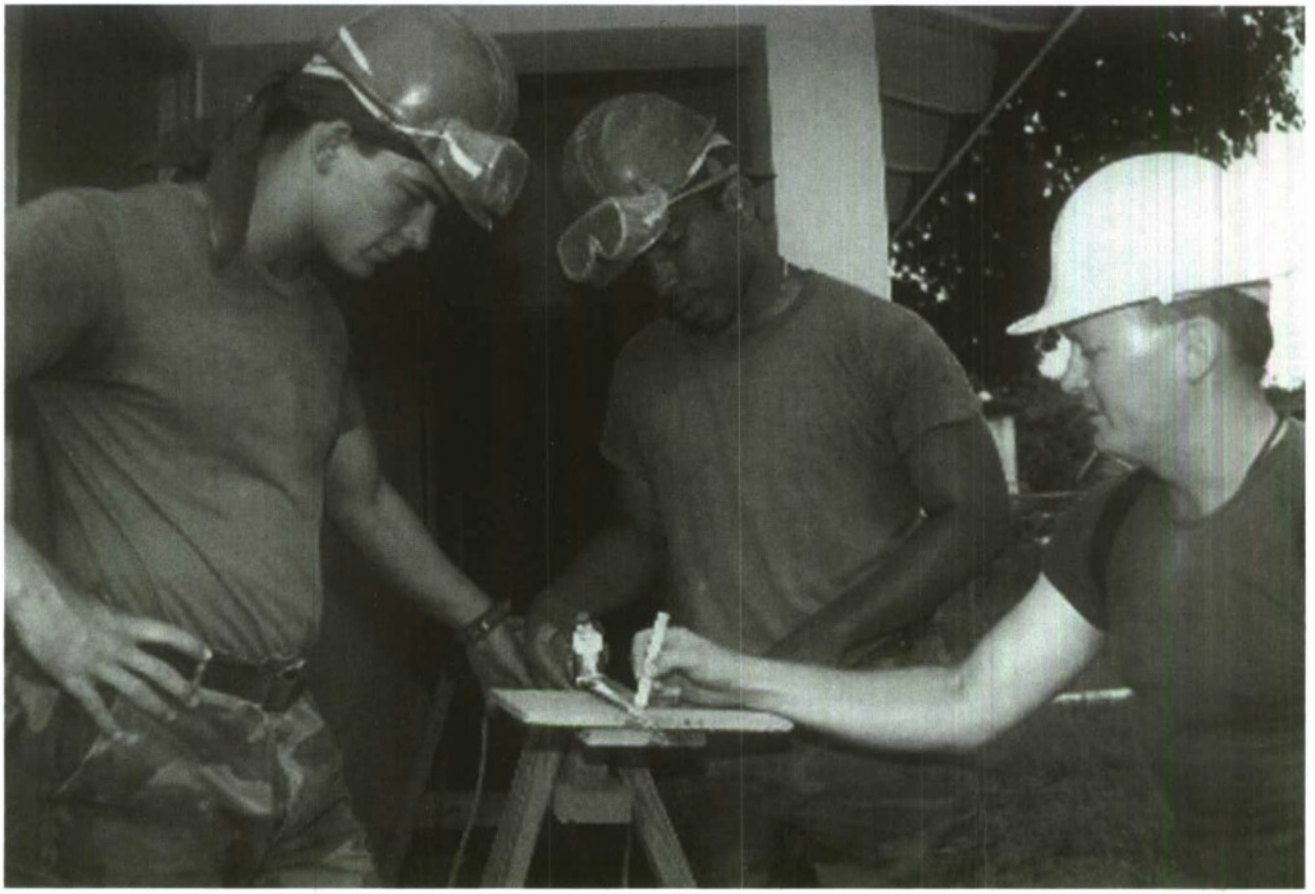

21

Facilities

6

"We have a tradeoff. We can continue to carry all of the excess infrastructure, or we can have the savings and put it into the kind of equipment that will keep us the most powerful nation in the world."

William S. Cohen
Secretary of Defense



Introduction

The Reserve components operate and maintain more than 43,000 buildings, located in more than 4,000 communities. Their replacement value exceeded $50 billion in Fiscal Year 1999. The number of Reserve facilities has grown in recent years, primarily due to new missions and Active Duty base closures. While the inventory has grown, roughly half the facilities need replacement or extensive renovation because of their age or condition. Maintaining this aging inventory remains a continuing challenge for all the Reserve components.

Reserve Component Facilities

Providing quality facilities for the Reserve components is critical to maintaining unit readiness. Indeed, there is a direct correlation between readiness and facilities, particularly in the Reserve components. Because the mission of the Reserve components is to equip, train, and prepare for their wartime missions with the Active forces, it is essential that they have quality facilities that meet their operational needs. Force structure changes, base closures, and new missions inherited from Active forces have all challenged the Reserve components' ability to maintain their facilities and utility systems. The poor condition of unit facilities also makes it more difficult for the Reserve components to recruit and retain quality individuals.

In an environment of severe funding constraints, Reserve components have implemented some innovative solutions to solve their facilities needs. For example, many units have promoted "joint use" facilities that are shared by two or more Reserve components. Each state holds a Joint Service Reserve Component Facility Board at least once a year to evaluate proposed military construction projects for their joint use potential. The mission of these boards is to encourage consolidation of Reserve assets and the maximum use of Reserve facilities by promoting joint use among several services. As a result, there are hundreds of joint use facilities in the Reserve component inventory.

Another initiative is the establishment of so-called "Reserve enclaves." These sites have been established at former Active bases that were closed as a result of past base closure actions. Such enclaves allow Reserve components to use government-owned facilities, which may then enable them to leave costly leased facilities.

Reserve components continue to assess the condition and usefulness of facilities, to consolidate units into the best facilities, and to dispose of excess facilities. Table 6-1 highlights the changes in Reserve component facilities between Fiscal Years 1997 and 1999. The decrease in the average age of structures within some components is a result of base closures or the demolition of aging facilities.

Military Construction

All Reserve components except the Coast Guard submit construction requirements separate from their Active components. Nevertheless, the Reserve components compete with the Active Duty forces for military construction dollars. Military construction funding has not kept pace with requirements, which has strained the ability of both Active and Reserve components to meet construction needs. Military construction projects for the Reserve components represent only a fraction of the total military construction program in the President's Budget. For example, in Fiscal Year 1999, the Active Army had 82 percent of the total military construction requirement, while the Army National Guard had 12 percent and the Army Reserve had 5 percent.

Table 6-1
RESERVE COMPONENT FACILITIES

Component	FY	Total Facility Locations	Number of Separate Communities	Number of Bldgs and Structures	Average Age of Structures	Value of Facilities (in Millions)	Percent Considered Inadequate	Number Jointly Used
Army National Guard	99	3,212	2,725	28,290	35	$ 18,900	75%	162
	98	3,237	2,769	27,393	34	$ 18,000	72%	544
	97	3,237	2,776	27,393	34	$ 17,300	72%	542
Army Reserve	99	1,182	792	7,665	38	$10,514	45%	91
	98	1,150	790	7,600	37	$ 10,600	45%	91
	97	1,315	835	5,535	33	$ 5,900	45%	94
Naval Reserve	99	184	163	1,296	42	$ 2,800	16%	127
	98	186	167	1,471	38	$ 2,900	15%	130
	97	189	169	1,594	37	$ 3,000	16%	130
Marine Corps Reserve	99	188	172	528	39	$ 1,000	25%	105
	98	190	175	541	38	$ 1,000	25%	106
	97	192	177	551	37	$ 1,000	25%	107
Air National Guard	99	182	182	4,925	27	$12,600	50%	23
	98	174	174	4,487	27	$11,100	50%	23
	97	174	174	5,556	36	$11,000	50%	23
Air Force Reserve	99	70	70	1,167	25	$ 11,300	27%	65
	98	70	70	1,161	31	$ 11,100	39%	64
	97	70	70	1,146	31	$ 6,100	39%	64
Totals	99	5,018	4,104	43,871	35[1]	$57,100	63%[1]	573
	98	5,007	4,145	42,653	34[1]	$54,700	61%[1]	958
	97	5,177	4,194	41,775	34[1]	$44,400	62%[1]	960

[1] Weighted Factors
Sources: The Reserve components and Assistant Secretary of Defense for Reserve Affairs.
Data as of September 30, 1998.

Congress has traditionally inserted projects in the military construction line-up. In Fiscal Year 1999, a total of 55 appropriated projects were congressionally added. Even with congressional add-ons, however, the Army National Guard will be able to fund less than half its validated requirements. A military construction program funded at barely 10 percent of its annual recurring requirements has kept the Army National Guard from reducing its construction backlog.

By contrast, the trend has been positive for the Naval and Marine Corps Reserve. Both components have experienced an increase in funding. For example, the Marine Corps Reserve has nearly doubled its Military Construction Naval Reserve funding. It has gotten two projects funded annually at $8 million to $10 million, up from just one project per year funded at the $3 million to $6 million level.

Table 6-2 reflects the military construction funds requested in the President's Budget and the subsequent funds and number of projects appropriated by Congress. The dollars shown in each fiscal year include major construction, planning and design, and unspecified minor construction funds.

Construction Backlog

The backlog of required military construction has been a long-standing problem for all seven Reserve components. The construction backlog

Table 6-2
MILITARY CONSTRUCTION FUNDING
(Dollars in Millions)

	FY 1997		FY 1998		FY 1999		FY 2000	
	Dollars	Projects	Dollars	Projects	Dollars	Projects	Dollars	Projects
Army National Guard								
MILCON Request	8		45		48		16	
MILCON Appropriation	78	16	118	24	142	20	227	21
Army Reserve								
MILCON Request	48		47		71		23	
MILCON Appropriation	55	8	74	8	102	14	111	10
Naval/Marine Corps Reserve								
MILCON Request	11		14		15		5	
MILCON Appropriation	38	12	47	7	32	8	28	6
Air National Guard								
MILCON Request	75		60		35		21	
MILCON Appropriation	190	47	191	36	170	25	264	37
Air Force Reserve								
MILCON Request	52		15		11		12	
MILCON Appropriation	53	16	30	8	34	8	64	11
Totals								
MILCON Request	194		181		180		77	
MILCON Appropriation	414	99	460	83	480	75	694	85

Not applicable to the Coast Guard Reserve.
FY2000 based on PBD748, Incremental Funding of Construction Programs.
Source: Office of the Assistant Secretary of Defense for Reserve Affairs.
Data as of September 30, 1999.

includes all military construction projects that have been validated for future construction by a particular component, but that have not yet been authorized and appropriated by Congress. The backlog for all Reserve components currently totals $6.7 billion, meaning that it would take nearly $7 billion to accomplish all the construction projects already identified.

The total backlog actually declined slightly in Fiscal Year 1999, dropping from $6.9 billion to $6.7 billion. The decrease stems from several factors. Some Reserve military construction projects were postponed, while others were canceled because of force reductions that eliminated the need for the projects.

By far the largest portion of the military construction backlog is made up of current mission requirements, that is, projects needed to replace antiquated facilities, alleviate severe space deficiencies, or upgrade deteriorating pavements and utility systems. Due to the constrained military construction budget, however, some new mission projects have had to be deferred. Future force structure changes and new mission requirements will remain significant factors in determining whether the construction backlog can be further reduced. In fact, significant reductions in the construction backlog seem doubtful in the outyears, given the constrained Reserve component military construction budget projected in the Future Years Defense Program. Table 6-3 shows the Reserve component military construction backlog.

Even a modest reduction of the construction backlog, say 4 percent per year, would require a funding level of more than $1.1 billion per

year. By comparison, the total Reserve component military construction appropriation for Fiscal Year 1999 was only $480 million.

Table 6-3
MILITARY CONSTRUCTION BACKLOG
(Dollars in Billions)

	FY 1998	FY 1999	FY 2000
Army National Guard	2.5	2.5	5.5
Army Reserve	1.9	1.9	2.1
Naval Reserve	0.4	0.4	0.34
Marine Corps Reserve	0.25	0.092	0.263
Air National Guard	1.3	1.2	1.5
Air Force Reserve	0.6	0.602	0.55
Total	6.95	6.694	10.253

Not applicable to the Coast Guard Reserve.
Source: Office of the Asst. Secretary of Defense for Reserve Affairs
Data as of September 30, 1999.

Real Property Maintenance and Repair

Several factors continue to challenge the Reserve components' ability to maintain and repair their existing facilities. These include the age of the facilities, the soaring cost of repairs, and the number of additional facilities acquired through base closure actions. Moreover, critical maintenance has had to be postponed due to lack of funds, thereby accelerating the deterioration of these aging facilities.

The funds needed to maintain and repair existing Reserve facilities come from the services' Operation and Maintenance (O&M) accounts. This means that real property maintenance and repair must compete with other traditional O&M funding priorities, such as base operations, organizational supplies and equipment, environmental concerns, training and travel. Budget thresholds from the military services mean that facility maintenance often rates a lower funding priority than those functions.

Funding for Reserve facility maintenance and repair is projected to decrease in Fiscal Year 2000 from 1999 levels, based on the services' submittals to the president's budget. Real property maintenance funding for Fiscal Year 2000 will average 61 percent of required funding levels. It is expected that migration into Real Property Maintenance accounts will continue to occur as in years past. Inadequate funding levels could hasten the deterioration of Reserve facilities and their supporting infrastructure to the point that Reserve forces would be unable to support missions. Some of the services are trying to increase budgeted amounts for Real Property Maintenance, to reach levels previously published in the Defense Planning Guidance. Table 6-4 shows the level of Real Property Maintenance funding received by the Reserve components.

Table 6-4
REAL PROPERTY MAINTENANCE AND REPAIR FUNDING
(Dollars in Millions)

	FY 1998	FY 1999	FY 2000
Army National Guard	136.4	135.8	192.3
Army Reserve	87.9	88.0	127.9
Naval Reserve	57.7	53.6	45.3
Marine Corps Reserve	6.8	14.6	7.2
Air National Guard	93.9	102.8	111.1
Air Force Reserve	75.8	87.7	60.6
Total	458.5	482.5	544.4

Not applicable to the Coast Guard Reserve.
Source: Office of the Assistant Secretary of Defense for Reserve Affairs.
Data as of September 30, 1999.

Backlog of Maintenance and Repair

The Reserve components' Backlog of Maintenance and Repair totaled more than $1.9 billion in Fiscal Year 1999, and is projected to exceed $2 billion in Fiscal Year 2000. The increase stems from a combination of inflation and maintenance funding shortages

from the previous year. The growing backlog will continue to hamper readiness, training, and the basic quality of life for Reserve component members. They are routinely forced to cope with faulty heating and air conditioning equipment, leaky roofs, and broken doors and windows. In addition, the burden of satisfying new federal requirements, such as those dictating health, safety, and handicapped access, only adds to the escalating facility repair costs.

One of the most significant factors in the growth in the backlog of maintenance and repair is the under-funding of military construction projects to replace older facilities. Newer buildings are cheaper to maintain than older buildings. But by failing to replace aging structures, Reserve units are forced to use maintenance funds to provide short-term solutions. That, in turn, diverts funds that could be used to reduce the maintenance backlog.

In short, improved funding levels for military construction would directly relieve the strain on facility maintenance budgets, and would stem the growing backlog of maintenance and repair. Table 6-5 shows the steady growth in maintenance backlogs from Fiscal Years 1998 to 2000.

The Army National Guard's maintenance and repair backlog for Fiscal Year 2000 is projected to be $494 million, up from $484 million in 1999. The Army Reserve's backlog is expected to climb to $450 million in Fiscal Year 2000, up from $371 million in 1999. Such massive backlogs have resulted in poorly maintained facilities that are both unattractive and inefficient. The poor condition of unit facilities also hampers the ability of the Army Guard and Reserve to recruit and retain quality soldiers.

The Naval Reserve's maintenance backlog is projected to be $160 million for Fiscal Year 2000, up from the $150 million of 1999. The Marine Corps Reserve's backlog will increase by $500,000 in Fiscal Year 2000.

The Air National Guard's projected maintenance backlog is $894 million in Fiscal Year 2000, a dramatic increase of $115 million over the 1999 level. The Air National Guard consistently has the highest maintenance backlog of all the Reserve components. The Air Force recently decided to limit Real Property Maintenance funding to one percent of each command's plant replacement value. That decision, coupled with a service-wide construction funding limit of $700 million, has meant that the Air Force's two Reserve components have been unable to make any significant reductions in their maintenance backlogs.

The Air Force Reserve projected a maintenance backlog of $170.7 million in Fiscal Year 2000. Low levels of maintenance funding by the Air Force will continue to make Air Force Reserve components unable to fully perform day-to-day maintenance. This will not only add to future maintenance backlogs, but will accelerate facility deterioration, resulting in a greater need for facility repairs and replacement.

Table 6-5
BACKLOG OF MAINTENANCE AND REPAIR (BMAR)
(Dollars in Millions)

	FY 1998	FY 1999	FY 2000
Army National Guard	398.2	483.6	493.5
Army Reserve	283.1	371.1	450.3
Naval Reserve	127.8	150.2	159.7
Marine Corps Reserve	7.4	10.2	10.7
Air National Guard	670.3	778.7	893.5
Air Force Reserve	158.2	195.3	170.7
Total	1,645.0	1,989.1	2,178.4

Not applicable to the Coast Guard Reserve.
Source: Office of the Assistant Secretary of Defense for Reserve Affairs.
Data as of September 30, 1999.

Impact of Base Closures

While the pace of base closures is slowing, the Reserve components continue to be significantly affected by the closure of Active Duty bases. For example, the Reserves have been able to dispose of unneeded facilities and relocate to more economically efficient locations. Other advantages include consolidating units with similar missions, sharing of services and facilities with other Reserve components, and partnerships with other services for more economical operation of facilities. Base closures have made it possible for the Reserve components to establish and expand training facilities and maneuver areas at Reserve enclaves, thereby saving on leasing costs by moving to government-owned facilities. Finally, base closures have resulted in an increase in joint operations.

Joint Use Facilities

Joint use facilities appear to be providing cost-saving opportunities for the Reserve components in the design, construction, management, and operation of such facilities.

Army National Guard future joint-use projects include the construction of two Army School System complexes programmed for this year and Fiscal Year 2000, as well as three new Armed Forces Reserve Centers, programmed for Fiscal Years 2000, 2001, and 2003.

The Army Reserve's future joint use initiatives include a Fiscal Year 2000 construction project in Orlando, FL, and a Fiscal Year 2002 construction project in Ft. Carson, CO.

The Naval Reserve has found that joint use of properly designed Reserve centers saves about 10 percent of the total square foot requirement, by eliminating redundant features. Three of the four Naval Air Stations used by the Naval Reserve are Joint Reserve Bases, and the fourth is co-located with an Air Force Reserve Base. Of the 15 Reserve Centers programmed for construction between Fiscal Years 2001 and 2005, nine will be joint-use projects.

For the Marine Corps Reserve, savings from joint use facilities are gained by sharing redundant requirements, such as the drill hall, classrooms, and shower and locker rooms. The Marine Corps Reserve is currently involved in the design and construction of new, joint-use facilities at Gary, IN; Minneapolis, MN; Orlando, FL; Belle Chasse, LA; and Wahpeton, ND.

The Air National Guard has made limited use of joint-use facilities, since the majority of units are located on stand-alone Air National Guard installations. However, the Air National Guard shares training and maintenance space with Active and Reserve components wherever possible. These arrangements have saved operations and maintenance dollars as well as reducing the initial cost of construction for new facilities. Future projects include a medical training facility at McGuire AFB, NJ; a medical training facility at Pease Trade Port, NH; a composite support complex at Klamath Falls, OR; and a dining facility at Portland, OR.

The Air Force Reserve has found that operating from locations where another component operates the airfield results in significant savings. Typically the Air Force Reserve spends more than $1 million annually to operate an airfield, not including facility maintenance and repair. Joint use agreements, which provide for sharing of costs for maintenance and repair, help distribute the Real Property Maintenance funds among several Reserve components.

Future Challenges

The Reserve components face a number of challenges in the facilities arena. In an increasingly tight funding environment, each service will be forced to focus on the most critical requirements and prudently manage programs that most directly support readiness.

The accelerating deterioration of facilities will continue if maintenance funding continues to shrink. These funding shortfalls will require the Reserve components to more rigorously prioritize maintenance requirements so that the most urgently needed projects will receive the limited maintenance and repair funding. Reserve components will also need to make difficult decisions about whether to demolish and replace aging facilities, or to simply continue repairing deteriorating facilities.

The size of both the Active and Reserve forces are likely to continue to decline in the coming years. As a result, joint-use facilities will become increasingly important. The key will be to relocate or consolidate units wherever possible, and to plan for additional joint-use facilities in the future.



Environmental Programs

7

"At the Department of Defense we also believe it is the responsibility of the strong to protect the earth. And while we are best known for defending and protecting our national security, we also do a very good job of defending and protecting wilderness areas, sites of historic and cultural value, and animal habitats."

John J. Hamre
Deputy Secretary of Defense



Introduction

All the Reserve components have strong environmental programs to protect the millions of acres of land entrusted to them. Aggressive environmental goals set by the Reserve components continue to be achieved. Moreover, the Reserves continue to develop initiatives to reduce the impact of increasing legal and regulatory requirements.

Fiscal Year 1999 proved to be a success story for the Reserve components in environmental compliance, pollution prevention, restoration, and conservation. The Reserves reported that only minimal environmental violations were identified, with a total of just $2,600 in fines assessed. Nevertheless, the overall goal remains zero violations and zero fines.

Organization of Reserve Component Environmental Programs

The Reserve components' environmental programs are organized to comply with federal, state and local laws and regulations at all Reserve component installations.

The Army National Guard Environmental Program supports operational readiness by insuring that environmental quality is maintained through sound management practices. The Army Guard Environmental Program is guided by their Environmental Programs Division, which is made up of four branches: Conservation, Compliance, Restoration, and Requirements and Analysis. These four branches provide technical assistance and policy guidance to the Army National Guard organization in each state and territory. State Guard officials manage the environmental programs within their state or territory, overseeing program administration, monitoring compliance with environmental laws and regulations, monitoring restoration projects at sites of contamination, administering cultural and natural resource conservation programs, as well as planning for and responding to any incidents of environmental contamination.

The Army Reserve environmental program is run by the Chief of Army Reserve Engineer's Office, which sets program policies and goals. The Environmental Division Chief carries out these environmental policies and provides technical support and program management to 11 regional support commands, four Army Reserve installations, and two Army Reserve commands. Each of these organizations, in turn, has an environmental manager and staff assigned to its local engineer's office. Their duties include identifying environmental program requirements for their respective areas.

The Naval Reserve environmental program oversees all the Naval Reserve's shore activities. The Commander of the Naval Reserve Force headquarters has an environmental program staff that supports three Naval Air Station Joint Reserve Bases, one regular Naval Air Station, and one Naval Air Reserve facility. The Commander of the Naval Surface Reserve Force and the four Regional Directors of Facilities each have an environmental engineer position providing support to Reserve Centers in their region. Overall, the regional directors are responsible for environmental issues at 70 Naval Reserve Centers and Naval and Marine Corps Reserve Centers.

Headquarters, Marine Forces Reserve in New Orleans, LA, is responsible for 186 Marine Reserve sites in 47 states, the District of Columbia, and the Commonwealth of Puerto Rico. Environmental activities include preparation of National Environmental Policy Act documentation, including Categorical Exclusions, Environmental Assessments, and Environmental Impact Statements.

The Air National Guard's environmental program is based on four pillars: compliance, pollution prevention, conservation, and restoration. The Environmental Compliance

Assessment and Management Program serves as the cornerstone of the Air National Guard compliance program. The Air National Guard Installation Restoration Program is centrally managed from the Air National Guard Readiness Center at Andrews AFB, MD.

Air Force Reserve installations use teams of environmental engineers, scientists, logisticians, and technicians to run the day-to-day environmental programs. Each installation has an Installation Environmental Protection Committee to provide management oversight of environmental program elements. The committee monitors compliance, pollution prevention, and restoration and conservation activities for each Air Force Reserve installation.

The Coast Guard Reserve does not have a separate environmental program. The Active component is responsible for all environmental requirements at Coast Guard facilities where Reservists are stationed.

Environmental Program Goals

Each of the Reserve components provides management oversight of its environmental programs. To assist in this management, each component sets its own goals for environmental compliance. This year, all of the Reserve components met or exceeded their environmental goals in compliance, pollution prevention, restoration, and conservation.

The Army National Guard continues to meet its environmental goals of reducing the release of toxic chemicals by 50 percent and reducing disposal of hazardous waste by 50 percent. These goals have been achieved through an active education and training program, implementation of pollution prevention solutions, and a proactive approach that helps identify potential problems early. The Army National Guard is scheduled to complete all of its Integrated Natural Resource Management Plans and Integrated Cultural Resource Management Plans by November 2001. The Army National Guard is completing baseline inventories of natural and cultural resources through the following four interagency agreements:

- The Natural Resource Conservation Service is completing soil surveys.
- The U.S. Army Corps of Engineers' waterways experiment station is completing wetland inventories.
- The U.S. Army Corps of Engineers (St. Louis District) is completing cultural resource planning level surveys.
- The Army National Guard has a Geographical Information System capacity in each state and territory. A national contract with Utah State University is being used for data development and training support.

The majority of Army Reserve environmental requirements are related to vehicle and equipment maintenance and troop training, along with real estate transactions and master planning. The Army Reserve met its current compliance goals, which include reducing open enforcement actions by 50 percent from 1998 levels, and achieving full compliance with all Clean Water Act-permitted systems. This has dramatically reduced the numbers of violations and fines levied. Pollution prevention programs at many installations have developed recycling and waste minimization programs for antifreeze, solvents, oily rags, paper, plastic, and metal.

The Naval Reserve focused on waste reduction and pollution prevention during Fiscal Year 1999 with its Consolidated Hazardous Materials Reutilization and Inventory Program. The program benefits personnel safety and environmental protection at reduced cost, all without degrading operational readiness.

The Marine Corps Reserve continues to increase environmental training for all its units. For example, 67 personnel were trained at its Hazardous Material Waste Handler Training Course. A Marine Environmental Services

Division has also been established, with a staff of 60 trained Marine and Navy personnel. The division will provide environmental field support to units during operations and exercises. In addition, units are encouraged to use non-hazardous materials whenever possible. For instance, units are seeking alternate solvents for cleaning small arms that will not only clean the weapons but also reduce hazardous waste and cut disposal costs. The Marine Corps Reserve also purchased 16 hazardous material storage shelters for its installations, and conducted 46 environmental compliance evaluations.

The Air National Guard has taken steps to insure that all installations comply with all air pollution rules and regulations, reduce their solid and hazardous waste disposal by at least 50 percent, and complete the clean-up of both high-risk and medium-risk sites.

The Air Force Reserve exceeded the Air Force's 1999 goal of reducing hazardous waste disposal by 50 percent from its 1992 baseline. Air Force Reserve bases reduced their production of solid and hazardous wastes by 70 percent. Initiatives include: reducing the environmental impact of de-icing chemicals; reducing or eliminating contaminated water run-off; and replacing heating fuel oil tanks with natural gas or propane systems whenever possible. Additional improvements have been made in disposing of hazardous pharmacy materials, as well as safeguarding cultural and natural resources, including threatened and endangered species. The Air Force Reserve continues to make improvements to its Hazardous Material Emergency Response Program, Pollution Prevention Strategic Plans, and Environmental Restoration Programs.

Program Funding

Environmental programs generally received adequate funding in Fiscal 1999, with the exception of Army National Guard programs. Funding was sufficient to meet planned program needs, including all mandated compliance requirements. However, significant turmoil erupted in the Army National Guard's environmental program when the Environmental Protection Agency's Region I Administrator imposed unilateral changes to a previously agreed-to analysis and clean-up program underway at the Massachusetts Military Reservation. These changes resulted in an unplanned and unfunded requirement for an additional $6 million in the Army Guard program. This money was reprogrammed from other Army accounts, primarily readiness accounts. All elements of the clean-up program at the Massachusetts Military Reservation remain fluid and difficult to plan and program for in light of the uncertainty of working under negotiated agreements that the EPA can change unilaterally.

Funding allocated to Reserve components environmental programs in Fiscal Year 1999 is provided in Table 7-1.

Legal and Regulatory Impacts

Legal and regulatory environmental requirements affect all the Reserve components, and may adversely impact critical programs. Such impacts can occasionally be remedied by working to amend the regulations, when possible and where appropriate. In other cases, more restrictive environmental laws may require additional funding or significant changes in the way readiness training is conducted to ensure compliance by the Reserve components. For example, environmental legislation that affects Army National Guard training needs to be identified at least four years in advance to insure future funding in the programming phase of the budgeting process. Currently, new environmental requirements identified within the four-year window usually require funds to be reprogrammed from other areas.

Table 7-1
RESERVE COMPONENTS ENVIRONMENTAL SECURITY PROGRAMS
(Dollars in Millions)

Program	Army National Guard	Army Reserve	Naval Reserve	Marine Corps Reserve	Air National Guard	Air Force Reserve
Restoration[1]	33.8	5.1	0.0	0.0	16.0	8.1
Compliance	75.5	21.2	7.5	3.0	13.3	12.9
Pollution Prevention	3.1	2.8	1.9	0.9	3.7	4.9
Conservation	15.8	1.7	0.7	0.0	3.2	2.6
Total	128.2	30.8	10.1	3.9	36.2	28.5

[1]The Naval Reserve Restoration Program is administered by NAVFAC. All restoration funds are distributed from the parent Service appropriations.
Sources: Data provided by Reserve component headquarters' Environmental Offices, and Office of the Assistant Secretary of Defense for Reserve Affairs.
Data as of September 30, 1999.

Environmental requirements often affect the Army Reserve's real estate and facility reduction programs. Property transactions such as congressionally mandated conveyances, General Services Administration disposals, and base closure acquisitions are among the most commonly affected activities. Detailed environmental considerations are imperative to ensure that these actions can be executed promptly and economically. The Army Reserve currently has a number of these actions underway, and will continue to give them due environmental consideration in future years.

Every aspect of the Naval Reserve environmental program is driven by legal and regulatory requirements. While there were no funding shortfalls in the environmental arena during Fiscal Year 1999, some of the funds were not provided until almost the end of the fiscal year. The timing of the funding stream made it a challenge to successfully award necessary environmental contracts.

The Marine Corps Reserve does not have sufficient staff assigned to meet the growing environmental program demands. An environmental manpower study is now being conducted for the Marine Corps Reserve to address this staffing shortfall.

A recent court ruling struck down the Environmental Protection Agency's regulations implementing the Clean Air Act. This ruling and subsequent higher court rulings are being closely monitored, since flying operations could be affected by the allowable levels of particulates. Also, under the current Clean Air Act, propane gas is not reportable for the Air National Guard. If a higher court allows the changes in the Act, permits could be required at many Air National Guard bases.

For the Air Force Reserve, diverting and recycling solid waste, hazardous waste, and construction debris often costs significantly more than simply disposing of waste. Although the Air Force Reserve Environmental Office on Recycling has set Fiscal Year 2005 as the break-even goal, this may be overly ambitious in light of what the recycling market will support.

Initiatives and Innovations

The Army National Guard pollution prevention program is designed to support state efforts to reduce production and disposal of solid waste

and other pollutants, increase recycling, and encourage use of environmentally friendly products and services. Among the demonstration projects are: using rechargeable batteries for tactical radios; design and construction of a five-building area using recycled materials; solar energy and self-composting sanitary waste management; using "solargizers" for recharging vehicle batteries; and a pilot program for recycling solid waste. Clean Water Act initiatives include the construction of Spill Prevention Control and Countermeasure sites for mobile fueling vehicles and developing similar spill prevention sites for all armories and shops.

The most significant Army Reserve initiative during Fiscal Year 1999 was the creation of the Environmental Stewardship Committee. The committee is required to periodically report progress, milestones, and issues to the Army Reserve Engineer Directorate executive staff. The stewardship committee has established several special working groups for Army Reserve environmental program staffing, training, and automated program management. The committee's initiatives include an automated standard operating procedure to help standardize environmental reporting and program management throughout the command; a manpower study to determine the level of resources required to provide optimal environmental program management; and an environmental training plan for all Army Reserve commanders and soldiers. Many of the committee's early initiatives will take effect in Fiscal Year 2000.

The Naval Reserve manages hazardous materials throughout their life cycle with its Consolidated Hazardous Materials Reutilization and Inventory Management Program. That program, coupled with recycling and pollution prevention initiatives, helps stress waste reduction. Among the Naval Reserve's initiatives are: providing hunting opportunities for disabled sportsmen at Joint Reserve Bases, creating a Bird Aircraft Strike Hazard (BASH) program to control geese by using a border collie instead of a propane canon, and agricultural outsourcing with 4-H sheep grazing.

The Marine Corps Reserve continues to increase environmental training for all its Reserve units. Specific initiatives are to promote non-hazardous chemical substitution, and to buy each Reserve unit a portable shed for storing petroleum, oil, and lubricants to reduce the chance of spills.

The Air National Guard continues to make significant investments in pollution prevention initiatives. The centerpiece of this program is the Hazardous Material Pharmacy concept, which enables the Guard to reduce the amount of hazardous materials used on base. To date, a total of 70 pharmacies are operating at Air National Guard flying units. The Air National Guard's underground storage tank compliance team coordinated more than 110 projects at 173 different locations, with a total programmed cost of $104 million. By working closely with state and local regulators, the team reduced the project completion cost by 48 percent, saving $50 million over the five-year life of the program. The Air National Guard also reached 100 percent compliance with the U.S. Environmental Protection Agency's underground storage tank standards. Under the Pollution Prevention Program, the Air National Guard implemented several new courses to enhance environmental awareness at the mid-manager and maintenance shop levels. Additionally, the Air National Guard successfully developed the first Air Force environmental restoration cost recovery agreement at General Billy Mitchell Field in Wisconsin. This agreement will not only recover clean-up costs of more than $800,000, but will also save the Air Force more than $5.7 million.

The Air Force Reserve met or exceeded its solid and hazardous waste reduction goals. All Air Force Reserve underground storage tanks have been upgraded and meet federal regulations. The Air Force Reserve had an industry expert train its painters and air managers in the latest coating technology, in

compliance with the Clean Air program. All Integrated Natural and Cultural Resource Management Plans are complete. All Threatened and Endangered Species inventories, wetland inventories, and Historic Property inventories are complete and up-to-date. The Air Force Reserve Environmental Restoration Program continues to meet or exceed all established program goals. The Air Force Reserve is moving forward with its Alternative Fueled Vehicles program. March Air Reserve Base, CA, has significantly reduced its use of combustion engines by increasing its use of electric carts.

Environmental Memorandums of Understanding

The Army National Guard and the Air Force Center for Environmental Excellence completed a Memorandum of Understanding to assign responsibilities for managing the Installation Restoration Program at the Massachusetts Military Reservation. The Army National Guard and the United States Geological Survey entered into a Memorandum of Understanding for sharing of information and technical assistance to enhance the Army National Guard's ability to comply with all applicable environmental laws and regulations.

Several memorandums of understanding are pending within the Air National Guard. They are being considered between the Air Force Base Closure Agency and the Air National Guard to turn over responsibility for site cleanup on Air National Guard sites slated for closure. Installations under consideration are Griffiss ANGB, NY, Rickenbacker ANGB, OH, and Pease AFB, NH. The Air National Guard is also working on potential memorandums of understanding with the Marine Corps at Townsend Range, GA, and with the U.S. Fish and Wildlife Service concerning natural resources conservation in the state of New Mexico.

Environmental Fines and Violations

The Army National Guard received two Notices of Violation with associated fines. One involved an underground storage tank at Orchard Training Area, Idaho, and carried a fine of $600. The second was for a violation of the Clean Water Act by the South Carolina Army National Guard, and carried a $2,000 fine.

No environmental fines were levied on the Army Reserve in Fiscal Year 1999. However, at Fort Indiantown Gap, PA, the use of a 150-ton rock crusher that exceeded state air emissions standards has been halted until completion and approval of an operating permit.

The Naval Reserve and Marine Corps Reserve had no environmental violations or fines.

No fines were levied for environmental enforcement actions against the Air National Guard in Fiscal Year 1999. It did have one open enforcement action at Springfield-Beckley Municipal Airport, OH, resulting from a violation of the Clean Water Act. The notice was issued because neither the National Pollution Discharge Elimination System permit nor the permit application identified current operations. The installation is working to close this violation.

The Air Force Reserve received two notices of violation from regulatory agencies during Fiscal Year 1999. An administrative order was received for improper documentation required for training of technicians engaged in refrigerant recovery and recycling work. The other violation was levied for improper labeling of drums and inadequate training. No fines or penalties were assessed for these violations and immediate actions were taken to correct the deficiencies.

Success Stories

The Secretary of Defense and Secretary of the Army presented environmental awards to the following Army National Guard facilities:

- Camp Ripley, Army National Guard Training Site, MN, won in the Natural Resources Conservation, Large Installation category.
- Environmental Management Office, Missouri Army National Guard, received honorable mention for the Natural Resources Conservation, Individual/Team category.
- Colonel Frank Intini, Army Aviation Support Facility No. 1, New York Army National Guard, received honorable mention for the Environmental Quality, Individual/Team category.

Secretary of the Army environmental awards were presented to the following Army National Guard facilities:

- Camp Gilbert C. Grafton, North Dakota Army National Guard, received honorable mention for the Natural Resources Conservation, Small Installation Category.
- Camp Beauregard Training Site, Louisiana Army National Guard, received honorable mention for the Cultural Resources Management, Large Installation category.
- Major Michael L. Tarpley, Louisiana Army National Guard, received honorable mention for the Cultural Resources Management, Individual/Team category.
- Mobilization and Training Equipment Site No. 71, Fort Polk, Louisiana Army National Guard, received honorable mention for the Environmental Quality, Industrial Installation category.
- Stephen J. Ransom, Iowa Department of Public Defense, Iowa Army National Guard, received honorable mention for the Individual Recycling category.

The Army Reserve continues to publish its quarterly environmental community newspaper titled "pRESERVEr", and has set up web sites for the Army Reserve's environmental community. Fort McCoy, WI, received the Secretary of the Army Environmental Award for Cultural Resource Management at a Large Installation. Fort McCoy also received honorable mention for Environmental Quality for a Non-Industrial Installation and Cultural Resource Management for a Large Installation.

Within the Naval Reserve, three Naval Air Station Joint Reserve Bases received environmental awards. Joint Reserve Base Fort Worth, TX, received awards from the Chief of Naval Operations, the Department of the Navy and the Department of Defense for Individual Recycling/Pollution Prevention. Also, the State of Texas awarded the Fort Worth base its 1999 Annual Recycling/ Pollution Prevention Award.

Headquarters Marine Corps has recognized several units for superior results on Environmental Compliance Evaluations. Their management of hazardous materials and waste, effective record keeping, voluntary recycling programs, and coordination with local emergency response personnel were especially noteworthy.

Programs and Policies Points of Contact



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- Individual Mobilization Augmentee Program
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- Montgomery GI Bill
  Colonel Paul Torick (703) 695-7490
- Reserve Component Transition Initiatives
  Colonel Richard Krimmer (703) 693-7490
- Reserve Officer Personnel Management Act
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1500 Defense Pentagon
Washington, DC 20301-1500

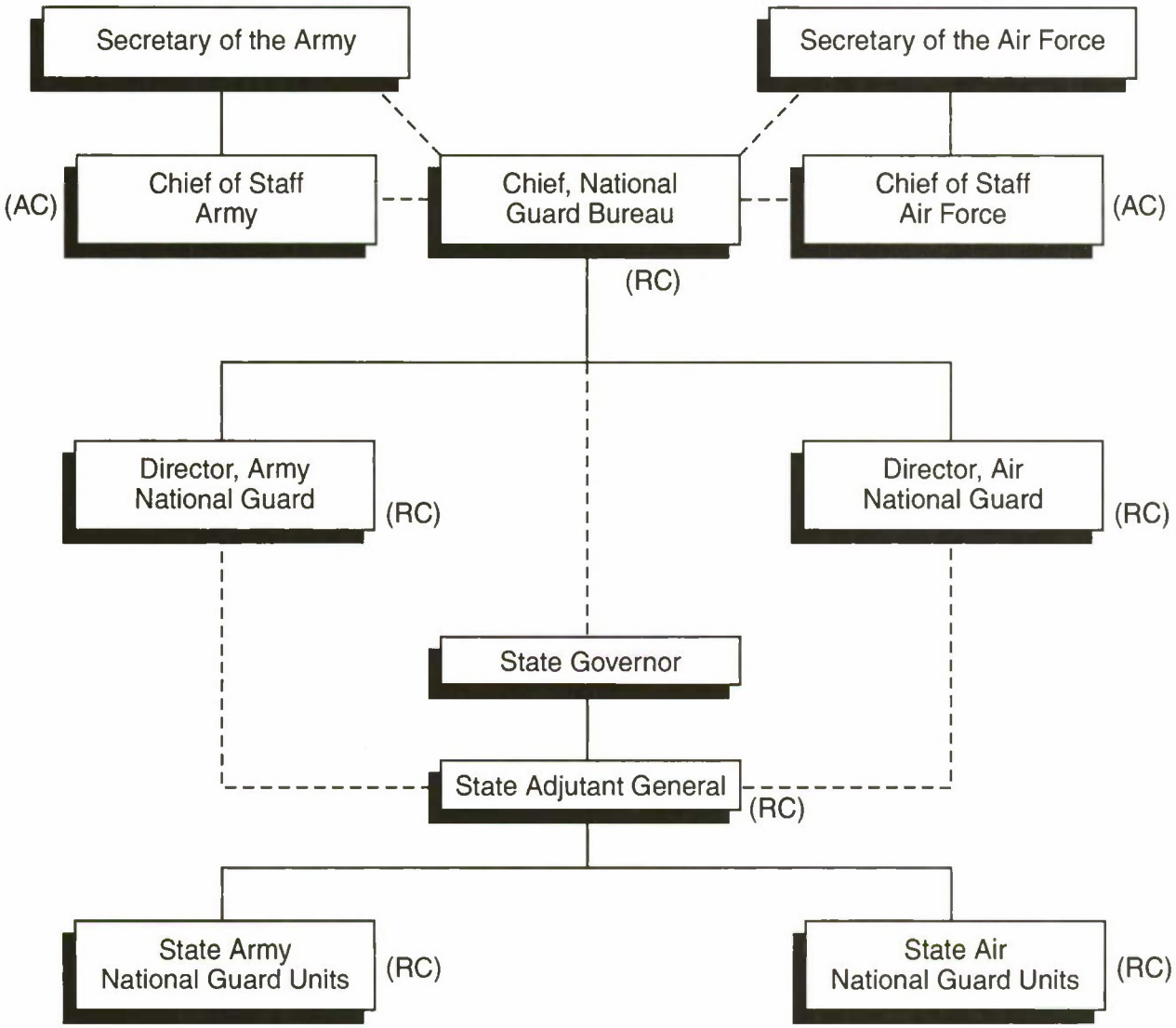
• Accessibility Colonel Robert Smiley (703) 697-0493 • Mobilization and Recall Colonel Robert Smiley (703) 697-0493 • Readiness and Title XI Initiatives Captain Scott Beaton (703) 695-4125 • Training Support and Management Colonel Frank Cook, III (703) 693-8611 • Civil-Military Programs (Innovative Readiness Training Programs) Colonel Diana Fleek (703) 693-8618	**Deputy Assistant Secretary of Defense for Reserve Affairs (Readiness, Training, and Mobilization)** **1500 Defense Pentagon** **Washington, DC 20301-1500**
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Command and Control Diagrams

B



Army National Guard and Air National Guard

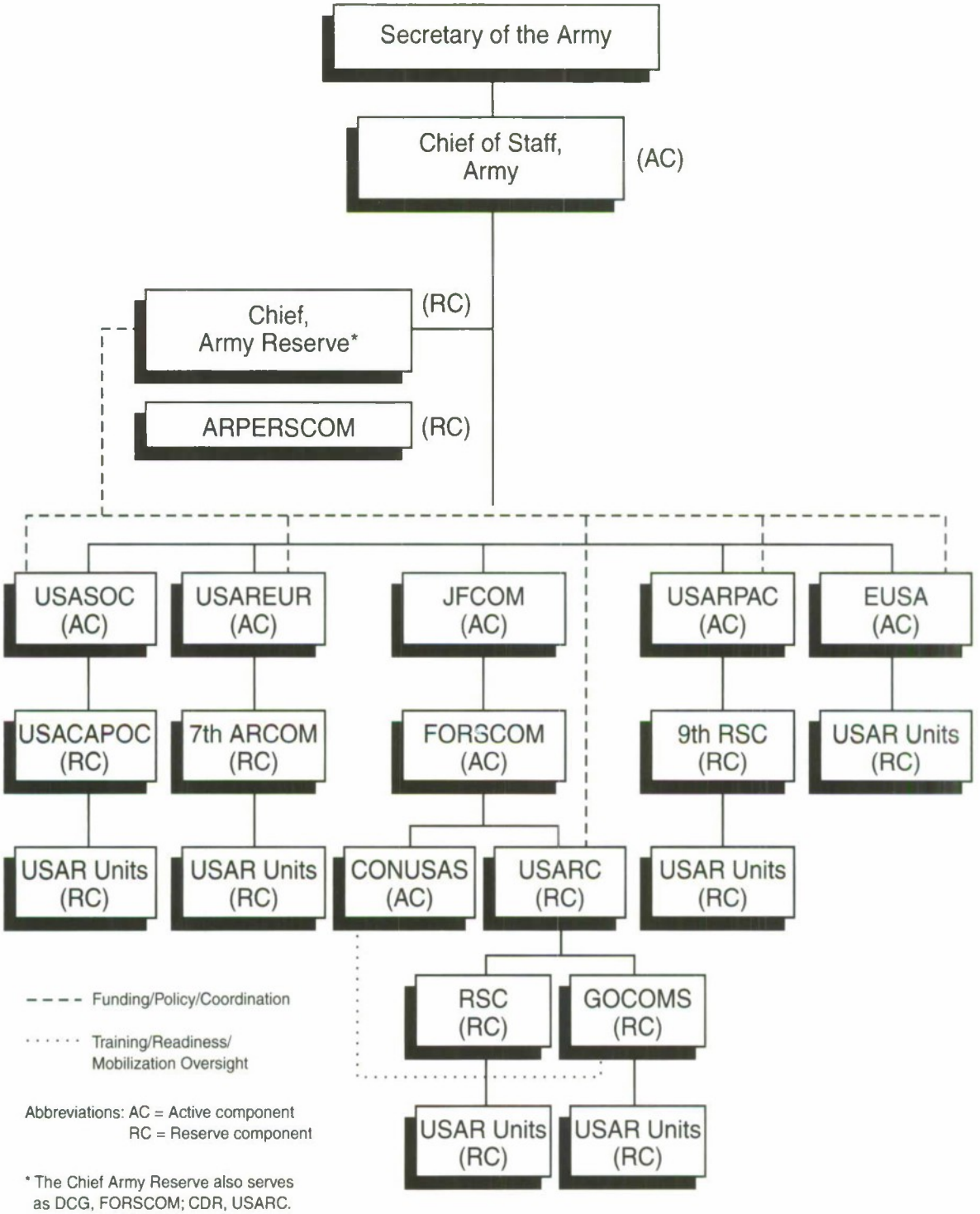


- - - - Communication/Coordination Assistance/Advice

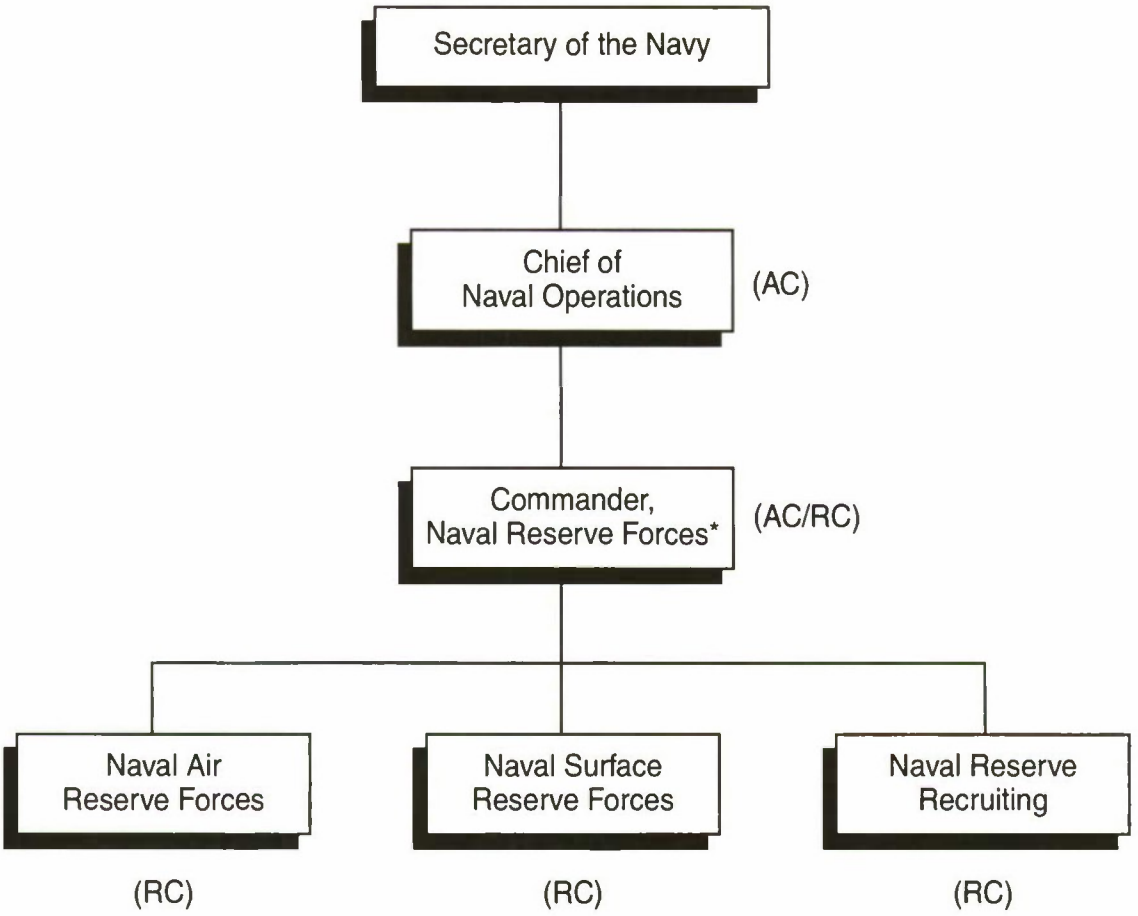
Abbreviations: AC = Active component RC = Reserve component

Note: District of Columbia National Guard Commander is appointed by the President of the United States.

Army Reserve



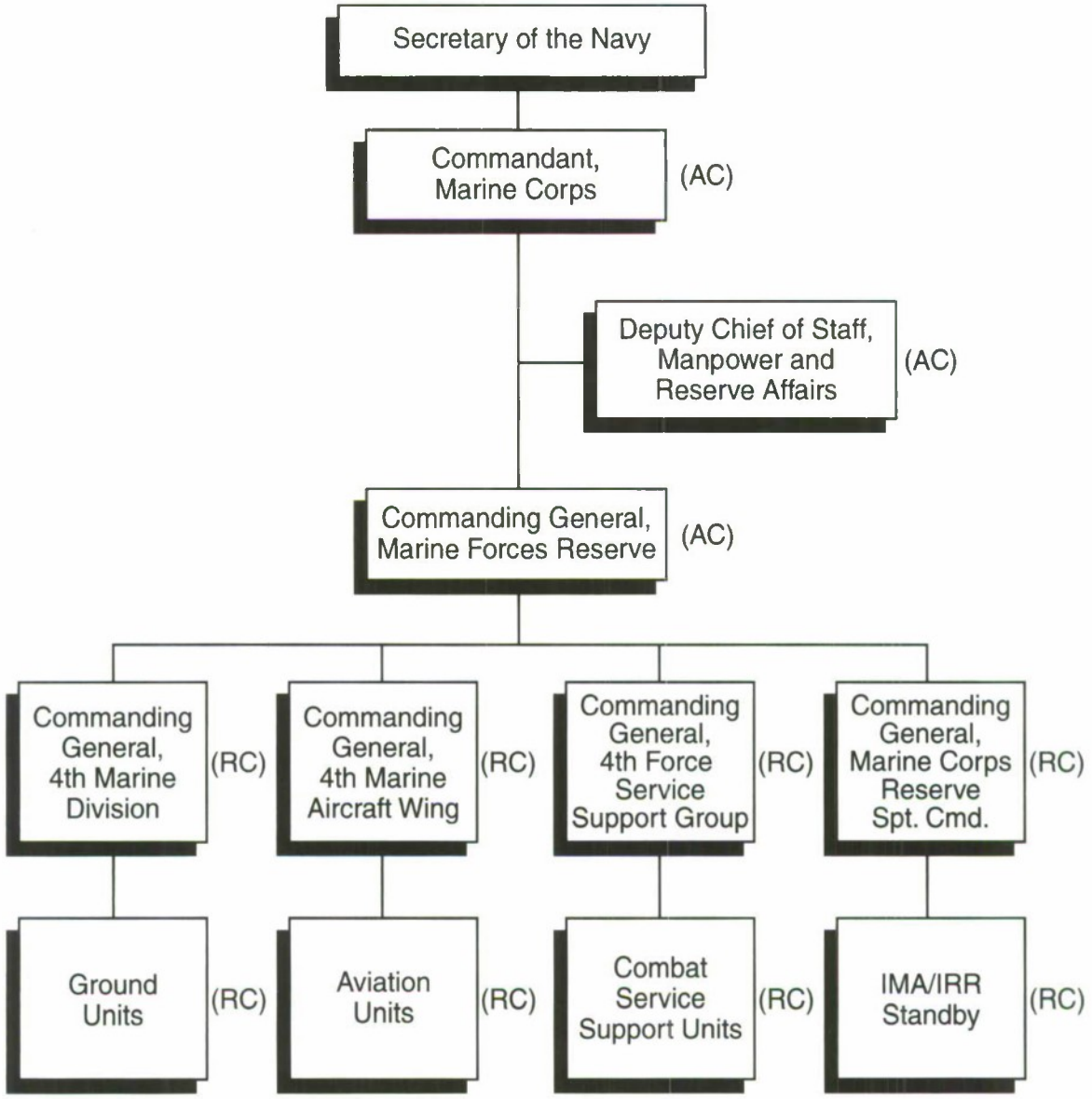
Naval Reserve



Abbreviations: AC = Active component RC = Reserve component

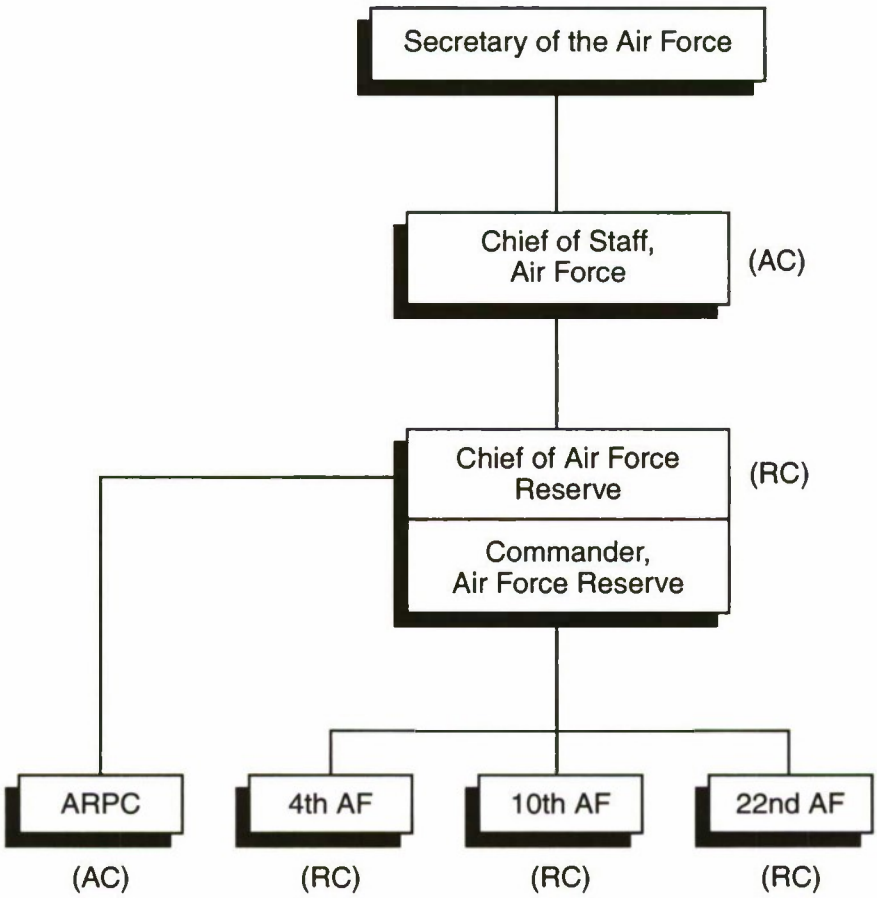
*This position can be filled by an AC or RC Commander.

Marine Corps Reserve



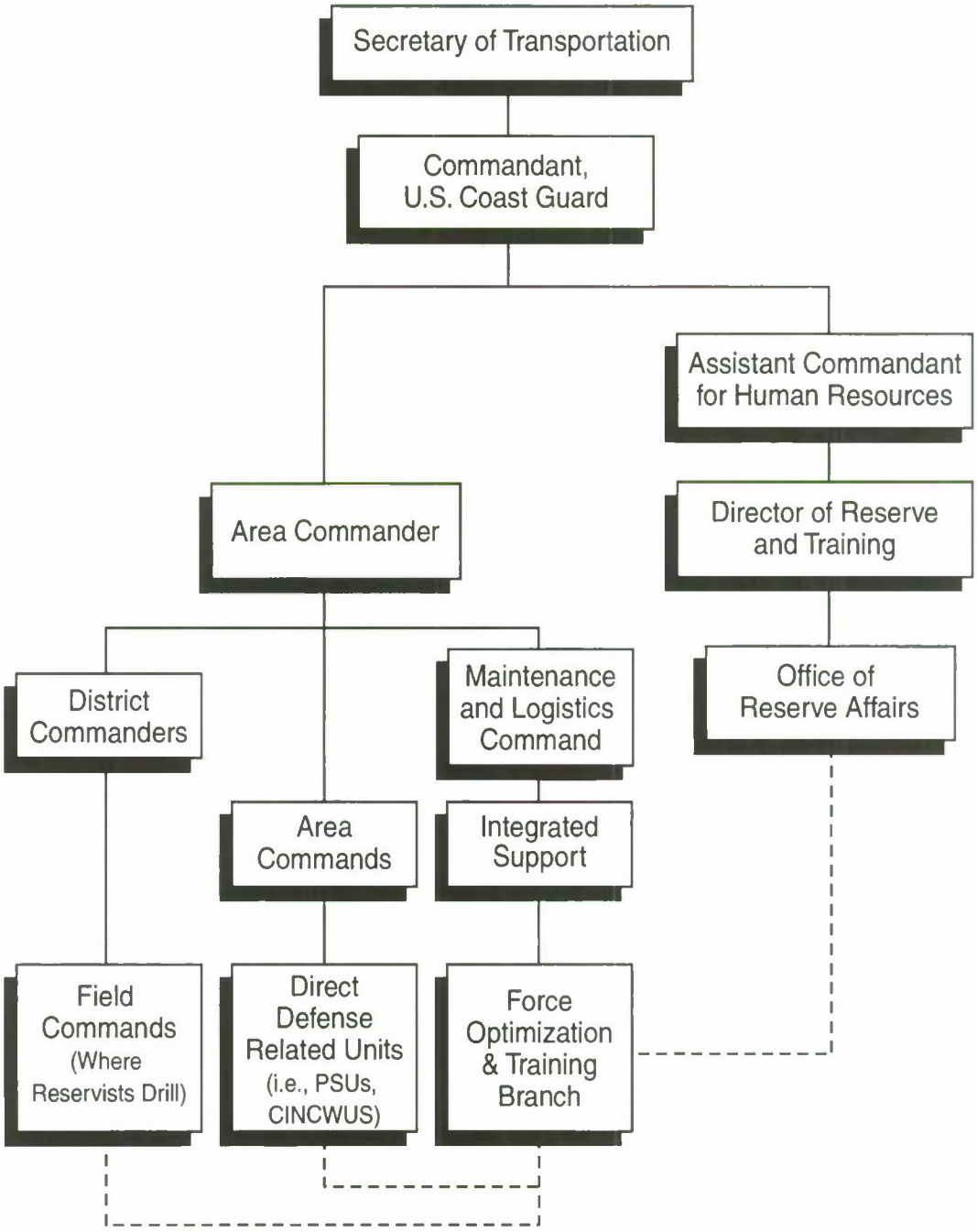
Abbreviations: AC = Active component RC = Reserve component

Air Force Reserve



Abbreviations: AC = Active component RC = Reserve component

Coast Guard Reserve





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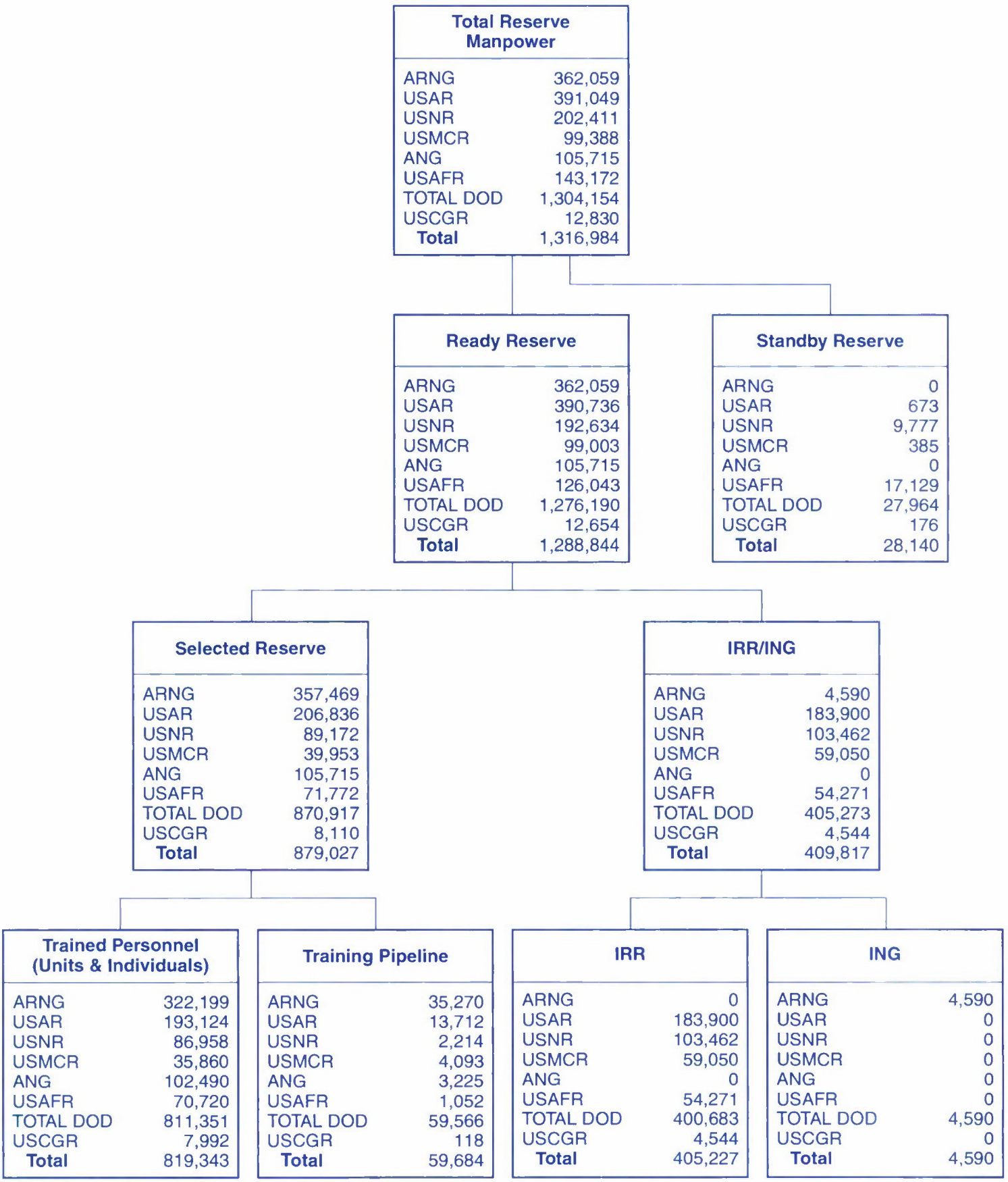
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- *Reserve Components of the Armed Forces: Reserve Component Categories*



Total Reserve Strength



Total Reserve Manpower	
ARNG	362,059
USAR	391,049
USNR	202,411
USMCR	99,388
ANG	105,715
USAFR	143,172
TOTAL DOD	1,304,154
USCGR	12,830
Total	1,316,984

Ready Reserve	
ARNG	362,059
USAR	390,736
USNR	192,634
USMCR	99,003
ANG	105,715
USAFR	126,043
TOTAL DOD	1,276,190
USCGR	12,654
Total	1,288,844

Standby Reserve	
ARNG	0
USAR	673
USNR	9,777
USMCR	385
ANG	0
USAFR	17,129
TOTAL DOD	27,964
USCGR	176
Total	28,140

Selected Reserve	
ARNG	357,469
USAR	206,836
USNR	89,172
USMCR	39,953
ANG	105,715
USAFR	71,772
TOTAL DOD	870,917
USCGR	8,110
Total	879,027

IRR/ING	
ARNG	4,590
USAR	183,900
USNR	103,462
USMCR	59,050
ANG	0
USAFR	54,271
TOTAL DOD	405,273
USCGR	4,544
Total	409,817

Trained Personnel (Units & Individuals)	
ARNG	322,199
USAR	193,124
USNR	86,958
USMCR	35,860
ANG	102,490
USAFR	70,720
TOTAL DOD	811,351
USCGR	7,992
Total	819,343

Training Pipeline	
ARNG	35,270
USAR	13,712
USNR	2,214
USMCR	4,093
ANG	3,225
USAFR	1,052
TOTAL DOD	59,566
USCGR	118
Total	59,684

IRR	
ARNG	0
USAR	183,900
USNR	103,462
USMCR	59,050
ANG	0
USAFR	54,271
TOTAL DOD	400,683
USCGR	4,544
Total	405,227

ING	
ARNG	4,590
USAR	0
USNR	0
USMCR	0
ANG	0
USAFR	0
TOTAL DOD	4,590
USCGR	0
Total	4,590

Source: Office of the Assistant Secretary of Defense for Reserve Affairs.
Data as of September 30, 1999.