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Factors to Consider in Blending Active and Reserve Manpower Within Military Units

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Preface

The United States military has five armed forces—four military services plus the Coast Guard. Each armed force is made up of two components—the active component and the reserve component. The latter encompasses the federal reserves and the National Guard. Both components have multiple workforces: officers including warrant officers, enlisted personnel, and civilians. (There is also a large contractor workforce that is not considered in this document.) Each armed force has functional elements characterized by different capabilities. It also has workforces characterized by different levels of training, experience, and availability. The armed forces, components, and workforces are integrated at many levels. At the combatant command level, the Goldwater-Nichols Act of 1986 has led to increased integration of military service forces into joint organizational structures, such as joint task forces. At the military service level, Marine Corps expeditionary units and Army corps are examples of multiple functional capabilities integrated into effective employable forces. The Army is in the process of creating active and reserve brigade combat teams that are themselves functionally integrated. Traditional division and corps structures are being replaced with new organizational designs as well.

At the workforce level, the formal policy since the 1970s has been to achieve better defense output—more performance and efficiency—by using the multiple workforces more effectively. Most recently, effort has been placed on better integrating the military unit–based work effort of the active and reserve components. This research examines the

integration of reserve and active military workforces into such units as headquarters, squadrons, and battalions.

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Summary

A 2002 Department of Defense (DoD) report stated that the military services developed or adopted many innovative approaches to unit structures and organization as force size changed and operational tempo increased.[1] The report suggested that organizational concepts leading to a more flexible, capable force must be implemented more broadly to better capitalize on the capabilities and strengths of the reserve components. In particular, such organizational concepts include "blending" active component (AC) and reserve component (RC) workforces in military units. We define *blending* as any arrangement or event that brings active and reserve manpower together within organizations for a common purpose. At the organizational level where mission work is actually done, there is interest in *workforce integration* between the components.

RAND was asked to examine existing organizational designs that facilitate integration of the reserve and active workforces and to ascertain whether changed personnel management practices are needed to help implement the organizational designs. To answer these questions, we reviewed service reports and directives and other relevant literature on the subject, including the organizational change literature, and we interviewed service officials and subject matter experts.

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[1] Department of Defense (2002), p. 14.

Common Purposes

If seamless workforce integration of active and reserve component is the strategy, what are the goals? The defense leadership has enunciated goals that improve readiness and others that work to reduce costs. The ultimate goal of the strategy, of course, is to improve the accomplishment of missions. At the efficiency level, there are two goals: better use of human capital and lower cost including better capital asset utilization.

Other considerations are not explicitly included as goals. One must recognize that the states have a stake in the process, especially with regard to National Guard units and workforces. One must also recognize that components and units have rich histories and cultures that merit consideration.[2]

Our interviews and literature reviews suggest that workforce integration efforts aimed at improving operational accomplishment of mission, balancing operations tempo, and increasing capital asset utilization would be more successful than efforts aimed at other goals.

Examples of Workforce Integration

In the military, the paths toward workforce integration are not similar among the armed forces, and movement along the paths is not occurring at the same rate. For example, the Air Force has blended units from two components into a single wing with a single commander. Traditionally, the Air Force has integrated workforces using associate units. The Coast Guard believes it has fully integrated its components operationally, organizationally, and administratively. The Navy has had associate units in one functional area but is using the concept in a limited way. The Army has chosen to integrate at the unit level (battalion and below) and at some headquarters in multi-component units.

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[2] We define *culture* as the General Accounting Office (GAO) (now the Government Accountability Office) defines it: "[T]he underlying assumptions, beliefs, values, attitudes, and expectations shared by an organization's members" that "affect the behavior of its members" (GAO, 1992).

The Marine Corps assigns AC personnel to RC units to assist in training and preparedness.

Enabling and Constraining Factors

Based on our reviews and interviews, we have outlined a set of factors that we hypothesize affect workforce integration within units. These factors are associated mainly with organizational structure or work content.

Factors

Table S.1 shows how certain factors might govern formation of units with operationally and organizationally integrated workforces in a peacetime environment. (For some units, mobilization or deployment might significantly change the effect of the factors.) These factors should apply to all the services equally. While certain functions (e.g., transportation, medical) might seem to be more amenable to integration than others (e.g., infantry), it may be because these factors affect those functions differently and not because the functions cannot be inherently integrated.

We categorized the factors as being important for workforce integration, useful for workforce integration, and/or difficult for workforce integration.

Factor Relationships

Some of these factors overlap with others or are correlated with each other. For example, job-sharing fits well with individual/small team tasks focused on operational output. Particular factors may work together to favor or hinder integration. Being able to deploy or be employed on similar timelines is an example of a factor that, combined with another factor, makes integration possible.

Table S.1
Factors Affecting Workforce Integration

Factor	Important for Workforce Integration	Useful for Workforce Integration	Difficult for Workforce Integration
Work schedule	Continuous (24/7) or intermittent schedules		Fixed (weekday or weekend) schedules
Job-sharing	Job-sharing possible		Job-sharing not possible
Complementary jobs		Reserve military job fits civilian occupation	
Operational value of work	Operational output		Training output
Focus of work		Capital-intensive; platform-centric	Unit-centric
Nature of work	Individual/small team tasks; aggregated effort		Group tasks; collective effort
Command authority		Single source of power/authority	
Workforce interactions		Vertical coordination	Horizontal coordination
Deployment and timing	Can deploy (be employed) on same schedule		Different deployment schedules or lengths
Location of unit		Geographically proximate	Geographically distant
Equipment ownership and commonality	Shared, common equipment	Separately owned, common equipment	Separately owned, different equipment
Unit size		Small, noncomplex units	Large, complex units
Workforce experience		Workforce experience is high and homogeneous	Workforce experience is low or heterogeneous
Nature of association	Routine, frequent association	Periodic, frequent association	One-off, infrequent, or rare association
Workforce identity		Weak or changeable identity and culture	Strong identity and culture
Training standards/ training status	Same standards; individuals qualified or qualifications achievable with minimal training	Same standards; progress toward qualifications	Different standards; some individuals unqualified

It is not apparent that any one factor by itself can lead to favoring integration. Instead, an accretion of factors leads toward integration or hinders it. The best example of this may be the Coast Guard, where continuous 24/7 schedules, job-sharing, operational output, aggregated effort, common employment schedules, geographically proximate workforces, and a changeable identity allowed creation of a new culture around "Team Coast Guard," that service's name for its integrated active-reserve force.

Challenges to Workforce Integration

Challenges created by workforce integration arise in other areas. Among them are command and control, operational availability, readiness reporting, component-specific funding, deployment availability, geographical dispersion, training availability, operations tempo (OPTEMPO) funding, equipment modernization and compatibility, property accountability, command opportunity, work scheduling, career and job expectations, personnel performance evaluations, and supporting pay and personnel information systems.

We particularly examined personnel management policy differences among the active and reserve workforces to determine if they created barriers to workforce integration. We reviewed active and reserve component officer management and selected private-sector organizations.

Table S.2 summarizes some of the AC and RC workforce differences in the broad processes of entering (the component as well as a first or subsequent unit), developing and training, promoting, and transitioning.

Do personnel management differences between the component workforces need to be resolved to achieve workforce integration? Our review of workforce integration in multiple instances leads to the observation that they do not. There are many instances in which members of different workforces integrate operationally and organizationally to serve mission needs, but not administratively and without impact on mission.

Table S.2
Generalized Workforce Differences

Personnel Function	Active Component	Reserve Component
Entering	Hires nationally	Hires locally
	Closed system; no prior experience preferred	Open system; prior experience preferred
	Trains upon entry	Trains over extended period
	Assigns qualified personnel to duty positions	Assigns qualified and unqualified personnel to duty positions
	Distinct hiring and placement	Simultaneous hiring/placement
Developing	Time-based; "push" system	Event-based; "pull" system
	Both horizontal and vertical rotational assignments	Local on-the-job training; few or no rotational assignments
	Periodic training and education at fixed intervals	Episodic training and education as available
Promoting	Rank-in-person system: fungible across jobs	Generally a rank-in-job system: job-dependent
	Service-wide promotion vacancies	Promotion to local position
	Up or out	Up or stay
Transitioning	Time-based	Event- (points) and time-based
	Defined-benefit retirement	Different defined-benefit retirement
	Transition to RC complex	Transition to AC complex

Although there are differences in personnel management policies both within and across the services, our research and interviews with reserve and active authorities did not uncover problematic challenges that impede workforce integration if other factors align. Changes in personnel management policy and practice may be warranted for other reasons, but our review led us to the conclusion that those different practices are not barriers that must be overcome to achieve workforce integration. Instead, they must be understood and accommodated. In essence, the issue is training and education rather than a barrier per se. Where there are difficulties in administering different personnel management systems in one unit, those difficulties are more a function of the administrative information management systems than a function of personnel policy. Thus, there could be more than one set of per-

sonnel management policies operating within a blended organization, each serving its own constituency.

Summary Observations

The forms of workforce integration that are used by the armed forces have counterparts in the private sector. Just as different forms are used in the private sector to fit environment and needs, no one form fits all situations in the military. There are structural and work content and context factors that assist in governing the choice as to whether to blend workforces within units in a certain way or to keep workforce-pure units.

Several other observations about these factors emerge from our assessment. First, where organizational factors align, personnel management does not appear to be a significant problem. Second, where organizational factors do not align to favor integration, personnel management changes will not achieve integration. Finally, there are political challenges in integrating National Guard and federal units. Governors have strong interests in their National Guard units, and employment of those units for state active duty or in Title 32 status is problematic in integrated units.[3] However, workarounds exist to address these limitations.

Recommendations

We have three recommendations. First, adapting what works within a service to other functional areas in the service is a better near-term workforce integration strategy than replicating forms of integration across services. In essence, the goal should be to adapt within rather than to force organizational change from without.

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[3] Guard troops in Title 32 status are under the control of the governor but are federally funded.

Second, moving toward the future, during their force structuring (organizational design) processes, the services should provide policy guidance that makes workforce integration (e.g., multi-component and associate units) a consideration given certain factors of the type outlined above.

Third, the services should consider performing more evaluation of workforce integration against the objectives for it that have been asserted (see Chapter Two for a discussion of these objectives). Is effectiveness actually higher and are costs actually lower? Evaluation against the goals asserted for workforce integration could be performed by measuring attitudes and outputs (mission accomplishment) as a result of change. Increased understanding of the actual effects of workforce integration within units can to lead greater emphasis on the respective strengths of the workforces, and more efficient use of resources.

Acknowledgments

Abbreviations

4ID	4th Infantry Division
AC	active component
ACW	Air Control Wing
ADSW	active duty for special work (USCG)
ADT	active duty training
AFB	Air Force Base
AFR	Air Force Reserve
AGR	Active/Guard Reserve
ANG	Air National Guard
ANGCRRA	Army National Guard Combat Readiness Reform Act of 1992
AR	active reserves
ARNG	Army National Guard
ARPC	Air Reserve Personnel Center
ART	Air Reserve Technician
AT	annual training
ATC	Associate Truck Company (USAR)
BRAC	base realignment and closing
CONUS	continental United States
CS	Combat Support

CSS	Combat Service Support
DIMHRS	Defense Integrated Manpower Human Resource System
DoD	Department of Defense
DOPMA	Defense Officer Personnel Management Act (U.S. active officer management system)
eSB	Enhanced Separate Brigade
FSSG	Force Service Support Group (Marine Corps)
FTF	Future Total Force (Air Force)
FTS	full-time support
FTU	formal training unit
GAO	Government Accountability Office
GO	general officer
HM	Helicopter Mine countermeasures squadron (Navy)
I&I	Inspectors and Instructors (Marine Corps)
IDT	Inactive duty training
IMA	Individual Mobilization Augmentee
IRR	Individual Ready Reserve
ITAPDB	Integrated Total Army Personnel Database
MarDiv	Marine Division
MARFORRES	Marine Corps Forces Reserve
MAW	Marine Aircraft Wing
MCU	Multi-Component Unit
MEF	Marine Expeditionary Force
MOS	military occupation specialty
MPA	Military Personnel Army
MTOE	Modified Table of Organization and Equipment

NCO	noncommissioned officer
NGPA	National Guard Personnel Army
NGREA	National Guard and Reserve Equipment Account
ODS	Operation Desert Storm
OIF	Operation Iraqi Freedom
OMA	Operations and Maintenance Army
OMAR	Operations and Maintenance Army Reserve
OMARNG	Operations and Maintenance Army National Guard
ONW	Operation Northern Watch
OPTEMPO	operations tempo
OSW	Operation Southern Watch
PERSRU	Personnel Reporting Unit (USCG)
PSU	port security unit (USCG)
RC	reserve component
ROPMA	Reserve Officer Personnel Management Act (U.S. reserve officer management system)
RPA	Reserve Personnel Army
RPAL	reserve personnel allowance list
SELRES	selected reservist
SMCR	Selected Marine Corps Reserve
TIG	time in grade
TIS	time in service
USAR	U.S. Army Reserve
USC	U.S. Code
USCG	U.S. Coast Guard
USCGR	U.S. Coast Guard Reserve
USMC	U.S. Marine Corps

USMCR	U.S. Marine Corps Reserve
VTU	voluntary training unit
ZBR	zero-based review

Introduction

The use of the reserve components, both individual members and units, has differed from the concepts under which they were initially designed and structured. The reserve components are no longer a force held in strategic reserve. Instead they are selectively and operationally engaged to prosecute missions as well as augment and reinforce the active component. The total capabilities of the force, active and reserve, are needed to support the operations of the Department of Defense (DoD).

The military services have developed or adopted many innovative approaches to unit structures and organization as force size changed and operational tempo increased. A 2002 DoD report[1] suggests that organizational concepts leading to a more flexible, capable force need to be implemented more broadly to better capitalize on the capabilities and strengths of the reserve components. In particular, such organizational innovations for integrating military workforces as multi-component units, blended units, associate units, and fully integrated units should be explored for applicability across all the services. We broadly define *workforce integration* by referring to a report by the General Accounting Office (now the Government Accountability Office) (GAO) stating that "integration could be considered as any arrangement or event that brings members from two or more components together for a common purpose."[2] To be successful in meeting strategic

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[1] Department of Defense (2002), p. 14.

[2] GAO (2000).

needs, though, these organizational designs must align with personnel management policies, practices, and workforce plans and must overcome other challenges to implementation.

The questions addressed in this study relate to organizational and personnel management factors that may affect workforce integration within a unit.[3]

Research Questions

RAND was asked to address two questions:

1. What are the organizational designs that facilitate integration and employment of the reserve and active workforces?
2. What are the personnel management practices that facilitate implementing the organizational designs?

To answer these questions, we explored organizational changes within AC and RC units that have been, are being, or could be implemented to improve accomplishment of missions and goals:

- What are the types of integration currently employed by the military?
- What are the factors that enable or constrain such integration?
- Are there designs that could apply across services?
- Do personnel management practices hinder workforce integration?
- What are the lessons learned for the future regarding how best to implement workforce integration?

This monograph synthesizes answers to those questions and provides recommendations addressing the policies and programs that

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[3] After mobilization, AC and RC units are assigned for mission use to a unified command, and thus units are operationally integrated at the forces level. Organization and training remain the responsibility of the military departments. National Guard units are also used by the governor as needed for state missions.

would best facilitate workforce integration opportunities to meet critical service readiness and operational needs.

Methodology

We reviewed literature and interviewed subject matter experts to address the research questions. Our literature review included an examination of reference material regarding organizational change. We also reviewed DoD and GAO reports and other reports and literature that addressed the services' workforce integration efforts. We interviewed subject matter experts—active and reserve—within the Army, Navy, Air Force, Marine Corps, and Coast Guard who were deeply involved with and knowledgeable about their respective service's "blending" or workforce integration efforts. This study is based largely upon our literature review and interviews with representatives from the military services and private industry.

Organization

This monograph is organized as follows. Chapter Two reviews the objectives that have been asserted as the reasons for organizational integration of the workforces. Chapter Three discusses workforce integration in theory and practice. Chapter Four analyzes the organizational enabling factors that lead to successful integration outcomes, as well as factors that limit integration efforts. Chapter Five examines personnel management in blended-workforce organizations. Both Chapters Four and Five contain findings and observations with respect to organizational integration and personnel management policy, respectively. Chapter Six discusses other considerations that emerge in blended-workforce units including changes in other processes that are caused by changed organizational architectures. Chapter Seven summarizes these findings and presents our overall observations and recommendations. The appendixes contain more detail about the several organizations we examined. They include our analyses of the Army, Navy, Air

Force, Marine Corps, and Coast Guard workforce integration efforts and results. We also include a selected case study from private industry. Readers who wish to familiarize themselves with more-detailed accounts of the several approaches to workforce integration might want to review the appendixes first.

Why Workforce Integration?

Overall, workforce integration can be viewed as a strategy that supports multiple goals. More precisely defining the strategy of integration helps identify expected goals, benefits, and challenges of integration. The GAO report referenced above (GAO, 2002) suggests that integration should be aimed at common purposes.

What are those common purposes?[1] What is integration of the reserve and active component workforces within a mission unit designed to accomplish? The Air Force Chief of Staff broadly states that such integration will create efficiencies, cut costs, ensure stability, retain invaluable human capital, and—above all—increase combat capabilities.[2] The Air Force presented three compelling reasons for integration in 2004:

- Integration allows balancing personnel tempo appropriately among the components.
- Integration plays to the strengths of each component.
- Integration provides a continuum of service, an expansion of institutional knowledge, and preservation of human capital.[3]

Most recently, the Air Force stated that integration

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[1] In the private sector, organizations enter into relations with each other for a number of reasons—long-range survival, gain in market power, synergy, risk sharing, cost sharing, subcontracting and outsourcing, technology sharing, and knowledge of a market (National Research Council, 1997, p. 127).

[2] U.S. Senate (2003b).

[3] U.S. House of Representatives (2004b).

- can leverage the tremendous experience levels available in the guard and reserve
- provides the ability to use the active-duty airman to sustain increasing levels of deployment.[4]

The Army has espoused somewhat similar views. Former Chief of Staff GEN Dennis Reimer is frequently cited as the impetus for Army active component/reserve component (AC/RC) workforce integration through his 1998 white paper, *One Team, One Fight, One Future*. More precisely, FORSCOM Regulation 350-4 (Department of the Army, 2003) states that AC/RC partnerships are designed to foster seamless capabilities among the active component, Army National Guard (ARNG), and U.S. Army Reserve (USAR) in executing the full range of operational missions supporting national requirements. Among the partnerships are multi-component units, made up of personnel from more than one Army component, whose intent is to integrate, to the maximum extent possible within regulatory and legal constraints, resources (manpower, equipment, and funding) from more than one component into a cohesive, fully capable Army unit. These units may be AC, ARNG, or USAR with elements from one or both of the other components.

The Coast Guard's long-term goal is to fully integrate active and reserve commands. This provides active-component commanders with a rich mix of well-trained full-time and part-time resources to respond to any contingency while more effectively and efficiently executing day-to-day missions.[5] The Coast Guard executed this plan by placing one AC unit commander fully in charge of all active and reserve

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[4]   Department of the Air Force (2005).

[5]   Commandant, United States Coast Guard (1994).

resources and making all reservists Individual Mobilization Augmentees (IMAs).[6]

The Navy states that it has some reserve needs that are best filled by discrete units that stand up when required to provide a specific capability and other reserve needs for individuals or portions of units that can augment active commands.[7] To do this, the active force is assuming greater command and control responsibility for the reserve force to include for training and readiness.[8]

U.S. Marine Corps Reserve (USMCR) forces are a vital part of the Marine Corps because they provide depth, flexibility, and sustainment. Marine Corps Reserve units are task-organized just as the active component is. They are fully integrated into the active forces for mission accomplishment across the complex spectrum of crises and conflicts.[9] Individual AC Marines are assigned to USMCR units as inspectors and instructors to assist with USMCR unit training.

Goals and Considerations

If seamless workforce integration of active and reserve components is the strategy, what are its goals? We reviewed much of what has been written or spoken by defense leadership and the research community. We outline the major goals (some with subgoals) and organize them by those goals that improve readiness and those that work to reduce costs. The ultimate goal of the strategy is to improve the accomplishment of missions. Associated with that goal is a related one that aims at improving the future ability to accomplish missions. The third effectiveness goal is rooted in a major assumption that active control of reserve component operations and training improves them. At the efficiency level,

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[6]   An IMA is an individual selected reservist (SELRES) who receives training from and is assigned to an AC organization billet that must be filled in a short time period or shortly after mobilization.

[7]   Anderson and Winnefeld (2004).

[8]   GAO (2005).

[9]   Department of the Navy (2000).

there are two goals: better use of human capital and lower cost. Each has subordinate goals that help to explain its meaning.

Not everyone would agree with the goals we have outlined. The advisability of a strategy of workforce integration must be demonstrated by achieving these goals and subgoals or in showing that, absent such integration, the goals would not be achieved. The following goals are not rank-ordered in any way but merit consideration in a strategy to improve workforce integration.

- Improve readiness.
  - Improve accomplishment of missions and goals.
  - Improve readiness to accomplish missions and goals.
  - Facilitate active ownership[10] of appropriate training and readiness standards for all components and appropriate resourcing to accomplish assigned missions.
- Improve efficiency.
  - Achieve better availability of human capital.
    - o Foster seamless movement among AC and RC.
    - o Share professional experience and coaching.
    - o Balance personnel tempo.
    - o Optimize the unique capabilities and strengths of each component.
  - Lower cost.
    - o Lessen AC deployment numbers.
    - o Increase capital asset utilization.
    - o Use the least costly mix of personnel to accomplish the mission.

Other considerations are not explicitly included as goals. One must recognize that the states have a stake in the process, with regard to National Guard units and workforces. One must also recognize that components and units have rich histories and cultures that merit pres-

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[10] Active-component ownership of reserve training, readiness, and operational support was an explicit goal of Coast Guard and Navy reviews but is a concept that may not apply equally to each service. There are differences in the levels at which the services resource RC training and readiness.

ervation.[11] While workforce integration may not maintain or preserve existing cultures and identities, approaches to integration must recognize that the rich cultures of existing organizations have produced many successes. To the extent possible, it may be beneficial to preserve and build on existing cultures and identities. The strategy of improving workforce integration could also achieve political and other economic goals as a natural consequence. For example, political aims may direct workforce integration as a means to preserve jobs. Workforce integration could be the means in which the military services achieve and execute legislated requirements to have active personnel assigned to the reserve component.

Is Integration a Means or an End?

We raise one last consideration: We have taken workforce integration to be a strategy that supports achieving certain goals. It is entirely possible that workforce integration could be an end rather than a means to other goals. If so, the assessment should be more about feasibility and less about advisability.

Integration as Means

The objectives above have been asserted as goals for organizational integration of workforces. Mission and goals could be accomplished without workforce integration, but the claim that improvements in effectiveness could result seems justified. Whether readiness is improved and whether the active component should own reserve training and readiness is a more difficult argument to make for all the services. In terms of efficiencies, balancing personnel tempo has merit, as does increasing capital asset utilization. Preserving existing cultures and identities is at cross-purposes with certain types of workforce integration.

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[11] We define *culture* as the GAO does: "[T]he underlying assumptions, beliefs, values, attitudes, and expectations shared by an organization's members" that "affect the behavior of its members" (GAO, 1992).

Our interviews and literature reviews suggest that workforce integration efforts aimed at three purposes (improving operational accomplishment of mission, balancing tempo, and increasing capital asset utilization) would have greater success than efforts aimed at other goals.

Integration as End

Should workforce integration at the unit level be considered an end in itself rather than a strategy to better achieve certain ends? This was suggested in several interviews as a direction in which the Total Force policy could usefully evolve. However, achieving this would require substantial modification of existing cultures and attitudes to subsume the existing ones within a higher, shared culture and identity. The concept of a best-value total force that emphasizes output (mission or work to be accomplished) rather than input (the various workforces) appears to be a step in this direction.

Military Workforce Integration in Theory and Practice

Military Integration in General

The strategy of integration exists on at least three levels. The first level is interorganizational or forces integration, i.e., combining distinct AC and RC units to operate together as part of a larger force assigned to a combatant commander. This is standard practice in today's operational environment. The second level is workforce integration—integrating AC and RC workforces within units. In other words, both AC and RC personnel can be used to fill spaces or billets within units. That is the level this monograph examines. The third level is that of integrating other AC and RC resources such as materiel/equipment, facilities, or funding. This monograph assumes forces integration and examines workforce and personnel integration, but touches on some of the other aspects of integration.[1]

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[1] Integration in a military setting or work environment has unique challenges. Military personnel are subject to deployment and frequently endure arduous conditions. The varying nature of the work to be performed and the organization and resources of units that perform it have led to different approaches and execution of integration. The services have used various forms of integration to best tap the strength of the RC and complement the AC. Some of the other lenses from which to view integration are doctrinal integration, e.g., Army roundout units; organizational integration, e.g., Air Force blended wings or Army multi-component units; training integration, e.g., Army integrated divisions; materiel integration, e.g., Air Force associate units; leadership integration, e.g., Army battalion command exchange program; personnel integration, e.g., Team Coast Guard, Marine Corps Inspectors

At what point can forces integration be distinguished from workforce integration? At the high end (Aerospace Expeditionary Forces, Corps packages, integrated divisions, Marine Expeditionary Forces), it is clearly interorganizational—a force or unit issue. Whole units are joined with other whole units to provide force capability. At the level of an Army company, clearly individuals or small groups from different components are being integrated into one unit to provide unit capability. In the middle, we chose to judgmentally include or exclude based on our assessment of intent. So division staffs, logistics commands, engineer battalions, wings, squadrons, and component command staffs are all examples where workforce integration is planned or practiced.

Organizational Theory as a Basis for Integration

Organizational architecture refers to the formal or official specification of an organization and its governance.[2] Typical choices in organizational architecture include constructing the units that actually undertake the mission of the organization (work that needs to be done), specifying the means of coordinating members and units, and allocating resources and rewards.

Organizations should choose an architectural form that is best for their environment.[3] Architectures come about through either adaptation or selection that could include imposition from without. Adaptation maintains the existing organization but makes adjustments to better align with the environment under the assumption that such change is feasible and beneficial. Selection replaces outdated organizations with new organizational forms. Change of this type is more difficult because of various internal and external constraints. In either case, change could come from inside the service as opportunities pre-

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and Instructors (I&I); facilities integration, e.g., Air Force bases in the continental United States (CONUS).

[2]   Hannan, Pólos, and Carroll (2003).

[3]   "When organizations are structurally aligned with their environment, they perform better" (Carroll and Khessina, 2005).

sent themselves or could be imposed from the outside. Overall, imposing new organizational forms (selection) is more difficult than adapting existing forms.

In the Air Force, creation of associate units[4] for air mobility in 1966–1968 is an example of selection. Use of the associate concept since then in other instances and in functions beyond mobility is an example of adaptation. The more recent creation of the blended wing is also an example of selection. The existing organizations and their architectures were changed, although the same people staffed the new organizations. The previous units had not aligned with their environment in one of two core areas: technology (loss of the B1-B bomber for one organization) and mission (high tempo and low retention in the other).[5] Both previous organizations ceased to exist as a result of a merger of people into a new organizational form.

Workforce Integration

For the purposes of this study, we adopt an Air Force convention and assess operational, organizational, and administrative workforce integration. In operational integration, there is one "owner" or commander responsible for operational mission accomplishment. Operational integration joins together small units temporarily for a common purpose, but each unit has a separate organization and each workforce has an administrative identity. However, in terms of power and authority, there is one commander ultimately in charge of mission accomplishment.

A second form of workforce integration adds organizational integration to operational integration. Under this structure, all the personnel in the active and reserve workforces are assigned to and working in the same organization on a long-term basis. Typically the military

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[4] See the appendixes for more information about the differing forms of service integration cited here. We are assuming the reader has some familiarity with them.

[5] U.S. Senate (2003b).

will refer to this as being on one document for authorizations.[6] However, each workforce component (AC or RC) within the respective unit maintains its own administrative and personnel management directives and processes. Unit identity is maintained, but the workforce identity (AC or RC) of the personnel assigned is known and preserved.

The third form of workforce integration brings administrative commonality into play. All people from the various workforces in the unit can be administered via a single (or, at a minimum, transparent) set of policies. Administrative personnel management directives and instructions encapsulate all workforces.[7]

Workforce Integration in Practice

In the military, the paths toward workforce integration are not similar among the armed forces, and movement along the paths is not occurring at the same rate. For example, the Chief of Staff of the Air Force states that the Air Force has achieved an unprecedented level of integration by "blending units from two or more components into a single wing with a single commander."[8] Traditionally, the Air Force has integrated using associate units, which are separate units that share the equipment of one unit to accomplish particular missions. The Coast Guard believes it has fully integrated its components, operationally and administratively. The Navy has had associate units in one functional area but is using the concept in a limited way. The Army has chosen to integrate at the unit level (battalion and below) and at some headquarters in multi-component units, which are units made up of more than one military workforce. The Marine Corps assigns AC personnel to RC units to assist in training and preparedness.

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[6]   Depending on the service, this may be accomplished in different ways to fit the workings of the databases and systems. From a practical standpoint, the individuals making up the unit appear to be on a single document.

[7]   This form of integration raises additional questions. For example, if administration is common, why have separate workforces?

[8]   U.S. Senate (2003b).

Have some services gone too far in integration (to the point of ineffectiveness) or have others not gone far enough? How will effectiveness be judged? Are there environmental factors that make each organizational architecture useful for the one service but not for the other? Are there other organizational forms of integration that might be used in another service? These are among the organizational questions we attempt to answer as a basis for understanding other changes that must occur to facilitate the organizational architectures.

Figure 3.1 shows how the armed forces have used various forms of workforce integration. The figure includes entries that we believe are accurately placed, based on our assessment. This figure is not comprehensive, and there may be other notable examples of one form or the other of workforce integration that are not included. As we discussed workforce integration with officials in all the services and with subject matter experts, we could identify instances of workforce integration that had not been explicitly listed previously. We suspect that there may be many more instances of integration of various forms.

Air Force associate units (Appendix D) are probably the best known from this list and their more widespread use in the Air Force is an example of adaptation. Both the Navy (Appendix E) and the Army (Appendix A) have made use of associate units, but in a far more limited way. In both services, use of associates shows organizational selection because they were new forms for these services.

For the Army, use of multi-component units is also an example of organizational selection. When multi-component units were first proposed, it was expected that by fiscal year (FY) 2007 there would be over 130 of them across many functional areas. However, as reviewed in Appendix A, over time and for various reasons, the concept has not worked in all areas. Currently, the Army plans to continue to use the concept, but fewer such units will exist.

The Coast Guard (Appendix B) is another example of organizational selection at work: It has new organizational forms with primarily fully integrated workforces. With a few exceptions, all RC personnel are IMAs assigned to AC units, and separate reserve units no longer exist. Team Coast Guard has different workforces (e.g.,

Figure 3.1
Examples of Workforce Integration

| Air Force associate units |
| Navy associate units |
| Army associate units |
| Combatant command (COCOM) |
| Joint reserve unit |
| Individual augmentees |
| Individual mobilization augmentees |

Air Force blended units	COCOM Joint Reserve Directorate
Army multi-component units	IMA in COCOM
USMC inspectors and instructors	Standing joint forces headquarters
Full-time support (FTS)	Joint intelligence centers

| Team Coast Guard |

Operational → **Organizational** → **Administrative**

active officers and Active/Guard Reserve [AGR] officers), but all are integrated across the spectrum of operations, organization, and administration.

The Marine Corps (Appendix C) has AC personnel assigned to RC units as part of the Inspector and Instructor concept. Such individuals mobilize and deploy with the reserve unit. However, for personnel management purposes, most AC and RC personnel management practices are governed by separate policies. The Marine Corps uses Inspectors and Instructors as an integrating method, and it is an example of organizational selection when first used and adaptation thereafter.

Other examples of workforce integration that we found include IMAs, joint reserve units and directorates in combatant commands, full-time support in various units and staffs (e.g., on the Joint Staff or in standing joint task force headquarters), and personnel serving in

joint intelligence centers. There are multiple examples of organizational selection and adaptation occurring over time within a service but fewer examples of organizational architectures adaptation across services.

What Kinds of Units Have Integrated Workforces?

It appears that the various forms of workforce integration have been used across almost all functional areas. For example, in the Air Force one can find examples of units in air control, test and evaluation, fighters, communications, space operation, air refueling, airlift, maintenance, formal training units (FTUs), and special operations. In the Army, examples can be found in aviation, engineer, signal, military police, infantry, cavalry, military intelligence, logistics, medical, dental, transportation, and chemical units. Not all these examples have been successful, however. For the Coast Guard, Marine Corps, and Navy, examples are also available across different functional areas. It appears that no particular function is advantaged or disadvantaged per se by workforce integration, but there may be reasons of operational employment that limit use across functional areas. This is discussed below.

How Many Units Have Integrated Workforces?

With the exception of the Coast Guard, which has integrated almost all units, proportionally not a lot of integrated units exist. For example, the Army has about 6,000 separately identified military units (the majority of which are battalions or companies), but only about 70 multi-component units and one associate unit. The Air Force has about 60 associate units and one blended unit but has plans to use associate units in a more widespread way for F-22 units and post–base realignment and closing (BRAC). The Marine Corps has 190 reserve training centers with Inspectors and Instructors (I&I), but no associate units of which we are aware. The Navy has only two associate units among its separately identified units.

Having reviewed the theory and practical application of work-force integration within the armed forces, in the next chapter we examine factors that enable or constrain it.

Enabling and Constraining Factors

From our interviews and discussions, we have outlined a set of factors that we hypothesize affect workforce integration within units. These factors are associated mainly with organizational structure or work content. None of these has been tested empirically so as to be generalizable, but anecdotal evidence exists for all. These factors were assessed for their ability to integrate traditional unit reservists and individual mobilization augmentees, both of which are part-time workforces. The factors do not necessarily apply for reservists who are in a status of full-time support (full-time workforce). Other issues apply and are discussed in a later section.

Workforce Integration Factors

Table 4.1 shows how certain factors might govern formation of units with operationally and organizationally integrated workforces in a peacetime environment. (For some units, mobilization or deployment might significantly change the effect of the factors.) These factors should apply to all the services equally. While certain functions (e.g., transportation, medical) might seem to be more amenable to integration than others (e.g., infantry), it may be because the factors affect these functions differently and not that they cannot be inherently integrated.

We categorized the factors as being important for workforce integration, useful for workforce integration, and difficult for workforce integration.

Table 4.1
Factors Affecting Workforce Integration

Factor	Important for Workforce Integration	Useful for Workforce Integration	Difficult for Workforce Integration
Work schedule	Continuous (24/7) or intermittent schedules		Fixed (weekday or weekend) schedules
Job-sharing	Job-sharing possible		Job-sharing not possible
Complementary jobs		Reserve military job fits civilian occupation	
Operational value of work	Operational output		Training output
Focus of work		Capital-intensive; platform-centric	Unit-centric
Nature of work	Individual/small team tasks; aggregated effort		Group tasks; collective effort
Command authority		Single source of power/authority	
Workforce interactions		Vertical coordination	Horizontal coordination
Deployment and timing	Can deploy (be employed) on same schedule		Different deployment schedules or lengths
Location of unit		Geographically proximate	Geographically distant
Equipment ownership and commonality	Shared, common equipment	Separately owned, common equipment	Separately owned, different equipment
Unit size		Small, noncomplex units	Large, complex units
Workforce experience		Workforce experience is high and homogeneous	Workforce experience is low or heterogeneous
Nature of association	Routine, frequent association	Periodic, frequent association	One-off, infrequent, or rare association
Workforce identity		Weak or changeable identity and culture	Strong identity and culture
Training standards/ training status	Same standards; individuals qualified or qualifications achievable with minimal training	Same standards; progress toward qualifications	Different standards; some individuals unqualified

The discussion below uses a few illustrative examples drawn from the material in the appendixes. Exemplar units and services are shown in parentheses.

- Work schedules that are 24/7 allow personnel to be used when and as available. Intermittent work (planned or unplanned schedules) can be accomplished by workforces that are fungible with respect to time. However, when a workforce has a fixed-time work schedule (e.g., weekday or weekend) and is not able to adjust easily, integration is more difficult. Many units (e.g., Air Force mobility; Coast Guard waterway safety) have 24/7 schedules and can integrate active and reserve personnel into these schedules as available. Most units, though (e.g., Army division headquarters), have weekday work schedules for AC units and weekend work schedules for RC units, which make integration difficult.
- Job-sharing—interchangeability of qualified people—makes integration feasible. The same person does not have to do the job on a consistent basis (Coast Guard). Many jobs (e.g., leaders, managers, experts) do not fit this pattern.
- A reservist whose military and civilian jobs are similar may be a source of expertise not otherwise available, which facilitates integration.
- Units whose work has operational value (measurable mission production, e.g., ton miles moved) can be integrated better (Air Force mobility) than units whose work effort is geared only to practice or training when not deployed (Army truck units).
- Work effort and a work pace dictated by equipment that can be used for more than one shift a day facilitates integration (Air Force).
- If work outcome is the aggregate output of individual effort, then the individuals can be transient or interchangeable (Coast Guard, Air Force). When work outcome depends on small or large group effort, then all members must be present at the time work is done (Army, Marine Corps).
- Although a single governance authority is useful, examples of successful integration exist in its absence.

- Horizontal coordination does not work if the other person is not present; vertical coordination is often not as time-sensitive or can be handled by different persons in the higher-level unit.
- If all members of a unit cannot be employed simultaneously when needed, integration is difficult (Army).
- The previous factor deals with being "close" in time; being close in space is also useful. Geographical proximity aids integration (Coast Guard, Air Force).
- If one set of equipment is shared (not unlike leasing equipment), there are fewer integration issues than when each workforce owns its own equipment (Air Force associate units).
- Size has a complexity of its own in that more varied types of subordinate units, equipment, and occupations must work together to be successful. Adding workforce integration makes successful outcomes much harder. Smaller, less complex units are more easily integrated (Army power generation sections).
- Workforces that have high and similar levels of experience can integrate better because they can be productive in the absence of supervision (Air Force).
- The more often workforces associate, the less apparent their identities become, and the greater is their ability to integrate successfully (Air Force, Coast Guard).
- Knowing and reinforcing workforce identity limits integration. A strong workforce identity and culture make integration more difficult.
- As AC and RC personnel are trained and resourced (provided with funding) to train to the same standard, integration is eased. Reservists blend into active units seamlessly when they arrive trained to similar standards as the AC unit they are joining. Integration becomes challenging when members of the blending AC and RC units are not equally qualified.

Relationship of Factors

Some of these factors overlap with others or are correlated with each other. For example, job-sharing fits well with individual/small team tasks focused on operational output. Particular factors may work together to favor or hinder integration. Being able to deploy or be employed on similar timelines is an example of a factor that, combined with some other factor, makes integration possible. It is not apparent that any one factor by itself leads to favoring integration or not. It is an accretion of factors that leads toward integration or not. The best example of this may be the Coast Guard where continuous 24/7 schedules, job-sharing, operational output, aggregated effort, common employment schedules, geographically proximate workforces, and a changeable identity allowed creation of a new culture around an integrated Team Coast Guard.

Implications for Personnel Management

Do different personnel management practices for each of the workforces hinder workforce integration? This chapter reviews how personnel management is changing, examines differences in general among active and reserve component workforces, and discusses specific differences in officer personnel management.

Personnel Management

Current thinking around personnel management is that organizations should strive to provide and develop people who can accomplish organizational mission and goals. There is a shift away from managing people based on their input characteristics toward managing people to get needed work done. This shift is the basis for modern day human capital management.

Personnel management of the active and reserve components has been constrained by administrative, cultural, and legal heritages that have accrued over 200+ years of national history. The administrative heritage is that of structures, methods, and competencies that originated in the past. For the reserve component it is the lingering legacies of a local militia birth overlaid with a federal reserve. Both active and reserve components have long memories with respect to how their personnel management policies have evolved, and each believes it knows best how to develop, educate and train, assign and use, promote, and

separate. They have been doing it for two centuries. The cultural and legal heritage imposes currently prevailing values and norms such as fairness, equity, merit, and equality of opportunity. Each component operates within its closed system, and has its own legal and social practices as a result of law, executive order, policy, or state practices. For the National Guard, some practices vary state by state.

While not ignoring completely these heritages, the key influence that new approaches to personnel management strive to consider is the mission and technology orientation by which operational military output is produced and delivered. The issues here are efficiency, effectiveness, flexibility, quality, and innovation. If integrated units are useful from a mission and goal standpoint and personnel management policies are a barrier, new personnel management policies may be needed.

Generalized Workforce Differences

Table 5.1 portrays differences between the active and reserve workforces. There are four major personnel management processes to consider: entering, developing and training, promoting, and transitioning. These are briefly discussed below and aspects of them are outlined for further analysis.

Entering

This process includes entering the component as well as entering a first or subsequent unit. The active component hires nationally, uses a closed system that prefers people without prior service, provides initial entry and occupational training at entry, and assigns qualified personnel to a duty position in an organization. The reserve component hires locally, uses a more open system that prefers those with prior active component experience, provides initial entry and occupational training/retraining over a long period of time, and places qualified and unqualified personnel in units. Hiring and assigning are simultaneous.

Developing

The active component develops human capital through planned horizontal and vertical job rotations (most likely including geographical rotations) and periodic training and education that occur at fixed periods in a career path. It is a time-based system. The reserve component develops human capital through local use (on the job), and episodic-training and education as positions become available. It is more an event-based system. The active component system is a push system; the reserve component system is a pull system.

Table 5.1
Generalized Workforce Differences

Personnel Function	Active Component	Reserve Component
Entering	Hires nationally	Hires locally
	Closed system; no prior experience preferred	Open system; prior experience preferred
	Trains upon entry	Trains over extended period
	Assigns qualified personnel to duty positions	Assigns qualified and unqualified personnel to duty positions
	Distinct hiring and placement	Simultaneous hiring/placement
Developing	Time-based; "push" system	Event-based; "pull" system
	Both horizontal and vertical rotational assignments	Local on-the-job training; few or no rotational assignments
	Periodic training and education at fixed intervals	Episodic training and education as available
Promoting	Rank-in-person system: fungible across jobs	Generally a rank-in-job system: job-dependent
	Service-wide promotion vacancies	Promotion to local position
	Up or out	Up or stay
Transitioning	Time-based	Event- (points) and time-based
	Defined-benefit retirement	Different defined-benefit retirement
	Transition to RC complex	Transition to AC complex

Promoting

The active component system is a rank-in-person system. Personnel are selected for and promoted against service-wide vacancies and eventually placed in a position at the higher grade. Once the rank is achieved, it is kept regardless of what position the person is serving in. The reserve component system is largely a rank-in-job system, although exceptions exist. Each service has slightly different procedures, but in general a position must be found in order for a person to be promoted; rank is "lost" when the person is no longer in a position for that rank.

Transitioning

We described entry into each of the components above. Once a person is in a component, movement can occur from one component to another or out of the component completely (separation or retirement). The active component uses a time-based system for defined-benefit retirement after a certain number of years of service. The reserve component uses an event- (points) and time-based system for defined-benefit retirement at a certain age. Finally, transition between the two components is administratively complex.

Other Factors to Consider in Workforce Integration

Promotion and Command

Another aspect of military personnel management that is a central element for individuals within the system is competition and opportunity for promotion and command positions among officers and senior noncommissioned officers (NCOs), within both the AC and RC. When AC and RC units are not integrated and/or are organized separately, command and control of the unit is clearly established—i.e., an AC commander is in charge of AC forces and equipment and an RC commander is in charge of RC forces and equipment. When AC and RC units are integrated, a contentious aspect of unit-level workforce integration may be how integration will affect an individual's opportunity for promotion. Will it be better, worse, or the same, and who (AC or RC) will be in command?

Promotion boards for officers are statutory boards and are governed by law and DoD and service guidelines. Personnel are considered for promotion based on their merits. Promotion boards are composed of both AC and RC personnel to present a balanced view of the unique contributions and merits of the individuals being considered for promotion.

Some disparities between AC and RC promotion timing exist now and may continue to exist after workforce integration. For example, because RC personnel must wait for a higher-ranking position to become available in their unit, equally ranked AC and RC personnel may have different levels of time-in-service and experience. Thus, AC personnel will typically have less overall time in the military. This challenge was also evident in the Selected Marine Corps Reserve (SMCR), where individuals must compete for open billets. Workforce integration will not solve this disparity, but promotion opportunity and/or challenges need to be communicated as integration is pursued.

Command boards are administrative entities convened and run by the military services. A plan for workforce integration and its impact on command opportunity and selection also needs to be well communicated. The opportunity to gain a command is a motivator that attracts and retains leaders and maintains a quality force, within both the AC and RC. The effect of command opportunity on integrating units is service- and unit-specific and is dependent on the organization of the units. An example of changed command opportunity is the Coast Guard, where the AC commander is in command of all AC and RC personnel. Now, with an integrated force, there is no opportunity for command for a Coast Guard RC officer. Command opportunities are not always aligned within a service's AC and RC. For example, although the Air Force 116th Air Control Wing did enjoy operational successes with integration of Air National Guard (ANG) and Air Force AC units (see Appendix D), the fact that ANG and AC command rotation policies are in conflict made integration challenging: AC commanders rotate after two years, whereas ANG commanders remain in command longer—in some cases until they are promoted or retired. These examples show that the effect of command and com-

mand opportunity on the force must be carefully weighed when workforce integration plans are made.

Is Administrative Integration Needed for Workforce Integration?

We explored this question as part of our study by reviewing selected private-sector practices and those of another military and by examining in detail the differences between active and reserve component officer management for one service. Title 10 and Title 32 of the U.S. Code govern many of these processes, and the reserve officer management system (generally called ROPMA, for the Reserve Officer Personnel Management Act) was modeled after the active officer management system (generally called DOPMA, for the Defense Officer Personnel Management Act). Many studies have suggested the need to change the latter to better fit the missions, organizations, and technology of this era. Whether ROPMA also needs updating is an unanswered question. What we were asked to do, though, was to examine whether differences in personnel management policies between the components hinders workforce integration of active and reserve components at the unit level.

Do personnel management differences between the component workforces need to be resolved to achieve workforce integration? Our review of workforce integration in multiple instances leads to the observation that it does not. Change may be desirable for other reasons but appears not to be needed for workforce integration. There are many instances where members of different workforces integrate operationally and organizationally to serve mission needs, but not administratively and without impact on mission.

There are many examples, some extreme, where organizational integration works quite well even with separate personnel management policies and practices for the workforces. A simple example is the many headquarters organizations (e.g., Army Table of Distribution and Allowances [TDA], enlisted, active, reserve) and DoD civilian and contractor workforces work side by side to accomplish missions and goals. Another example is that of military organizations external to the military services (e.g., the combatant commands) where members of all the military services (both active and reserve) work together

without disruption from different personnel management policies. For example, AGRs[1] routinely serve in joint organizations. Also, members of the various reserve components come together without problem in Joint Reserve Units. Active-component Marines serve in reserve units without problems. Moreover, even in military organizations, enlisted and officers follow separate personnel management rules without any apparent problems.

Several more extreme examples: the British Royal Navy has personnel assigned to private-sector organizations but who are administered for personnel management under Royal Navy rules. The U.S. Army has Stryker Brigade Combat Teams where contractors routinely integrate at the unit level to provide support including in deployments. It is not readily apparent why administrative integration should be more difficult for purely military units that have multiple workforces with their own personnel management policies and practices. In the private sector (see universities and hospitals in Appendix F), workforces operating within different personnel and administrative structures are blended to accomplish missions and goals.

The Coast Guard has fully integrated its active and reserve components but the changes to personnel administration came after the fact. All RC personnel are assigned to an operational commander and are organizationally, operationally, and administratively integrated within their respective units. The operational commander owns all equipment and systems, is solely responsible for mission accomplishment, and as such organizes and operates his/her unit and personnel to best meet mission needs. While some RC administrative procedures are different from the AC, all AC and RC administrative personnel are cross-trained to service all assigned personnel.

Administrative workforce integration is most desirable as an eventual outcome for those who view integration as an end and not just a means. However, such integration may not be needed to achieve the goals associated with active and reserve operational and organizational integration. We did not find instances where personnel management integration is required for operational or organizational integration.

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[1]   Active Guard and Reserve personnel who are in full-time support.

Some friction can occur when inequities in personnel management policies appear to advantage the AC over the RC or vice versa. While there are differences in personnel management policies both within and across the services and challenges exist, our research and interviews did not uncover challenges that were sufficiently problematic to be barriers.

We were not able to conclude that personnel management policy prevented workforce integration at the organization and operational levels. Certainly, common information technology systems could facilitate blending workforces, but personnel management policies do not appear to be barriers.

The nuances of personnel management are complex. Although change may be warranted on its own merits, our review led us to the conclusion that different personnel management practices are not necessarily barriers that must be overcome to achieve workforce integration. Rather, the differing practices must be understood and accommodated. In essence, the issue is training and education rather than a barrier per se. Where there are difficulties in administering different personnel management policies in one unit, those difficulties are more the function of the administrative information management systems than a function of personnel policy. Personnel management practices must be based on coherent and consistent bundles of policies. But there could be more than one set of personnel management policies operating within an organization, each serving its own constituency.

Workforce Integration: Other Considerations

While they were not directly part of our research questions, other considerations were identified during the course of our research. We review these issues here.

Cascades of Process Change

The organizational architecture changes made to foster workforce integration, which we discussed in Chapters Three and Four, create changes in other processes. A single initial change often begets a series of subsequent changes as well.[1] The initiating change is usually structural because the organizational architecture is more malleable to management and individual decisionmakers (e.g., the Secretary of the Air Force or Chief of Staff of the Army). This change might be sensible in that it would likely improve organizational alignment and performance. However, changes can also degrade performance in either the short or long term, especially through unintended consequences. Organizations with complicated patterns of interconnections among their subordinate units will generate longer cascades of change when given a new architecture. The likelihood of failure increases with the complexity of the interconnections and with the time it takes to respond to changes.

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[1] Adapted from Hannan, Pólos, and Carroll (2003).

For example, we hypothesize that the creation of the Air Force associate architecture caused fewer cascades in processes because it was less intricate, could be implemented faster, and thus had a high survival rate and even grew. But it has taken nearly 40 years for the Air Force to adapt this architecture to different areas beyond mobility (airlift)—e.g., to fighters. We might further hypothesize that this architecture has not been replicated in the other military services because they have the more difficult problem of organizational selection rather than adaptation.

In this section we outline the other process changes for the military that flow from organizational structural change. The cascades of resulting change can be described through the use of a military analytical framework that uses a process called DOTMLPF analysis. DOTMLPF stands for Doctrine, Organizing, Training, Materiel, Leadership, Personnel, and Facilities. Briefly, *doctrine* concerns procedures, regulations, and/or policy that govern the way things are done. *Training* and *education* provide changes in behaviors, attitudes, knowledge, and skills needed to perform missions. *Materiel* has to do with weapons, platforms, equipment, and parts used in getting things done. *Leadership* deals with both setting direction for the things to be done and planning for and controlling the results. *Personnel management* ensures that qualified and motivated people from the various defense workforces are available to do what needs to be done. *Facilities* represent the infrastructure, systems, and support germane to getting things done. The *mission,* of course, constitutes what is done, and all activities, including organizing, are directed toward performing the mission.

Challenges to Integration

Below, we list process challenges created by structural change to achieve workforce integration. They are drawn from various sources, including our interviews. We have categorized them according to our own judgment.

- Doctrine
  - Command and control
  - Need for operational cohesion and coordination

- – Operational use of AGRs
- – Operational availability
- – Readiness reporting
- – Component-specific funding
- – Deployment availability
- – Geographical dispersion
- Training
  - – Training availability
  - – OPTEMPO funding
- Materiel
  - – Equipment modernization and compatibility
  - – Property accountability
- Leadership
  - – Identity and culture
  - – AC command opportunity
  - – RC command opportunity
- Personnel
  - – Work scheduling
  - – Career and job expectations
  - – Personnel performance evaluations
- Facilities (supporting systems)
  - – Pay and personnel systems
  - – Travel reimbursement
- Resourcing
  - – Funded drill and training periods
  - – Funded material/equipment

These challenges are structural and attitudinal. Simply separating specific workforce integration challenges from the broader challenges of reserve component management and mobilization is difficult. Although this monograph has touched on some of these challenges, we were specifically tasked to enumerate and evaluate the challenges with respect to personnel management policies.[2]

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[2] We were asked to examine organizational factors and potential personnel management barriers to workforce integration. The change management literature and observations from

Workforce Integration Has Implications for Work and the Workforce

The change in organizational architecture in moving from pure (one workforce) units to integrated units affects both the nature of the work that is done and the nature of the workforce that accomplishes it. We use Table 6.1 to describe examples of both types of change.

The boxes deal with two discrete dimensions: *work,* which is either permanent or temporary, and *employment,* which is full time or part time. There are implications in two of the boxes that are not usually considered: A part-time workforce could do permanent work (e.g., job-sharing) and a full-time workforce could do temporary work (e.g., a project-to-project assignment). Most people currently envision the active component (full-time) doing permanent work and the reserve component (part-time for most reservists) doing only temporary work.

Table 6.1
Nature of Work Versus Employment Status

		Nature of Work	
		Permanent	**Temporary**
Employment Status	**Full-Time**	Active-duty, EAD[a] and full-time support (AGR)	Reservists serving on ADSW[b] to meet short-term full-time operational requirements
	Part-Time	Drilling reservists	Rescheduling IDT[c] and ADT[d] to meet short-term contingency requirements

[a]EAD = Extended active duty.
[b]ADSW = Active-duty for special work.
[c]IDT = Inactive duty training.
[d]ADT = Active duty training.

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our review of two private-sector organizations with highly integrated workforces stress that barriers to change can be overcome by (among other things) strong leadership, a clear sense of purpose, and continuous improvement.

The work or demand continuum needs to be explored more fully along with the employment or supply continuum. It is especially important to look at matching workforces to work in ways they are not currently matched. Not only should the reserve component be analyzed across a continuum, but the active component should be as well.

The idea of a continuum of service[3] simply expands the employment status concept using continuous dimensions. There is also a continuum of work in which jobs could be extremely temporary or, at the other end, very permanent. These continua of work and/or service could exist in integrated units or in RC units, irrespective of whether they are integrated. For example, Air Force RC flying units employ significant numbers of full-time personnel doing permanent work as well as part-time traditional reservists doing temporary or permanent work. The maximum hours (or drills) served in an RC unit is limited, not by statute, but by budgets designed to meet mission and training requirements. In integrated units, it is common to see full-time reservists and civilians working alongside full-time active personnel—all of them doing permanent work. RC statutes set the minimum limits on days to be served, and it is common for RC unit personnel to be employed up to full-time via flexible workdays/hours.

A change in workforce integration could allow for more or less of permanent and temporary work as a means of expanding the potential use of a part-time or full-time workforce. In particular, the use of blended units implies that a part-time workforce[4] can integrate with a full-time workforce to do permanent or temporary work. The nature of the work itself may be a key factor in successful integration of the two workforces. Moreover, even if blending units organizationally does not change the type of work available, it might allow for a part-time or full-time workforce to accomplish more of the work that needs to be

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[3] A *continuum of service* refers to a description of an individual's availability for service, ranging from members of the Individual Ready Reserve (IRR) who do not normally train with units to active-duty personnel, to individuals who perform short-term active service, to reservists who volunteer for active duty for up to 365 days. The continuum spans the range of employment and all categories of duty from drills, to annual training, to active duty in support of specific requirements and contingencies, to full mobilization.

[4] Some blended units comprise mainly full-time reservists and full-time actives.

done. For example, the Coast Guard has many 24/7 missions to which a part-time workforce can contribute, as does the Air Force with its air mobility missions.

Concluding Observations and Recommendations

This chapter summarizes findings and observations from the two previous chapters and presents overall conclusions and recommendations.

Observations

The forms of workforce integration that are used by the armed forces have counterparts in the private sector. But just as different forms are used in the private sector to fit the environment and need, no one form fits all situations in the military. Having said that, however, we believe there are factors that assist in governing the choice as to whether to blend workforces within units in a certain way or to keep workforce-pure units.

One factor that stands out as making workforce integration difficult is strength of identity or culture. It may be that successful unit-level workforce integration stands in contrast to strong AC or RC workforce identities or cultures. If there is a single identity or culture for all the workforces, there is no practical distinction among them other than part-time or full-time. But although integration within an operational construct may be feasible where strong identities exist, the need to maintain strong identities brings challenges with it, and achieving complete organizational or administrative integration may then be more difficult.

Some other observations emerge from our assessment. First, where organizational factors align, personnel management does not appear to

be a significant problem. We highlighted examples of this in Chapter Five. Second, where organizational factors do not align to favor integration, personnel management changes will not achieve integration. The match of workforce to work is more problematical than personnel management of the separate workforces.

There are also political challenges in integrating National Guard and federal units. Governors have strong interests in their National Guard units and employment of them for state active duty or in Title 32 status is problematic in integrated units.[1] Workarounds do exist to address these limitations, but the workarounds must typically be agreed to by both the president and the governor and that makes them difficult to implement.

Recommendations

We have three recommendations. First, adapting what works within a service to other functional areas in the service is a better near-term workforce integration strategy than replicating forms of integration across services. In essence, the goal should be "adapt within rather than force organizational selection from without." For example, if the Army is comfortable with multi-component units, finding more instances where they could be used appears more desirable than mandating use of associate units. If the Air Force is comfortable with associate units, it should use them and not multi-component units. The nature of certain armed forces may make adaptation a useful strategy across them. For example, the Navy might evolve to a form of workforce integration similar to what the Coast Guard has done. However, while the Coast Guard has effectively integrated through use of IMAs, the nature of the Navy's work as well as other factors (location of work, time, distance) may preclude effective adoption of this form of integration. The Marine Corps has multi-component units without using that name

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[1] Guard troops in Title 32 status are under the control of the governor but are federally funded.

and should probably be encouraged to adapt the concept further without the need for labeling them in a different way.

Second, moving toward the future, during their force structuring (organizational design) processes, the services should provide policy guidance that makes workforce integration (e.g., multi-component and associate units) a consideration given certain factors of the type we outlined in Chapter Four.

Third, the services should consider performing more evaluation of workforce integration against the objectives for it (discussed in Chapter Two). Is effectiveness actually higher and are costs actually lower? Examples where integration has been beneficial (see the appendixes) could be modeled by other services and used to their benefit. Evaluation against the goals asserted for workforce integration could be performed by measuring attitudes and outputs (mission accomplishment) as a result of change. Increased understanding of the actual effects of workforce integration within units can lead to greater emphasis on the respective strengths of the workforces and more efficient use of resources.

Integration of the Active Component and Reserve Components in the Army

Background

The United States Army consists of three components: the Active Component (AC), the United States Army Reserve (USAR), and the Army National Guard (ARNG). Collectively, the USAR and ARNG are referred to as the "Reserve Components" (RC). Unlike the other armed forces, the majority of Army manpower (54 percent in FY 2004) resides in the reserve component. Although many similarities exist between the USAR and ARNG, Title 10 of the U.S. Code governs the USAR, whereas Title 32 of the U.S. Code applies to the ARNG during peacetime and Title 10 during wartime. In assessing AC/RC integration efforts, the dual federal-state mission of ARNG units must be considered.

The Army's AC/RC integration programs are formalized in FORSCOM Regulation 350-4.[1] The first four programs listed below are integrated at the forces level or for training. The fifth program is a unit or workforce integration program that is of interest to this research. The Army programs are as follows:

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[1] Department of the Army (2003).

1. *Active Component/Reserve Component Association Program.* This program establishes formal training relationships between priority RC units such as Enhanced Separate Brigades (eSBs)[2] and AC units at brigade (colonel) level or higher, implementing AC association requirements mandated by Section 1131, ANGCRRA.[3] The ARNG divisions and reinforcing aviation units are also assigned AC associations, whether they are priority units or not. Unit relationships center on the sharing of professional experience and coaching, with associated AC unit commanders executing specific training management roles.

2. *Corps Packaging.* This aligns ARNG divisions and eSBs and Combat Support (CS) and Combat Service Support (CSS) units of the ARNG and Army Reserve with active-duty Army corps, facilitating exercises, training associations, and sourcing of contingency operations. Within Corps Packaging, RC units are partnered with AC units for mutual support of training and operational requirements where possible.

3. *Integrated Divisions.* One heavy and one light division made up of an AC headquarters, each commanded by an AC Major General. The division consists of an AC headquarters with three eSBs assigned to each division. Division commanders provide training readiness oversight and serve as AC associate/senior mentors for assigned brigades. The division headquarters, lack-

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[2] Enhanced Separate Brigades have been the principal RC ground combat maneuver force and are organized, equipped, and sustained to be doctrinally employable, command and control compatible, and logistically supportable by any U.S. Army corps or division. The term "enhanced" refers to increased resource and manning priorities.

[3] The Army National Guard Combat Readiness Reform Act (ANGCRRA) of 1992 (Title XI, Public Law 102-484, as amended) mandates initiatives to improve ARNG readiness in the areas of personnel qualification and deployability enhancements; capability assessment; and compatibility of ARNG units with AC units. As amended by Section 515 of the National Defense Authorization Act for Fiscal Year 1996 (Public Law 104-106, 110 Stat. 308), Section 1131 of the National Defense Authorization Act for Fiscal Year 1993 (Public Law 102-484, 106 Stat 2540) requires the ground combat maneuver brigades of the ARNG and combat support and combat service support (CS/CSS) units of the Army Selected Reserve that the Secretary of the Army determines are essential for execution of the National Military Strategy to be associated with an AC unit at brigade level or higher.

ing a CS/CSS base, is not deployable in present configuration and the eSBs will deploy independent of the division headquarters. The 24th Infantry Division (Mechanized) is located at Fort Riley, Kansas, with a forward element at Fort Jackson, South Carolina. Brigades from North Carolina, Georgia, and South Carolina are assigned to the 24th Infantry Division. The 7th Infantry Division is located at Fort Carson, Colorado, and has brigades from Arkansas, Oregon, and Oklahoma. At the time of our research, both of these divisions were under consideration for being disestablished.

4.   *Training Support Twenty-One (TS XXI).* In accordance with the ANGCRRA, the foundation of TS XXI is providing synchronized, integrated, and effective training support to priority units to achieve premobilization training goals, readiness levels, and reduce the time required for postmobilization training prior to operational deployment. The TS XXI structure integrates training support brigades and their subordinate units into training support divisions under the operational control of the Continental United States Army (CONUSA) for training support. These specifically structured organizations, with clearly defined functions and responsibilities for both pre- and postmobilization training, are designed to provide focused and streamlined RC training support.

5.   *Multi-Component Units (MCU).* Multi-component units are established as single integrated Modified Table of Organization and Equipment (MTOE) units, comprising personnel from more than one Army component. The unit (flag) may be AC, ARNG, or USAR with elements from one or both of the other components. The intent is to integrate, to the maximum extent within regulatory and legal constraints, resources (manpower, equipment, and funding) from more than one component into a cohesive, fully capable Army unit.[4]

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[4]   "The intent is to maximize integration of Active and Reserve Component resources. MCUs have unity of command and control similar to that of single-component units. MC status does not change a unit's doctrinal requirement for personnel and equipment; force

Although AC/RC integration in the Army has progressed since 1997, legal, financial, and cultural challenges remain.

AC/RC Integration Challenges for MCU

Multi-component units provide good examples with which to examine the legal, financial, and cultural issues affecting AC/RC workforce integration efforts.

The impetus for establishing MCUs began in June 1998, when the Chief of Staff of the Army, General Dennis J. Reimer, released a White Paper titled, *"One Team, One Fight, One Future: Total Army Integration."* By 1999, the first MCUs had been documented in the Army. The Army's original plans called for as many as 132 units, but by FY 2005, the Army had scaled these plans back to 85 units. While changes in the National Military Strategy, and thus, Army force structure, were responsible for some of these reductions, the AC/RC integration challenges proved too much to overcome for certain MCUs.

The following challenges existed at the beginning of FY 2005.

Legal Challenges

Command Legal Authority. Both USAR and AC commanders may exercise disciplinary authority over USAR and AC soldiers because both USAR and AC are federal components in wartime and peacetime. ARNG soldiers, however, are not in federal status during peacetime, and thus each state retains disciplinary authority.[5] In MCUs that include ARNG soldiers from different states, each state has authority over its soldiers, even while the units are training together. Although non-ARNG commanders of MCUs may forward requests for disci-

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packaging; or tiered resourcing. No limit has been established for the number of MTOE units that may become MC, and the concept is available to both Active and Reserve Component units. MCU selection is based on mission requirements, unique component capabilities and limitations, readiness implications, efficiencies to be gained, and the ability and willingness of each component to contribute the necessary resources" (Department of the Army, 2001).

5   Department of the Army (2002).

plinary action through the state chain of command, authority to take disciplinary action resides with the state.

Another complication for non-ARNG MCU commanders occurs when the ARNG portion of an MCU is called to duty for a state mission involving law enforcement. The Posse Comitatus Act prohibits any commander with a federal commission from commanding soldiers during state missions that involve law enforcement functions.

Availability of RC Prior to Mobilization. RC personnel are only available for authorized training days, except under presidential call-up or mobilization. The challenge for an integrated unit is to create a "ready" unit with one portion training 365 days per year and one portion training only 39 days per year.[6]

Access to the RC portion of the unit may even be limited upon mobilization, depending on which of the five levels of mobilization occurs.[7] Thus, when considering which units to integrate, the possible time delay of the mobilization process for the RC portion of the unit must be considered.

Financial Challenges: Appropriations (Funding/Resources)

Financially, the cost of RC units has historically been less than the cost of AC units. Although the reserve components constitute 54 percent of the Army's total force, they have historically consumed just 8 percent of the Army's budget. Much of the reduced cost comes from reduced manpower costs—39 days per year active duty for the RC versus 365 days per year for the AC. In addition, since the reserves have fewer training days, their equipment has historically been funded at lower levels also. For example, operation and maintenance funding for the California Army National Guard's 40th Infantry Division was based

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[6]   Both guard and reserve soldiers usually participate in 24 drilling days—typically 48 four-hour training periods—each year, performed during one weekend per month. In addition, guard and reserve soldiers usually participate in 14 and 15 days of annual training, respectively, each year.

[7]   Selective mobilization, presidential Selected Reserve call-up, partial mobilization, full mobilization, and total mobilization.

on 112 miles per tank in FY 2000, compared with the 800 tank miles that are normally allocated to active heavy divisions.[8]

However, increased use of the RC, whether for such contingency missions as Bosnia, for more training with AC units, or for operations, increases the overall costs for the Army. In addition to having to fund the manpower costs for additional active-duty days, it must account for the cost of maintaining, upgrading, and replacing equipment being used at much higher rates.

The AC, USAR, and ARNG receive separate congressionally appropriated funds each fiscal year. In compliance with 31 USC Section 1532, transferring funds between these appropriations requires legislative change/approval. AC soldiers are paid from Military Personnel Army (MPA), USAR soldiers are paid from Reserve Personnel Army (RPA), and ARNG soldiers are paid from National Guard Personnel Army (NGPA) accounts. Sustainment funds are separately appropriated as Operations and Maintenance Army (OMA), Operations and Maintenance Army Reserve (OMAR), and Operations and Maintenance Army National Guard (OMARNG). As mentioned previously, equipment is funded for usage based on OPTEMPO, or usage determinations. In an MCU, equipment and operators do not always belong to the same component, further complicating the issue. An ARNG truck provides a simple illustration of how these appropriations affect operations within the components. An ARNG truck driver not in federal status is paid from NGPA. If he drives an ARNG-owned truck, its maintenance is paid from OMARNG based upon predicted usage, normally 39 days per year. If the ARNG truck driver drove an AC-owned truck, he would still be paid from NGPA, but the truck would be OMA-funded for 365 days per year of usage. If an AC truck driver drove an ARNG-owned truck, the truck would still be funded for only 39 days of usage per year, even if the truck were actually driven 365 days per year.

In a single-component unit, where personnel, pay, and equipment usage match, these separate appropriations ensure that funds are adequate for projected training. In an MCU, however, the AC portion of

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8   GAO (2000).

the unit must constantly balance the desired training versus the level of funding the RC portion of the unit is allocated. Additionally, commanders cannot transfer "extra" funds to another component of their unit to fund additional training. And funding of training area upgrades or other projects may produce conflicts as to which missions are "state" and which are "federal" and who should pay for the projects.

Geographical Dispersion

AC units typically reside as one entity on a military installation. AC personnel are easily moved from one unit to another to ensure the correct numbers of personnel by rank and skill. RC units typically occupy a reserve center or armory in a city or town. Since the population tends to be fairly static, RC units are often split between locations in order to have access to sufficient population density to support an RC unit. The philosophy may be summed as, "The AC is people to units; the RC is units to people." Consequently, when integrated units form, they are rarely colocated. A good example is the 52d Engineer Battalion, which had AC at Ft. Carson, Colorado, USAR in New Mexico, and ARNG in Oregon. The result was one unit split between three states trying to coordinate training.

Moving the entire unit to one location and having soldiers travel to the unit is not cost-effective. Regulations and law contain time and distance constraints that prohibit reimbursement of travel expenses for soldiers who travel to join RC units.[9] Location makes integration of combat forces particularly difficult, since fewer than 5 percent of the National Guard armories are located within 50 miles of the Army's active heavy forces.[10]

Equipment Compatibility

Since most of the RC has been planned for deployment after the AC, the Army has assumed risk by equipping the RC at lower levels than

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[9] Proposed solutions are to designate MCU as "high priority units," which would allow RC soldiers an additional $10 per inactive duty training (IDT) period and legislative change to allow RC members to be reimbursed for travel under specified conditions.

[10] GAO (2000).

the AC, and often with equipment that is obsolete in the AC. Upon integration, the AC and RC may have equipment that is very different from one another.

For example, soldiers trained on the Army's latest M1A2 tanks would not be familiar with the operation of the ARNG's older M1A1 tanks. Maintenance and parts also become difficult due to parts, tool, and manual differences. Incompatible radios and automated information systems can inhibit communication capability within the unit.

On the other hand, the National Guard and Reserve Equipment Account (NGREA) at times provide the RC with more modern equipment than the AC. However, DoD Directive 1225.6[11] prohibits the transfer of equipment from the RC to the AC without congressional approval.

Another equipping issue is the use of unit equipment by ARNG soldiers for state-directed missions. MCU commanders must be aware that state missions may, at times, take precedence over scheduled training.

Readiness Challenges

Since the RC is funded at lower levels than the AC and includes fewer training days and often less modern equipment, maintaining the RC portions of MCUs at comparable readiness to the AC portions of the MCUs is not possible. Thus, when mobilizing, the AC portion of the unit may be capable of earlier deployment than the RC portion of the unit.

Personnel, Promotions, and Pay Systems

Personnel issues within MCUs include visibility of personnel status, promotions, and pay. Visibility of personnel currently resides on separate automated information systems specific to the AC, ARNG, and USAR. While the Army has an integrated automated information system planned, the "one-Army-personnel" system has yet to be

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[11] Department of Defense (1992).

implemented.[12] The result is that commanders of integrated units must access three separate systems to view the personnel status of their unit. The separate systems complicate the ability of the commander to assess the training and readiness status of an MCU.

The integration of the personnel automated information systems is compounded by the differences in promotions and personnel statuses of the components. Not only must a soldier have the correct qualifications to be promoted, but there must also be an authorized position available for that soldier at the next-higher rank. In the AC, qualified soldiers can move to a unit requiring their rank and skill, regardless of its location. In the RC, however, soldiers are usually not able to move because of their civilian jobs. Thus, RC soldiers often must wait many years for a position of higher rank to become available in that unit. The result upon integration is that soldiers of the same rank often have different levels of service time and experience. RC soldiers may resent younger AC soldiers at the same rank because the AC soldiers will typically have far less time in the military.

In addition, because pay is based on rank and time in service, AC soldiers with less time in service may be paid more because they have risen through the ranks more quickly than their RC counterparts. Integration of these dissimilar levels of age, rank, and experience can affect the cohesiveness of the unit if not managed and understood.

Full-Time Support Personnel for Reserve Component Unit Support

As AC and RC integration proceeded, AC sections of units found that they needed RC full-time support personnel to assist in administering and supporting the RC elements of the unit. The AC personnel were neither trained to support RC personnel nor often colocated with the RC portions of the units. In addition, the AC felt that Active/ Guard Reserve (AGR) soldiers were too limited by Title 10 and Title 32 to "organizing, administering, recruiting, instructing, or training the reserve components." The AC wanted AGR soldiers to be able to

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[12] Providing a common database for personnel asset visibility and accountability is linked to implementation of the Defense Integrated Manpower Human Resource System (DIMHRS) and the Integrated Total Army Personnel Database (ITAPDB).

be used operationally as well. While the FY 2000 National Defense Authorization Act authorized the desired expansion, it only pertained to Title 10 AGRs, and not to the portion of National Guard AGRs governed by Title 32, who are managed by the states. The National Guard Bureau submitted a request to further amend 10 USC 12310(b) to extend the modification to include Title 32 AGRs. However, the RC remains concerned that expansion of AGR duties will result in AGR soldiers being used to fill AC personnel shortfalls, rather than performing their primary duties of full-time support to RC soldiers.[13]

Examples

The 4th Infantry Division

The original concept of the 4th Infantry Division (4ID) was a Force XXI multi-component unit design. The original design included entire ARNG units, referred to as "dual-mission" units, as well as USAR and ARNG individual soldiers integrated into 4ID units. ("Dual-mission" refers to units such as an ARNG multiple-launch rocket system battery, which also retained its mission with the ARNG 49th Armored Division.) The original 4ID design consisted of 16,339 AC spaces and 475 RC spaces, of which 293 were individual spaces.

However, as the concept began to be implemented in 1999, the 4ID discovered significant challenges in filling the RC spaces, including high densities of certain military occupational specialties, little or no upward mobility for a majority of RC soldiers, a limited recruiting base, and the inability to reimburse RC soldiers for travel in excess of 50 miles to and from Inactive Duty Training (IDT) sites.

For example, the original design had a platoon of RC soldiers supervised by an AC soldier. The result was that during the week the AC soldier had no soldiers to supervise, and one weekend a month he had a platoon of RC soldiers. In addition, since the supervisor space was AC, none of the RC soldiers could be promoted to supervisor. Additionally, since the majority of the division were AC, they required

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[13] Owens (2001).

logistical support on a full-time basis. Because many of the RC spaces were for logistical support, such as medics and petroleum supply, the 4ID found it difficult to support training without full-time logistical support.

The result was a conversion of nearly all the spaces back to the AC. Currently, only about 44 RC spaces remain in the integrated units of the 4ID. The dual-missioned ARNG units remained. Since the dual-missioned units are component-pure, they did not face the same challenges as the integrated units.[14]

The 52nd Engineer Battalion

The 52nd Engineer Battalion is a unit that faced all the challenges of an MCU—legal, financial, and cultural. The mission of the 52nd Engineer Battalion is to increase the combat effectiveness of the division, corps, and theater army forces by accomplishing general engineering tasks and limited mobility, countermobility, and survivability tasks; to construct, repair, and maintain main supply routes, landing strips, buildings, structures, and utilities; and to perform rear-area security operations when required. The battalion consists of an AC headquarters company of 220 soldiers and an AC line company of 144 soldiers at Ft. Carson, Colorado, an ARNG line company of 144 soldiers stationed at two different locations in Oregon, and a USAR line company of 144 soldiers stationed at Ft. Carson, Colorado, and in New Mexico.

In terms of equipping, the establishment of the 52nd Engineer Battalion resulted in the AC and ARNG portions of the unit receiving more modern equipment, which resulted in better readiness. Training also improved.[15] However, personnel and funding challenges proved difficult to overcome. Increased personnel tempo for training and the perceived increased likelihood of deployment discouraged some RC soldiers from reenlisting. While the number of soldiers expressing "if I'd wanted to be AC, I would have stayed in the AC" was small, it nevertheless was a real concern for the RC portions of the unit striving to maintain personnel strength. In terms of promotion and advancement,

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[14] GAO (2000).

[15] O'Donovan (2002).

engineer officers on the battalion staff found less opportunity for command since two of the three companies that officers would normally be able to command were RC commands, rather than AC commands. Since one company was a USAR company, an AC officer was able to assume command when a USAR officer was not available, but that was the exception. Because personal clothing and equipment are funded by each component, they did not improve as much as battalion equipment did. The AC clothing and equipment tended to be newer and more modern than the RC clothing and equipment, which was readily apparent at battalion-level training.

Associate Units

The Army has made limited use of associate units. The USAR organized Associate Truck Companies (ATCs) to reduce unresourced requirements while maximizing use of available assets.[16] The USAR activated or converted six units to ATC in FY 1999 and FY 2000. These units were organized without typically authorized trucks and trailers. The concept was that AC truck units would leave their trucks in the continental United States (CONUS) at deployment. The USAR ATCs would mobilize, train with, and deploy with the AC trucks left behind. As resources become available, selected ATCs could be authorized for one platoon set of trucks for enhanced training opportunities. If equipment was not available, the alternative was to draw a squad set of equipment from a Reserve Equipment Concentration Site. This program has atrophied. Originally six USAR companies and active affiliates were identified. Only one remains as of FY 2005.

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[16] Memorandum for Reserve Component Coordination Council (2000).

Integration of the Active Component and Reserve Components in the Coast Guard

The Coast Guard Changed Its Organizational Structure

The Coast Guard developed a plan to integrate the active and reserve components in 1994. Prior to integration, the U.S. Coast Guard Reserve (USCGR) had a great deal of autonomy from the active component. This autonomy was evident in its organizational and administrative support units, structure, equipment, and policies. Prior to integration, the USCGR had

- reserve units
- reserve facilities and equipment
- separate administrative and support structures
- separate pay and personnel systems and manuals
- separate policies and forms.

In 1994, the Coast Guard leadership instituted a single military force called "Team Coast Guard." The plan merged the Coast Guard's active and reserve components into a single force of full-time AC and part-time RC military personnel. The goal of the plan was to have one unit commander fully in charge of all active and reserve resources. To accomplish this, reserve personnel were integrated with the active component unit in which they augmented. Coast Guard leadership

developed plans and policies to integrate the reserves with the active forces.[1] They did this by

- restructuring the Coast Guard Reserve at the field level by placing reservists under the direct operational control of the augmented active command
- integrating AC and RC administrative control structures
- eliminating reserve unit commanding officers, except in units needing special training, such as port security units (PSUs)
- developing a reserve personnel allowance list (RPAL) that assigns each selected reserve billet a unique identifying number
- integrating district readiness and reserve division functions into other staffs.

The long-term goal of the 1994 plan was to fully integrate active and reserve commands, provide active component commanders with a rich mix of well-trained full-time and part-time resources to respond to any contingency, while more effectively and efficiently executing day-to-day missions.[2]

A New Organizational Approach Required Changes to Other Processes

The U.S. Coast Guard plan for RC integration changed the organizational architecture of the active and reserve forces. To accommodate these changes, shifts were necessary in other processes including doctrine, training and education, material, leadership, personnel, and facilities. The following relates to how the Coast Guard developed processes to support their integration efforts.

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[1] Commandant of the Coast Guard (1994).

[2] Commandant of the Coast Guard (1994).

Doctrine

Doctrine refers to the fundamental principles that guides the organization's actions, and describes the Coast Guard approach in applying the basic principles of war. The new organizational architecture guides Coast Guard doctrine.

Under the Coast Guard integration construct, every reservist is an Individual Mobilization Augmentee (IMA).[3] The exceptions to this are the Coast Guard Port Security Units, which are nearly 100 percent reserve staffed, and Naval Reserve Harbor Defense Command Units, which have Coast Guard Reservists assigned. Under Team Coast Guard, most Coast Guard Reservists are now assigned to, drill with, and mobilize with a parent active unit. In the Coast Guard, every reservist is trained to perform a wartime mission.

Training and Education

Reserve component personnel are now directly assigned to the active units in which they train. The active-duty unit commander is responsible for establishing training requirements for both active and reserve personnel in support of units' mission needs. In this regard, the augmentation of active units by Coast Guard reservists is efficient, and the benefit of direct training received is realized through mobilization. Reservists maintain close ties with the units that they augment, and because they train with this unit, their efforts and skills are directly applied to the unit's mission. Discussion with Coast Guard authorities indicates that, because of the hands-on training, education, and close affiliation that reservists experience with their units, many reservists drill during the week as well as the weekend. This is facilitated by the fact that many Coast Guard activities are conducted 24 hours a day and 7 days a week (24/7).

Materiel

The effect of the changed organizational architecture on materiel is that the active-duty commander now owns all the materiel resources. Budget requests for tools, equipment, and supplies to support reservists

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[3]   Commandant of the Coast Guard (1994).

are made only by the operational unit to which reservists are attached. The goal of this financial accounting responsibility is to give the active-duty commander the ability to determine and provide the necessary resources to accomplish the command's mission.

Leadership

At the field level, the USCGR was restructured to place reservists under the direct operational control of the active command augmented. Active-duty commanders are now in charge of both active-duty and reserve personnel. A single command structure is now in place. Reserve units and the officers and enlisted personnel assigned are subordinated to the active-duty commander of the units that they augment. Tasking for all personnel assigned to a unit comes directly from the augmented active-duty commander.

The opportunity to command a unit is extended only to AC officers. Although reserve officers could command reserve centers prior to integration, the integration of active and reserve components brought both components under one active-duty commander. With this action, opportunity for command for reserve component personnel was eliminated.

Within a command, administrative and collateral duties for officers all are equally proportioned between active and reserve component officers.

Pay, Personnel, and Manpower

A unified pay and personnel system was established in 1994. Under Team Coast Guard, AC and RC personnel support units were merged. Personnel functions for AC and RC pay and personnel were also merged. Additionally, many of the benefits, such as the Montgomery GI Bill, are the same for active and reserve component personnel.[4]

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[4]   Entitlement for most VA benefits is based on type of discharge from active duty and for a period of time specified by law. Completion of two years of active duty and the minimum service obligation qualifies most reservists for VA benefits. Some VA benefits require wartime service, and duty performed during the Persian Gulf War and the Global War on Terror provides qualifying service. Reserve Force personnel must serve the period of time called to active duty by the President to qualify for medical benefits.

Whereas in the past, reserve administrative personnel serviced only reservists, reserve administrative personnel are now cross-trained so that they may service both AC and RC individuals equally. Active-duty administrative personnel (yeoman) are also trained on reserve program personnel records and personnel issues.

There are unified personnel polices and forms for both components, such as personnel evaluations. Active or reserve component personnel in an active component person's chain of command are responsible for evaluating the active component person. The same is true for reserve personnel, with the added exception that a reserve officer must have one active-duty officer in his/her chain of command for evaluation purposes.

Promotion boards comprise both AC and RC personnel. Because the active and reserve personnel are now under a single commander, AC personnel sit on reserve promotion boards and RC personnel sit on active promotion boards.

A challenge that had to be overcome with integration was in manpower accounting. We were told that when a reserve officer is recalled for more than one year, that officer is counted against the officer end-strength cap within the Coast Guard. Manpower authorities within the Coast Guard have addressed this challenge; now, longer service is allowed for reservists without counting against active-duty officer end strength. A related challenge was that because of end strength limitations, some Coast Guard Academy graduates were given reserve commissions and were ordered into active service under the active duty for special work (ADSW) category. But there are limits to the benefits for officers performing service under the ADSW category. In particular, Tricare did not immediately cover their dependents.

Other challenges with the integration of the RC and AC included issues related to reserve pay. When mobilized, reservists experienced a higher incidence of pay problems than their active-duty counterparts. Coast Guard leadership has actively addressed these challenges.

Facilities

Integration of the Coast Guard active and reserve components called for the colocation of all reserve units with an active command or

detachment, unless a clear, overriding operational or active-duty support mission demands maintenance of a separate noncolocated reserve unit.[5] Reserve units were disestablished. Where the Coast Guard used to have both active and reserve Personnel Reporting Units (PERSRUs), now a single PERSRU handles both active-duty and reserve personnel. Several reserve field-level units[6] are maintained because these units require special military training that is not available at active Coast Guard Commands.

Reserve-controlled property, including small boats, etc., was transferred to active commands. Overall, reserve units were disestablished to accomplish the goal of eliminating parallel and redundant command and administrative organizations.

Other Implementation Challenges

In the implementing instruction, the Coast Guard recognized that transitional challenges or inefficiencies would occur as reserve units became integrated with active component organizations. For example, when reserve PERSRUs[7] were disestablished and reserve personnel integrated with active personnel reporting units, active units now had to be open on weekends to service RC personnel. This administrative burden was addressed by assigning extra selective reserve administrative personnel to the active PERSRU.

Additionally, the service cultures of both active-duty and reserve component personnel had to be addressed. The more senior active and reserve personnel had problems adjusting to the new way of integrating reservists. The Coast Guard representative with whom we spoke added that it sometimes takes a generation to effectively implement change. As the senior personnel, who were most comfortable with "a less integrated" environment, work their way through and out of the

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5   Commandant, U.S. Coast Guard (1994).

6   Port Security Units (PSUs) are exceptions to reserve integration.

7   The unit in which an active or reserve component Coast Guardsman is assigned is called a Personnel Reporting Unit (PERSRU).

system with retirement or separation, junior personnel who are trained and acculturated in the integrated system are more accepting of this construct. Integration challenges still arise, however, because some AC personnel lack education regarding how to integrate and utilize the reserves.

A specific example of a challenge for reserve integration occurred when some reservists were mobilized for Operation Iraqi Freedom. To fill the mobilization billets, some mobilized reservists needed qualifications different from those they possessed. In some cases, they were not qualified for the duties they needed to perform while mobilized, and they had to undergo extensive training.

Another drawback mentioned was the loss of reserve identity. This could be viewed as positive: By losing their reserve identity, they have now been merged into the larger identity of Team Coast Guard.

Summary

Successes

The Coast Guard representative whom we interviewed stated that the reservists are more competent than before integration, and they have greater operational expertise. The AC personnel have greater knowledge and interest in the use of the reservists, and reservists are treated as valuable resources. As indicated above, the active and reserve components are now controlled under the same pay and personnel system, which has also resulted in efficiencies. Senior leadership closely follows the integration and its success. The Coast Guard boasts of a "true" Team Coast Guard. As evidence, the Coast Guard has recalled more than 70 percent of its reservists since 9/11.

Challenges

With over ten years of Coast Guard integration completed, challenges still exist with integration of the reserve force and the active component. These challenges were identified in a Reserve Strategic Assessment[8] that

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8 Chief of Staff, U.S. Coast Guard (2004).

acknowledged that the management of the reserve force is complex because of statutory requirements and the challenges with managing reservists who work for both the USCG and their private employers. The assessment indicated that the integration of the active and reserve components has greatly improved the active-duty personnel's knowledge and understanding of the reserve force, but much work remains to be done. Even with the successes enjoyed through ten years of integration within the Coast Guard, processes and policies to achieve and maintain a seamless integration are still being addressed. The Coast Guard leadership is pleased with the results of integration and the support provided to mission accomplishment by the Total Force. It is also mindful that time, experience, and education with the utilization and blending of an integrated force are necessary.

Table B.1 provides a summary of the Coast Guard Reserve Force mode of operations and policies that existed before integration, as well as the new mode after integration.

Table B.1
Summary of U.S. Coast Guard Integration Actions

	Pre-Integration	Post-Integration
Doctrine		
Reserve billets	Reservists drilled with one unit and mobilized with a different unit.	All reservists are IMAs. They drill and train with units they augment. All reservists are trained for wartime needs of augmented command.
Training	Organized by Reserve Center.	Performed in support of unit commander's mission requirements.
Materiel and equipment	Reserve components procured, owned, and maintained materiel and equipment.	Responsibility transferred to active-duty commander. Active unit commander owns all materiel and equipment and is responsible for all procurement and maintenance.
Leadership		
Command opportunity	Opportunity existed for reserve officers with reserve units.	None. Command opportunity available only to active-duty personnel.
Personnel		
Administrative support structures	Reserve and active components had separate and distinct administrative support structures.	Combined with active units. Reserve and active PERSRUs are colocated.
Pay and personnel systems/manuals	Separate/distinct for AC and RC personnel.	Combined. Administrative personnel are cross-trained to service both AC and RC.
Policies/forms	Separate/distinct for AC and RC.	Combined.
Promotion boards	Autonomous.	Active-duty officers sit on Reserve Boards; reserve officers sit on Active Duty Boards.
Facilities		
Reserve units	Reserve Centers were autonomous—owned, manned, and operated by USCGR.	Reserve Centers were disestablished. Active-duty commanders are in charge of running facilities.

Integration of the Active Component and Reserve Components in the Marine Corps

Marine Corps Reserve Organization

The USMC is task-organized to support missions or wartime requirements. The Marine Corps Reserve is an integral part of *Marine Corps Total Force*. Like the active forces, the Marine Corps Forces Reserve (MARFORRES) is a combined arms force with balanced ground, aviation, and combat service support units. The Marine Corps Forces Reserve includes a division, wing, and force service support group and unique capabilities such as civil affairs groups, aviation aggressor squadrons, and air-naval gunfire liaison companies.[1]

The three warfighting Major Subordinate Commands organized under MARFORRES are the 4th Marine Division (MarDiv), 4th Marine Aircraft Wing (MAW), and 4th Force Service Support Group (FSSG). The 4th MarDiv has a headquarters battalion, an assault amphibian battalion, and one combat engineer battalion. The 4th MAW comprises a headquarters squadron, four flying groups, one air control group, and one support group. The 4th FSSG has nine battalions with headquarters, medical, dental, supply, engineer, motor transport, maintenance, communications and landing support services.[2]

The Marine Corps integrates their reserve and active forces by assigning AC and/or Active Reserve (AR) Inspectors and Instructors

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[1] Department of the Navy (2001).

[2] Information derived from Uniformed Services Almanac (2005).

(I&I) to Selected Marine Corps Reserve[3] (SMCR) units. The I&I are responsible for organizing, training, and administering SMCR units. A unit's I&I staff share responsibility with the SMCR unit leadership in preparing SMCR personnel and units for mobilization. I&I staff are included in an SMCR unit's table of organization. Although a small number of I&I staff personnel do not mobilize with their unit (e.g., some provide site support), typically, I&I staff will mobilize with their unit. The Marine Corps integrates by augmenting staffs as well as other units with IMA personnel.

Overall, there are approximately 6,700 active-duty support personnel assigned to the USMCR, mostly composed of AC officers and enlisted Marines. AR Marines make up about one-third of active-duty support to SMCR.

Doctrine

Reserve units routinely exercise with the active forces and are assigned operational responsibilities. Ground units are mobilized as battalions, companies, or batteries. Aviation units are mobilized as squadrons, and combat service support units may be mobilized as detachments as needed. SMCR units can provide augmentation, reinforcement, or reconstitution of regular Marine Corps forces to satisfy mission requirements.[4]

Training and Education

MCR reservists attend the same schools, participate in the same exercises, and are held to the same standards as active-duty Marines. All skill sets receive their initial training in schools rather than on-the-

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[3]   Selected Marine Corps Reserve (SMCR) units are composed of Marine Corps Ready Reserve personnel who have an IDT and annual training (AT) requirement. SMCR members are in MARFORRES units, IMA status, or the AR program.

[4]   Department of the Navy (2001).

job training. Some RC and AC personnel do attend Army schools, although it can be challenging to obtain a place, given schools' quotas. The benefit of the formalized school training is that it produces and increases the knowledge base for both AC and RC and increases the credibility of the RC.

In Operation Desert Storm, some I&I staff remained behind while the SMCR deployed. In Operation Iraqi Freedom, many I&I staff deployed with the units. The active-duty I&I staff provide the units with greater expertise and experience, as well as increased credibility with active-duty units.

A recent assessment of the I&I program in lessons learned during Operation Iraqi Freedom (OIF) indicates that "a strong Inspector-Instructor (I&I) system and a demanding Mobilization and Operational Readiness Deployment Test (MORDT) program ensures that Marine Corps Reserve units continue to achieve a high level of pre-mobilization readiness."[5] Marine Reserve Units continuously train to a C1/C2[6] readiness standard, eliminating the need for post-mobilization certification.[7]

In a recent study of RC training, Marine Corps I&Is were credited with being the backbone for training management for SMCR units. Their success was due to their coordination with reservist commanders, which enables them to plan and prepare training for SMCR IDT weekends and for active training.[8] The authors of this study concluded that the involvement of I&I personnel in planning and preparing training was the likely reason that the MCR units experienced

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[5] U.S. Marine Corps Reserve Combat Assessment Team (2004).

[6] C1/C2 refers to a Status of Resources and Training (SORTS) readiness category. The overall category indicates the degree to which a unit is capable of undertaking its assigned wartime mission(s). A C1 category indicates the unit possesses the required resources and is trained to undertake the full wartime mission for which it is organized or designed, and a C2 rating indicates the unit possesses the required resources and is trained to undertake the bulk of the wartime mission for which it is organized or designed.

[7] Commandant, United States Marine Corps (2005).

[8] Morrison, Metzko, and Hawkins (2002).

fewer training challenges than another service branch that did not utilize this form of integration.

Materiel

SMCR units own and maintain their equipment. AC and AR I&I staff assist SMCR units by providing continuity between drill periods through planning and coordinating training, maintaining equipment, and ensuring that administrative requirements are met. Their efforts allow the unit to take maximum advantage of the limited training time available.[9]

Leadership

The majority of AC and AR personnel in SMCR units are integrated into a single chain of command. SMCR Marines are subject to deployment with their assigned unit (or as IMAs if applicable) in the event of mobilization.

At the field level, the SMCR unit commanding officer is a selected reservist. The senior I&I person assigned is of the same paygrade as the SMCR commanding officer. I&I personnel normally occupy key staff leadership positions, such as the training chief of a battalion or as the S-3/S-4. I&I staff provide leadership continuity when selected reservist (SELRES) leadership is not drilling, and they assist in planning training and unit development.

Pay and Administrative Support

The Marine Corps evaluated lessons learned during Operation Iraqi Freedom and compared the progress made from the mobilization challenges faced by the RC in Operation Desert Storm (ODS) in 1990. In

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[9] Marine Corps Reserves (2003).

OIF, units rapidly passed through the mobilization process. Overall, pay, administration, and I&I integration were considered success stories during OIF, and were great improvements over ODS.

The deployment of some Marine Corps reserves during Operation Iraqi Freedom was not without challenges. Some field units indicated that reserve Marines and units showed up in theater without the Marine Expeditionary Force (MEF) and attaching units knowing that they were en route. Some reserve units arrived in theater without being properly mobilized and assessed, and without pay and entitlements started.[10] The recommendation to correct this was to publish a Letter of Instruction for mobilized reserve units to follow prior to issuing mobilization orders, and distributing it to the Gaining Force Commander (GFC).

USMC authorities indicated that some activation/employment friction does occur due to imbalances between reimbursements for personnel performing annual training (AT) or active duty training (ADT). For example, a reservist performing AT/ADT in the vicinity of his home or drilling unit would draw normal basic pay and allowances for the AT/ADT period. The friction occurs when an out-of-area reservist performs duty alongside a local area reservist. Financial management regulations dictate that in addition to pay and allowances, the out-of-area reservist must also draw a per diem. Although both reservists are performing the same work, additional money (the per diem) is being drawn by the out-of-area reservist. This produces a pay imbalance between two reservists performing the same work.

Manpower and Personnel

The USMC has also integrated its MEF staff with a MEF reserve augmentation command element, whose personnel are assigned duties side by side with the AC command element. The MEF augmentation command element is now performed by personnel in IMA bil-

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[10] 1st Marine Division lessons learned from Operation Iraqi Freedom, May 2003, http://insidedefense.com/secure/data_extra/html/dplus2004_3213_2.htm.

lets. Therefore, instead of mobilizing an entire RC augmentation command element, IMAs can be activated to augment the staff as needed. Activation or mobilization of IMAs for staff support is now considered easier because individuals can be mobilized, rather than an entire RC unit. This allows the MEF to tailor the reserve personnel support to what it needs.

RC authorities that we interviewed indicated that there is some friction between AC and RC as a result of applicable law. The example that we were given related to promotions. While promotions for RC officers are relatively straightforward under the running mate system,[11] reserve authorities we interviewed stated that RC promotions for enlisted personnel are stagnant.

Enlisted promotions are based on open billets (billets available to be filled). If an enlisted person is promoted, that person then must locate a billet that he/she could fill. While the policy on assignment to a billet in an overgraded category is lenient, some individuals could be forced to leave. USMCR officials indicated that this policy is being evaluated.

All RC enlisted promotions have minimum time in service (TIS) and time in grade (TIG) criteria (see Table C.1). To be considered eligible for promotion to E-4/E-5, candidates must also achieve a minimum composite score, which is a combination of technical proficiency, conduct TIG, and TIS. RC E-6 to E-9 promotion criteria require TIG and TIS requirements, as well as being selected for advancement by the Staff Noncommissioned Officer (NCO) Board. To be considered for advancement, gunnery sergeants must agree to fill an advertised SMCR first sergeant vacancy if they are selected.

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[11] Sec. 14306 of Title 10, USC, describes the running mate system as follows: "An officer to whom a running mate system applies shall be assigned as a running mate an officer of the same grade on the active-duty list of the same armed force. The officer on the reserve active-status list is in the promotion zone and is eligible for consideration for promotion to the next higher grade by a selection board convened under section 14101(a) of this title when that officer's running mate is in or above the promotion zone established for that officer's grade under chapter 36 of this title."

Table C.1
Enlisted Promotion Requirements for USMCR

USMCR promotion to:	Requirement
E-2, E-3	Meet minimum TIS requirements
	Meet minimum TIG requirements
	Deemed qualified by commander
E-4, E-5	Meet minimum TIS and TIG requirements
	Meet composite score requirement
E-6, E-7, E-8, E-9	Meet minimum TIS and TIG requirements
	Be selected for advancement by Staff NCO Board
	For promotion to the grade of first sergeant (E-8), gunnery sergeants (E-7s) must agree to fill an advertised SMCR first sergeant vacancy if they are selected

AC administrative manuals address policies for both the AC and RC, so there is a common system for administering AC and RC personnel. In addition, the *Marine Corps Reserve Administrative Management Manual*[12] addresses MCR policies not addressed in AC administrative guides.

Facilities

There are more than 190 reserve training centers within the Marine Corps Reserve. These reserve centers are owned and managed by the Marine Corps Reserves. Because the SMCR units are usually spread out or geographically separated throughout the United States, day-to-day integration and training between AC and RC forces is challenging. The location of a reserve training center makes a difference since the demographics of a geographic location are a determining factor in getting the right people with right skills to support the mission.

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[12] Commandant, United States Marine Corps (1999).

Cultural

There were some cultural issues between the AC and RC during OIF. While RC personnel served side-by-side with their AC counterparts, some mobilized reservists felt that the AC personnel did not accept them as part of the team. The same experience was reported during ODS. As the duration of a reservists assignment in-theater increased, however, the feeling of team acceptance increased. The reservists felt that they had to prove themselves before they were trusted. The building of trust must be earned and may be an operational issue to overcome in future mobilizations.

Summary

Lessons learned during Operation Iraqi Freedom indicate that SMCR unit activation policies were considered to be clear cut and easy to follow. The Marine Corps assessed its I&I staff program and concluded that "it continually brings fresh active-duty experience into reserve forces; gives reserve units the extensive support they need to sustain an aggressive training program; and as I&I staff members rotate back into the fleet, they take with them a body of knowledge and experience of working with reservists. The warfighting implications in OIF are that former I&I know how to use reserve units to their maximum effect."[13] I&I are considered as an effective means of integrating or blending the AC and RC within the Marine Corps. Some pay, promotion, and administrative challenges do occur within the USMCR, but the policies are consistent throughout and do not appear to stress effectiveness.

Table C.2 summarizes RC integration in the Marine Corps.

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[13] U.S. Marine Corps Reserve Combat Assessment (2004).

Table C.2
Summary of U.S. Marine Corps Reserve Integration

	Integrating Function
Doctrine	
Reserve billets	Selected Reserve Forces compose one-fourth of the total Marine Corps Force.
Training	AC and AR Inspectors: Instructors plan and conduct training for USMCR personnel.
Materiel and equipment	Reserve component procures, owns and maintains material and equipment. I&I personnel maintain equipment in absence of SELRES personnel.
Leadership	
Command opportunity	USMCR officers command reserve units. I&I hold key staff positions in reserve unit (e.g., S-3, S-4).
Personnel	
Administrative support structures	Both reserve and I&I personnel administrate USMCR units.
Pay and personnel systems/manuals	One pay system is used for both active and reserve personnel. USMC personnel manuals address USMCR policies. The governing manual for USMCR is Personnel Manual Marine Corps Order P1001R.1J (*Marine Corps Reserve Administrative Management Manual*).
Policies/forms	Many policies/forms are the same. Some RC unique policies are addressed in the *Marine Corps Reserve Administrative Management Manual.*
Promotion boards	Officers are promoted via the running mate system. Enlisted promotion eligibility based on TIG, TIS (E-2/3); TIG, TIS, and composite scores (E-4/5); TIG, TIS, and selection by Staff NCO Boards (E-6/7/8/9); and other requirements.
Facilities	
Reserve units	Reserve centers are owned, manned, and operated by USMCR.

Integration of the Active Component and Reserve Components in the Air Force

Air Force Reserve Organization

The Air Force RC is composed of the Air Force Reserve (AFR) and the Air National Guard (ANG).

The AFR has 35 flying wings equipped with their own aircraft and nine associate units, each of which shares aircraft with an active-duty unit. In addition, the AFR has four space operations squadrons that share satellite control mission with the active force. The Air Force Reserve has over 440 aircraft in its inventory, mostly fuel tankers and transports. Those aircraft include the F-16 Fighting Falcon, A-10 Thunderbolt II, C-5 Galaxy, C-17 Globemaster III, C-141 Starlifter, C-130 Hercules, KC-10 Extender, KC-135 Stratotanker, B-52 Stratofortress, and HH-60G Pave Hawk helicopter.[1] The AFR also has approximately 620 mission support units.

The ANG is a separate reserve force of the Air Force. It has both a federal and a state mission. The federal mission of the ANG is to maintain trained, equipped units available for prompt mobilization during war and to provide assistance during national emergencies.[2] The Air National Guard has approximately 1,200 aircraft in its inventory, composed of C-130s, F-15s, A-10s, C-5s, C-21s, E-8Cs, KC-135s, HH-

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[1] The inventory of AFR aircraft was obtained from the AFR Web site, http://www.afreserve.com/whatwedo.asp#structure.

[2] U.S. Air Force (2005b).

60 helicopters, F-16s, and C-17s. Air National Guard aircraft, ammunition, trucks, construction supplies, etc., are purchased with federal funds.

Doctrine

Air Force Reserve

The AFR completes Air Force missions daily. These missions include aerial refueling, aeromedical evacuation, air transportation, aircraft maintenance, airlift, civil engineering, global fighter support, and medical and security force missions. In addition, the AFR also performs special missions, including aerial firefighting, aerial spray, search and rescue, space command, special operations and weather reconnaissance missions.

There are approximately 75,000 SELRES personnel in the AFR. The majority of AFR SELRES personnel are assigned to specific reserve units. Although they are obligated to perform the once-per-month weekend drills and a two-week annual training period, many perform additional drills. Reserve aircrews, for example, average more than 100 duty days per year, often flying in support of national objectives at home and around the world.[3]

Air Reserve Technicians (ARTs), IMAs, and AGR airmen also contribute to meeting daily mission requirements. ARTs are a special category of SELRES who are full-time federal civil service employees and perform the same job on reserve duty as they do during their full-time civil service employment. For example, an ART whose full-time job is an aircraft mechanic would perform the very same duties (at the same location and on the same aircraft) during a drill period. The ARTs' familiarity with the personnel and equipment allow them to provide stability, leadership, administrative and logistic support, and operational continuity for their supported units.[4] There are approximately 9,900 ARTs in the AFR.

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[3]   U.S. Air Force (2005b).

[4]   Air Force Reserve Command (2004).

IMAs are drilling reservists who are usually assigned to active Air Force units. They are used to provide support for contingency operations and/or pre- and postmobilization requirements. There are approximately 12,000 AFR IMAs who augment active-duty commands and provide a wartime surge capability. AFR AGRs are active-duty full-time support personnel used for organizing, administering, recruiting, instructing, or training reserve units. There are approximately 1,900 Air Force AGRs.

Air National Guard (ANG)

The ANG provides all the U.S. air defense interceptor force and other Air Force–related roles and missions, including tactical airlift, air refueling (via tankers), general-purpose fighter missions, rescue and recovery operations, tactical air support, weather flights, strategic airlift, special operations capabilities, and aeromedical evacuation.[5] The aircraft in the ANG inventory include the C-130 Hercules, C-5 Galaxy, C-17 Globemaster III, KC-135 Stratotankers, HH-60 helicopters, B-1 Lancer, OA-10 Thunderbolts, F-15 Eagle, F-16 Fighting Falcon, A-10 and OA-10 aircraft.

The ANG support units include air traffic control units, combat communications squadrons, civil engineering squadrons, and communication flights and squadrons. Support units also include weather flights, aircraft control and warning squadrons, a range control squadron, and an electronic security unit.

The Air National Guard has more than 106,000 officers and enlisted personnel who serve in 88 flying units and 579 mission support units. The primary sources of full-time support for Air National Guard units are the dual-status military technician and guardsmen on active duty.[6] Dual-status military technicians are civil service employees as well as drilling military members of the unit that employs them. They train and mobilize with their respective units. The full-time support personnel perform day-to-day management, administration, and maintenance.

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[5] Derived from U.S. Air Force (2005c).

[6] National Guard Bureau (2005c).

Organization

Associate Units

One way to increase the output of a fixed number of systems is to augment AC units and the systems they operate with reserve personnel or vice versa. Mixed units of this type are in use today.[7]

The AFR and ANG have associated (or integrated) flying groups in which aircraft crews and maintenance personnel share aircraft or a weapon system with an AC or RC unit. Associated units are located in the vicinity of active units; they divide aircraft/weapon system maintenance and flying responsibilities and tasks but maintain a separate chain of command.

The benefit to the active component is that the utilization of reserve personnel supports expanded operational use of assets with less strain on the active component. Reserve personnel in turn are benefited in that they become knowledgeable and qualified in operating and maintaining state-of-the-art operational equipment.

There are different ways of classifying units that combine active, reserve, and National Guard personnel. Maj Gen Ronald J. Bath (Deputy Chief of Staff for Plans and Programs) stated, "You can call them blended, integrated, merged, affiliated, associated or even partnered units," and, "When you say any one of those terms, it means one thing to one person and one thing to another."[8] He added that these labels reflect changes in the method in which the Air Force will operate.

The Associate Programs are classified by the component (AC or RC) that owns the equipment. These associated groups are

- *Classic associate*: An AC unit retains principal responsibility for a weapon system that it shares with one or more AFR units. Administrative control remains with respective components.
- *Active associate:* An RC unit has principal responsibility for a weapon system that it shares with one or more AC units. AC and

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[7] Department of Defense (2002).

[8] Lopez (2004).

RC units retain separate organization structures and chains of command.

- *AFR associate:* Two or more RC units integrate with one of them having principal responsibility for the weapon system. Each unit retains separate organizational structures and chains of command.
- *Integrated associate:* Members of two or more components belong to one unit. The host command structure remains and the staff is integrated at the operational level. Administrative control and support are provided by the respective components via detachments. Each component is subject to the same operational chain of command but relies upon separate administrative chains of command.

The Associate Program serves to maximize the use of the assigned capital assets (aircraft and/or weapon systems) by providing an increased number of trained crews and maintenance personnel per aircraft/system. AC, AFR, and ANG personnel are combined (in some form) to collectively operate the airframe/weapon system. This combined manpower supports the increased operational availability or utilization of the airframe/system and allows for increased accomplishment of missions in a 24/7 environment.

Recent Associate Unit Initiatives

The following is a discussion of two Air Force initiatives to integrate AC and RC units. The first addresses the integration of AC and ANG units and personnel to form the 116th Air Control Wing (ACW) at Robins Air Force Base (AFB), Georgia, and is based on a review of literature. The second example addresses the integration of the 78th Fighter Squadron, which integrated AC and AFR personnel. The information presented was obtained during discussions with Air Force and other officials.

The 116th Air Control Wing. Associate units have been formed as a matter of necessity. At Robins AFB, ANG units were faced with a simple issue. When they lost their parent aircraft due to an Air Force decision to consolidate and relocate them, they became units without

a mission and personnel without jobs. Their only option was to share aircraft.

The blended wing of the Air Force, the 116th Air Control Wing (Joint Stars), has been hailed by many as a successful model of blending AC and ANG units. The catalyst that led to this blended (or associate) unit was that the Air Force decided to relocate B-1Bs that were assigned to Guard units at Robins AFB. The relocation left approximately 1,150 members of the Georgia ANG without a mission.

The former 93rd Air Control Wing, an active-duty Air Combat Command unit colocated at Robins, and the 116th Bomber Wing, the ANG unit, were deactivated on October 1, 2002, and then combined to form the 116th ACW. The 116th ACW operates the E-8C Joint Stars aircraft.

The performance by the 116th in Operation Enduring Freedom (OEF) was considered very successful from an operational point of view. From the leadership's viewpoint, the lessons learned are that the differences between the active and reserve units are dissolving and that there is no discernable difference between how well the 116th ACW runs and how units that are not blended run.

An assessment of the 116th ACW was conducted by the Air Force to determine if it was a suitable construct for future integration. Despite the operational successes of the 116th ACW, there were challenges with the blending of the ANG and AC. Cultural differences and personnel rules limited the effectiveness of merging the components,[9] including

- labor rules governing (or limiting) what ANG technicians can or cannot do
- different maintenance scheduling practices
- personnel rules that prevented ANG senior NCOs from performing in a supervisory capacity due to their technician job descriptions
- a relatively large number of senior ANG NCOs compared with AC NCOs

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[9]   This information was obtained from U.S. Air Force (2005a).

- ANG and AC command rotation policies that are in conflict. AC commanders rotate after two years; ANG commanders remain in command longer—in some cases until they are promoted or retired.

The focus of personnel to meet mission requirements drove the unit's operational success. Although differences do exist in the work rules and composition of the respective forces, they surfaced as issues secondary to mission accomplishment. Nevertheless, these are long-term issues that must be addressed.

The 78th Fighter Squadron. An associate unit was started as a test in an F-16 squadron at Shaw AFB, South Carolina, the 78th Fighter Squadron. Fifteen AFR personnel augmented the squadron's AC complement. The AFR personnel consisted of six pilots (two full-time and four part-time), and nine maintenance technicians (three full-time and six part-time). While the squadron commander was a lieutenant colonel (O-5), the deputy commander position was filled by a reserve colonel (O-6), who maintained oversight of AFR personnel assigned. The deputy commander helped shepherd the reservists for this pilot program; the position is now filled by a lieutenant colonel.

The 78th Fighter Squadron is an operationally integrated squadron. Reserve pilots and maintainers assigned to the squadron are under the squadron commander's authority for operational assignment and control. The deputy commander handles the reservists' administrative and pay functions and responsibilities through the AFR chain of command.

The junior pilots in the active component who were just completing flight school had to complete their qualification process. In this regard, every flight that they flew was a flight to upgrade their qualifications. The AFR pilots, however, were prior AC officers who were qualified in the aircraft. The flight commander was responsible to mix and match personnel to ensure that the required skills were available to train the new pilots and perform required maintenance.

This pilot program was conducted with AFR personnel. Under the AFR, the squadron commander has Title 10 responsibilities and authority for the utilization and control of assigned AFR personnel.

Different rules would have been employed if this program had been an experiment with ANG personnel.

The AC's and AFR's allotted flying hours (for training) were melded together. The squadron commander had the freedom to schedule flying hours as necessary to qualify in order to meet mission requirements. The pairing of flight crews and the mixing and matching of qualifications were based on the needs of the mission, the training requirements to be met by the mission, and the availability of qualified personnel to train personnel needing upgraded qualifications.

In many cases, AFR personnel had greater experience and qualifications than the junior officers in the AC and were often the designated flight commanders for missions. The squadron put to use the skills of experienced prior active-duty AFR pilots (most in the grade of O-4) to train less-experienced active-duty pilots in upgrading flights. Because of their advanced qualifications, the AFR pilots were an immediate help to operational scheduling. A drawback with using the part-time AFR pilots was that they were not available to perform mission planning prior to the flights.

The assignment of an O-6 deputy commander made the task of managing the reserve component personnel much easier. The O-6 handled all the administrative and discipline for the reservists. The squadron commander met frequently with his deputy to discuss administrative and disciplinary issues and did his utmost to maintain the same standards in both components. The deputy commander handled the administrative workload for the AFR personnel assigned, which lessened the load on the squadron commander.

Deployment in Support of Operation Northern/Southern Watch. As new officers rotated into the integrated squadron, their status (active or reserve), as well as the status of other personnel in the squadron, was transparent. As the squadron prepared and deployed in support of Operation Northern Watch (ONW) and Operation Southern Watch (OSW), the deputy commander negotiated with the squadron commander to allot slots or billets that RC personnel would fill on the deployment. The squadron had 24 aircraft, half of them deployed to

provide ONW and OSW mission support. Personnel were rotated through the ONW detachments every two weeks. Because many of the RC personnel had supported ONW/OSW missions while on active duty, the transition to flying operational missions in support of ONW/OSW was easier for them than for the new pilots. Therefore, the reserve associate units were active, involved, and integrated into the squadron's ONW/OSW deployment. The deputy squadron commander supported and ensured the RC personnel involvement through negotiations with the squadron commander to fill operational billets with reserve component personnel.

In this fighter-associated unit program, all the assigned AFR pilots were prior active-duty Air Force pilots, and the maintainers were fairly experienced. The pilots were majors (O-4s) and all were qualified flight commanders.

Integration of part-time reservists with the squadron did have some challenges. For example, while the AC individuals have the responsibility for maintaining and flying the aircraft, they also have additional collateral duties that take up a considerable portion of their working hours. Because drilling AFR personnel do not have these duties, the perception by the full-time AC personnel regarding the reserve personnel is often that "it looks like they just show up and fly." Thus, AC personnel may think that they get a larger bulk of the extra duties, while reservists show up for their drill, get qualified, and go home—perhaps an easier assignment.

One reason for the success of the 78th Fighter Squadron that Air Force authorities relayed to us was that personnel assigned to the 78th Fighter Squadron were AFR component personnel. Air Force authorities indicated that it is easier to work with the AFR than with the ANG because the management of personnel in the AFR, like that of its active counterparts, falls under Title 10. Although the assignment of AFR personnel to the squadron left manpower unaffected, the assignment of an ANG reservist (under Title 32) would take away an active-duty billet from the squadron.

Training and Education

Selected reservists train to active-duty standards through unit or IMA training programs. Reserve training often is scheduled to coincide with Air Force mission support needs. Most AFR skills are needed in both peace and wartime, and the performance of mission requirements provides the opportunity to conduct training. Mission support is a by-product of training, and it benefits both the AFR and the active force.[10] Performance of and training to a real-world mission provide an effective method of on-the-job training.

The training missions in associate units provide a rich source of knowledge for both AC and RC personnel. AC units traditionally have a larger number of junior personnel who are beginning their careers. ANG and AFR have relatively more senior and experienced personnel than AC units, and associate units give junior airmen the opportunity to learn from more experienced RC personnel. Additionally, AC personnel have more time to attend advanced training schools and can share their specific knowledge about upgraded or new equipment and systems with their RC counterparts.

Materiel and Equipment

The ownership and utilization of airframes and weapon systems is a central issue that is currently being addressed by the Air Force, Air Force Reserve, and Air National Guard. While each state has federally procured ANG assets (aircraft and/or weapon systems), a focus of the Air Force's Future Total Force (FTF) will be to conserve valuable manpower, resources, and trained skills while reducing overall costs.[11] Combining materiel and equipment and completing missions through an associated unit organizational structure is viewed by the Air Force as an effective method to merge the strengths of the respective forces. The responsibility for the equipment depends on which component

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[10] Derived from U.S. Air Force (2005b).

[11] Air National Guard (2004).

owns it and how the organization is designed to function. The units and individuals assigned to associate units share materiel and equipment maintenance responsibilities.

Leadership

The FTF concept plans call for creation of associated units that combine AC and ANG or AFR or a combination thereof. In the past, leadership of AC, AFR, or ANG units was straightforward. The chain of command was determined by the component a person was assigned to— i.e., an AC unit had an AC operational and administrative chain of command, and the same was true for AFR and ANG units. Under the associated unit concept, the lines of authority are different. For example, the chain of command of ANG-associated units depends in part on the ownership (AC, AFR, ANG) of the aircraft, weapon system and/or equipment, and whether the unit is under federal or state control. Table D.1 below illustrates the chain of command under different associate organizations.

The formation of an associated unit means that the leadership must recognize the differences between the workforces and use them to their best advantage. Leadership must meld the workforces together

Table D.1
Leadership and Chain of Command Under Different Air Force Associate Unit Structures

Type	Leadership
Classic associate	RC personnel assigned fall under AC chain of command. AC unit retains responsibility for aircraft and weapon system. Administrative control remains with respective components.
Active associate	Each unit maintains a separate organization structure and chain of command.
AFR associate	Each RC unit retains separate chains of command and organizational structures.
Integrated associate	The host unit retains operational chain of command, and the staff is integrated at the operational level. Administrative control and support are provided by the respective components via detachments.

to best meet mission requirements. The benefit to an associated unit's leadership is that associated units provide additional human capital resources with similarly trained and experienced aircrews, maintainers, and/or weapon system/equipment operators to accomplish the mission.

There are legal issues that need to be resolved for ANG commanders to command Title 10 airmen and for AC officers to command Title 32 ANG airmen. Additionally, Title 10 commanders do not have authority over ANG personnel under the Uniform Code of Military Justice, nor are they able to complete performance evaluations on them. The same is true for Title 32 (ANG) commanders over Title 10 personnel. Whereas the blending of AC and AFR within the Air Force is easier, because both fall under Title 10, a separate chain of command is required for AC and ANG personnel for administrative functions and control.

There are also differences between the ANG and AC units regarding the length of leadership command tours. ANG commanders can command units for up to four years (or longer); AC command tour lengths average approximately two years. ANG commanders do not have rotation posts to transfer to as their AC counterparts do. This may be problematic if a post-ANG unit commander is assigned as a subordinate in a squadron. Therefore, there are unresolved challenges with command opportunities, e.g., who commands a unit—an AC or ANG officer, for how long, and where to rotate an ANG officer to upon completion of command tour.

Progress has been made under the FY 2004 National Defense Authorization Act, which amended Title 32, United States Code, Section 325, to make it possible for a National Guard officer to be in command of federal (active duty) and state (National Guard Title 32 and state active-duty) forces simultaneously.[12] Command of federal and state forces requires the consent of the president and the governor of the state.

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[12] National Guard Bureau (2005b).

Pay and Administrative Support

The AFR and ANG operate under different work rules, and therefore different pay and administrative policies apply. Component-unique policies related to drill periods and pay functions still require special tracking and attention. It appears that this is best provided by the parent component. For example, states fund the salaries of most Air National Guard personnel unless the persons are on federal duty, at which time they are paid by the U.S. government. Maintaining pay and administrative experts who are trained in the nuances of each policy is appropriate.

The Air Reserve Personnel Center (ARPC) provides personnel services to all members of the AFR and ANG. The services provided include assignments, promotions, career counseling and development, and separation actions. The ARPC also manages the IMA program and maintains IMA personnel records and, in the event of mobilization, would coordinate activation of ANG assets.

Manpower and Personnel

The organization of associate units allows the components to be administratively separate yet operationally combined.[13] Although associate units maintain a separate manning document for each component, many Air Force staffs and major commands are integrated so that their different components, AC or RC (and civilians), are maintained on a single manning document.

Cultural Challenges with Integration

The cultures of the AC and RC are reflective of their respective organizational structures, leadership, history, missions, and formality of

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[13] Air National Guard (2004), Chapter 6.

Table D.2
Cultural Differences Between AC and AFR/ANG

	Active	**AFR/ANG**
Workforce composition	Large number of junior personnel	More senior, experienced force
Work relationships	Formal relationships— "Yes sir/No sir"	Informal—first-name basis after working together for years
Assignments	Personnel compete for jobs	Personnel hired into a slot; do not compete for jobs
Living accommodations	Many enlisted live in dorms	Nearly all live off base
Rotation	Rotate every 2–3 years	Normally remain with parent unit
Cohesion	More of a rotational/ transient force	Sense of family and esprit de corps

relationships. There are marked differences between the AC and the AFR/ANG. Table D.2 above illustrates these differences.

Legislative Challenges

Whereas Title 10 of the U.S. Code (USC) governs the organization, personnel management, education and training, and general administration of the active and reserve components, Title 32 governs the National Guard. An Air Force study has identified legislative and other challenges that exist with managing a blended unit. These challenges are summarized in Table D.3.

As indicated in Table D.3, there are challenges with ANG officers commanding AC units, and specific authorities are needed to maintain command of both a state unit under Title 32 and an active component under Title 10. The high level of approval required (president and governor) to authorize a commander to retain both a state and federal commission may make such a command untenable under routine circumstances. The succession of command is easier for a commander under Title 10—i.e., the next most senior commander takes charge. End strength limitations on the number of general officers on active

Table D.3
Legislative Challenges with Blending AC and ANG Units

	USC Title 10—AC and RC	USC Title 32—ANG
Mission	Governing authority for federal missions.	Governing authority for state missions.
Commander/command	Maintains a federal commission only; commands all assigned.	32 USC 325 permits officers to retain state and federal commissions if both the governor and president consent. Commands ANG only under Title 32, or both if 32 USC 325 consent given.
Succession of command	Next senior officer takes charge if commander incapacitated.	Next-most senior ANG officer needs consent of president and governor.
General officers (GO)	ANG officers serving in dual status (under Title 10 and 32) count against Title 10 GO end strength.	GO performing a state Title 32 mission does not count against Title 10 end strength limits.
AGR limitations	10 USC 101(d)(6) limits AGR personnel to organizing, administering, recruiting, instructing, or training the reserve components.	32 USC 709 limits ANG technicians to the administration and training of the National Guard.

duty under Title 10 also limit the command opportunity for ANG general officers serving under Title 10 and Title 32. ANG personnel serving under Title 32 are legislatively limited in how they can be used, whereas AGR under Title 10 can be utilized more liberally.

The Air Force drew the following conclusions from its study:

- While the challenges experienced at the 116th ACW are not insurmountable, the stresses of combining an ANG unit with an AC unit under the same flag are substantial enough that future "blending" is not advisable in the current legal environment.[14]
- Therefore, instead of operating blended units under one chain of command, the AF would utilize associate units—maintaining separate chains of command for AC and ANG components even though the dual chain of command also presents challenges.

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[14] U.S. Air Force (2005a).

Future Integration Efforts

The Air Force's FTF initiatives seek to combine AC, ANG, and AFR units to utilize their respective strengths. Six test initiatives aim to evaluate the combination of these resources:[15]

- The Virginia ANG is partnering with Langley AFB in transitioning to the F/A 22. The ANG aircrew will join AC aircrews for initial training.
- Less-experienced AC aircraft maintainers will be stationed with experienced ANG technicians to be trained. This concept is called "community basing" and is being tested at the Vermont ANG 158th Fighter Wing.
- The AFR 419th Fighter Wing will be integrated into the AC 388th Fighter Wing. This test will serve to evaluate the AFR and AC combined performance in fighter aircraft.
- Texas and Arizona ANG and RC will operate the Predator UAV. The low turnover and stability of personnel is expected to reduce training costs.
- ANG and AFR forces will team with Army and ARNG in the operation of a global intelligence ground station in western New York.
- ANG and RC airmen will be integrated into the all mission areas of the Nellis AFB Air Warfare Center and Predator Operations.

The goals of these initiatives are to evaluate their stateside effectiveness as the components prepare to address necessary reorganization requirements that arise from base realignment and closing (BRAC) and recapitalization.

Summary

There are many benefits of integrating AC, RC, and ANG components via blended or associate units. The benefits include increased mis-

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[15] Dudney (2005).

sion accomplishment through the shared use of capital assets without generating increased overhead costs. Shared use of an aircraft between or among AC and RC personnel increases the personnel readiness or availability for mission accomplishment and maximizes the use of the asset. Associate or blended units can also ease the operational tempo of active units in a 24/7–type mission or environment by sharing mission performance duties. AC personnel benefit from the knowledge and experience offered by AFR and ANG units and crews.

The way in which the organizations are formed or integrated makes a difference. When ANG units and personnel are "blended" or are under one commander, cultural, personnel, and legislative challenges limit the seamless integration of the units. Historically, the AC, AFR, and ANG workforces have been used and managed differently. The AC first operated associated units in the 1960s with the AFR, and combining organizations or operating as associate units became the norm. The AC and AFR fit and work together more seamlessly because that is the way that they are organized to perform. However, an Air Force report acknowledges challenges to operating with the ANG in a similar fashion. It appears the ANG still works best when it is commanded by an ANG officer and when ANG technicians work and perform their duties within an ANG environment.

Table D.4 on the next page summarizes the integration of the AFR and ANG with the AC.

Table D.4
Summary of RC Integrating Functions in Associate Units with AC

Integrating Function	AFR	ANG
Doctrine		
Billets	"Blended units" combine RC and AC billets in one manning document. "Associate units" maintain separate manning document.	ANG is organized under state (Title 32) mission. Manpower is billeted to permanent state assignment.
Training	Enlisted basic training: ANG, AFR, and AC attend same facility. Associate units train and operate together.	Enlisted basic training: ANG/AFR and AC attend same facility. Associate units train and operate together.
Materiel and equipment	Ownership and responsibility varies by type of associate unit. AC ownership in some; ownership in others.	Federal funds pay for ANG equipment. Under associate unit concept, ANG units may either own or share equipment jointly operated with AC/ANG units.
Leadership		
Command opportunity	In blended unit, an AC officer commands. In associate unit, a separate chain of command is maintained for AC and AFR.	ANG officers command ANG units.
Personnel		
Administrative support structures	Separate administrative control and support structures maintained.	Separate administrative control and support structures maintained.
Pay and personnel systems and manuals	Different pay and personnel system maintained.	Use personnel manuals published by the national Guard Bureau and ANG. Pay system is separate.
Policies and forms	Different personnel policies and forms maintained.	ANG generally mirrors AFR personnel policies, but some policies are different. ANG shares AFR forms where applicable.
Promotion boards	Separate from AC—selection determined by AFR promotion board.	State runs ANG promotion boards.
Facilities		
Reserve units	AFR-owned units are sharing facilities and/or combining with AC and ANG units where necessary.	ANG has established unit locations in states—BRAC and Air Force FTF efforts combine with AFR/AC units where necessary.

Integration of the Active Component and Reserve Components in the Navy

Overview

The Navy has created integrated or blended units with varying degrees of success. The Navy recently performed a zero-based review (ZBR) of the reserve component to assess the role of the Navy Reserve in the total Navy Force and is implementing change as a result of this review. We did not fully examine the Navy's efforts with blended units because the Navy appears to have only limited workforce integration. We do offer insights we derived from interviews regarding some examples of integration, RC personnel management issues, goals and results of the zero-based review, cultural challenges with blending units, and future integration efforts.

Navy Reserve Organization

The Navy Reserve Force is organized into the Naval Air Force Reserve and the Navy Reserve Forces Command. The Naval Air Force Reserve is composed of Fleet Logistics Support Wings (VR squadrons), Reserve Patrol Wings (VP Squadrons), Carrier Air Wings (VFA, VAQ, and VAW squadrons), and Helicopter Wing Reserve (HCS and HSL squadrons). The Navy Reserve Forces Command is composed of Navy

Reserve Fleet Hospital detachments and Commander, Expeditionary Logistics Support Forces (ELSF).[1]

Examples of Navy Blended Units

Navy officials cited examples where integration of active and reserve forces has been effective in the Navy, including Helicopter Mine Countermeasures (HM) squadrons and the integration of the Navy intelligence community, among others.

Navy officials indicated that the HM squadron is purely a blended squadron. HM squadrons are composed of approximately 700 AC and RC officers and sailors. About four officers and 160 enlisted full-time support (FTS) personnel and 18 officers and 76 enlisted selected reservists are assigned to each squadron.

A regular drill weekend is scheduled each month to train and support SELRES training needs. An additional weekend is set aside as a "fly weekend" to give reserve pilots time in the cockpit. The squadron operates in shifts of day, night, and weekends to keep the squadron operational 24 hours a day. The HM squadrons have a high proportion of FTS maintenance personnel to maintain the aircraft.

The Navy Reserve intelligence community also contributes daily to the processing and evaluation of intelligence information. The Navy Reserve Intelligence Program has over 4,000 reservists, who serve, on average, about 80 days per year. Since 9/11, the Reserve intelligence community has had among the highest percentage of its members recalled to active duty. They continue to be in high demand today. There are 13 Navy Reserve intelligence commands and 27 joint reserve intelligence commands that are supported by the Navy Reserve intelligence community.

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[1]   Derived from "Administrative Organization of the Operating Forces of the U.S. Navy," OPNAV Instruction 3110.3Q, June 18, 2003.

Personnel Management

The Navy Reserve, like the Marine Corps Reserve, promotes its officers by following a running mate promotion system. When a Reserve officer is promoted, the officer is then assigned a running mate in the promoted grade who is an officer on the active-duty list. When the active-duty list officer is to be considered before a selection board for promotion to the next-higher grade, the reserve "running mate" is to be considered for promotion as well. Unlike in the active component, there are no below-zone officers promoted in the Navy Reserve.

Although SELRES officers in the grade of Lieutenant Commander (O-4) and below are in paid training billets, selection to paid billets in the grades of Commander (O-5) and above is board-based. Navy officers do not need a billet to report to in order to be promoted; however, once promoted, an officer is not necessarily guaranteed a billet. Navy Reserve officials indicate that they tend to promote more officers than they need, which results in a surplus of officers over the number of paid billets available.

The Navy deals with this surplus of officers by allowing officers in a non-pay status to participate in voluntary training units (VTUs). VTUs comprise a pool of reservists who drill (IDT and ADT) in a non-pay status for retirement points only, i.e., they are not paid for their IDT and ADT service.

Navy Reserve officer personnel policies are established by Reserve Force guidance. This guidance provides Reserve policies such as projected rotation dates (PRD), tour lengths, billet tenures, and failure of selection (FOS) policies for officers. Officers in the Ready Reserve participate until they become subject to limitations prescribed by law. Limitations include age, total years of commissioned service, and failure of selection.

Voluntary Training Units

As mentioned above, the Navy promotes more than it needs to serve in reserve billets. Officers who are promoted to the grades of O-5 and above must serve a minimum of three years time in grade to retire in the promoted grade.

The Navy allows personnel who are not assigned to a reserve billet to perform their drills for retirement points only. These personnel have been promoted but are not assigned to a billet or are in excess of allowed manpower authorizations. Navy RC personnel serving in VTUs drill on their own time without pay.

A challenge with the utilization of VTU personnel is that, in a non-pay status, they are part of the Individual Ready Reserve (IRR). That is, they cannot be mobilized or accessed without an act of Congress. These reserve personnel continue to drill (and earn valuable retirement points) in the hope of getting a paid assignment.

Zero-Based Review

The Chief of Naval Operations (CNO) directed the Navy to take a fresh look at the role of the Navy Reserve and how it integrates with the active forces to operate in the current environment. The key step in achieving active-reserve integration is to determine both what the AC really needs the RC to do, and when the RC needs to do it.[2]

The Navy conducted a zero-based review to determine how to utilize the reserve component more effectively. The Commander, Fleet Forces Command, was charged with overseeing the ZBR. Its vision was to "structure, man, train, and equip the Naval Reserve to better support Navy mission requirements."[3] The ZBR initiative is based on the AC defining the requirements that the RC must perform and then structuring the RC to meet that requirement. The AC's responsibility is to take action to maintain the readiness and training of the RC.

The review looked at every reserve unit and billet and evaluated whether it added value to the Navy. Gaps in the AC's capabilities were identified, and the review sought to best define how the RC could be used to support the AC. The Navy has needs for specific capabilities

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[2]   Anderson and Winnefeld (2004).

[3]   Anderson (2004).

that are best filled by RC units, and there are also needs for individuals or parts of units that can augment AC commands.[4]

The validation of RC billets under the ZBR resulted in a net decrease of more than 16,000 RC authorizations. This review produced a decrease of current authorizations from 78,838 (as of November 2003) to 62,820. Additionally, the ZBR recommended an increase of 882 AC billets and an increase of approximately 450 civilian billets. The Navy is aligning the RC with ZBR recommendations and the AC is taking ownership of RC training and readiness.

Integration Challenges: Geographical and Cultural

A challenge that the Navy faces with its RC is that the geographic location of reservists is not in proximity to fleet concentration areas. A preponderance of reservists live in the middle of the country and are not located near or are readily accessible to the gaining commands that they would report to upon activation.

Navy officials indicated that, for reserve personnel to be operationally useful and effective, they must be accessible to the gaining command. They added that, in some cases, SELRES who perform two drill days a month and 14 days ADT per year may not provide a sufficient exposure to the gaining command to have an effect on the command's mission. IDT and ADT times for an individual have competing demands. General military training and other training requirements, as well as physical fitness (exam and test) demands, compete with a command's need for a selected reservist's time. Gaining commands would benefit from more time and involvement than a typical reservist is asked to serve.

During our discussions, Navy officials indicated that active-reserve integration might prove to be challenging in the Navy because of political considerations. The history and influence of the Navy reserve extends deep into all 50 states, and the RC political base is very vocal and responsive to changes. The Navy is unlike the Coast Guard,

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[4] Anderson and Winnefeld (2004).

which primarily uses IMAs. It is bigger and has many different missions and commands. The scope and size of the Navy's missions have allowed for smaller stand-alone RC units to support them. Now that the ZBR is complete, some units and missions may change.

Future Integration

The AC will take ownership of RC readiness. The Navy is evaluating structural impediments that bar AC access to its RC. The goal is for the Navy to be able to tap the strength and abilities within its RC when needed, and the RC must in turn be flexible to meet those needed capabilities. Alternative methods of employing reservists other than one drill weekend per month and two weeks ADT will be necessary to fully exploit the RC capabilities.

RC units requiring tactical skills eventually will be located in the fleet concentration areas. Reserve capabilities in the nation's heartland will focus on skills that do not require constant practice or use or frequent training with the AC to achieve tactical proficiency.[5] An illustration of this initiative is that the Navy recently relocated Fighter Composite Squadron 13 (VFC-13) from Fallon, Nevada, to Key West, Florida. VFC-13 operates the F-5N Tiger aircraft with eight AC and 12 RC pilots and flies adversary training missions against carrier battle groups in predeployment training.[6] It was becoming too costly to move the aircraft, pilots, and maintenance staff from Fallon, Nevada, to perform the missions.

The bottom line with active-reserve integration is ensuring that reservists gain meaningful exposure to the gaining command to facilitate and support the mission.

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[5]   Anderson and Winnefeld (2004).

[6]   Koon (2005).

Private-Sector Workforce Integration

To get a sense as to which theories, concepts, and ideas have proven to be effective—or are in current practice—we investigated two types of organizations in the private sector that have integrated workforces: higher education and health care management. Our goal was not to conduct a detailed assessment of each sector but rather to identify innovative approaches and practices that have worked and might have applicability to military workforce integration.

In each organization we spoke with a leader (CEO or major work unit manager) and a human resources manager. We had a series of specific questions and provided each individual the opportunity to identify approaches, policies, and practices that they have found useful in integrating their workforces. The results are summarized below.

Institutions of Higher Education

Mission and Purpose
Colleges are educational institutions whose primary purpose is to provide a quality education to their students; large universities also have a significant research mission.

Workforce Composition
Teachers (the faculty) are pivotal to the organization; most are normally in a union or are on a tenure track, although it is not uncommon for some faculty to be part-time and/or in a different category, such as lecturers or instructors. Colleges also have a wide variety of other

employees: executives, managers, hourly workers, part-time workers, student workers, contractors, etc. In addition, colleges typically have a wide range of "volunteers" who often have an important role in managing the enterprise: alumni associations, boards of trustees (often also alumni), and community members.

Workforce Assessment

Although the president reports to a board and has overall responsibility for managing the college, the faculty also has considerable power in some specified areas of governance and some traditional functions (e.g., development of curriculum, promotion of faculty, and course scheduling). Most issues (and disagreements) between faculty and administration are addressed and resolved through consensus. Committees are common, although the process often takes considerable time and is frustrating to action-oriented administrators. Colleges typically have visions and missions that guide planning and operations.

Individual faculty, particularly those with tenure, often operate almost as independent entrepreneurs with little if any accountability to the administration. There is normally a departmental structure with each faculty member assigned to a department (English, Political Science, etc.); each department has a chair or head who is selected by and reports to a senior academic officer (provost or dean). However, in many colleges such department head positions are not highly sought because they entail mostly administrative work: class scheduling, budget and office management, performance evaluations, etc. As a result, faculty often fill the positions on a rotating basis and "supervise" more experienced and more senior faculty, who sometimes control their promotion—an interesting leadership challenge.

In contrast, the administrative staff typically functions in a hierarchical environment with more traditional managerial structure and operating protocols that often have been viewed as somewhat bureaucratic. Recently, college administration has been moving toward a business model with emphasis on marketing, public perception, and a clear focus on the bottom line. Increasingly, college presidents (and other administrators) have backgrounds in business or public service rather than academia. The result is an organization that is more flex-

ible in structure and systematic in its processes. Today's colleges issue annual reports, publicize outputs and outcomes (or have them evaluated by others, such as the controversial annual "Best Colleges and Universities" report by *U.S. News and World Report*), and are subject to an increasingly complex set of federal laws and regulations.

Administrators, including all college employees except faculty, work for the president and thus have the same organizational and operational control. The two exceptions are the chief academic officer, who is a faculty member assigned to the administration, and the treasurer, who also often reports to the board. Contractors, unionized workers, and volunteers are also part of a different organizational structure, resulting in cultural differences that must be addressed by managers and human resource staff.

Tenured faculty often feel that their independence (based ostensibly on the need for "academic freedom") and their education allows them the right to critique management—sometimes openly. In contentious times, nontenured faculty (lecturers and instructors) must walk a fine line between faculty colleagues with whom they work and the administrators who hired them (and presumably could fire them). This can become contentious if the faculty strike and instructors and lecturers are expected to continue work.

The arrival of a new president (the current average tenure is seven or eight years) brings the greatest opportunity for change. New presidents often come with a mandate for change in specific areas, bring in new senior staff, or champion a different vision. They are susceptible to individuals and organizations positioning themselves for more influence or additional resources and the opportunity to expand their favorite initiatives: Faculty want more power to add new departments, board members or major donors advocate pet projects, and the adjoining community wants concessions on some local issue. While this environment is unsettling to many, it is also a great opportunity for the organization to make cultural change and find a new focus.

Leadership

Leadership on a college campus presents a variety of challenges. The administrative structure is frequently hierarchical and, as noted, many

senior administrators come from the business world. Those who succeed in education find ways to build relationships and consensus with faculty, normally based on a shared vision and strategy that meets their common needs. Faculty members who spend their entire career at the same college have often worked for five or six presidents.

Faculty governance is much different, with a variety of committees that report to "the faculty" (or a faculty senate) with important decisions made by vote of the faculty. Since the faculty is not often forced to address time-sensitive issues or react to a rapidly changing environment, thoughtful, time-consuming deliberation and discussion is common.

Individual faculty members are professionals who often view their work as a "calling"; they are thus self-motivated to excel in teaching, scholarship, and research. Such faculty members function well independently but are also team players who work hard to achieve organizational goals.

Selection, Education, and Training of Workforce

In some sense, it is best to "blur the lines" between operational and organizational control so members feel they are part of one organization. A number of things facilitate this process and contribute to better workforce integration:

- Wherever possible, make rules and policies applicable to all members: one pension plan, similar benefits (particularly important are visible ones such as vacation, tuition assistance, etc.), common personnel and employment policies, and health insurance.
- Develop traditions and create opportunities to be inclusive by involving everyone in organizational activities (both official and social).
- Initiate team-building events and use facilitators skilled at multicultural issues who understand the organization's culture.

Obviously, it is preferable to preclude workforce issues from arising through common policies/procedures and a quick response. However, when issues do arise because of different personnel policies, they

must be addressed quickly and fairly (a "conflict resolution process" that includes all parties involved is helpful). Because lack of communication between parties is often a contributing factor to the conflict, the resolution should be publicized when possible and, when appropriate, should lead to policy changes.

Lessons Learned and Best Practices

Analyzing the culture of the higher education environment and talking to leaders and members of the organization produced the following lessons learned or best practices:

- Selection and orientation of new employees is key; "old hands" should be included in both processes.
- Be sensitive to perceptions and respond quickly to problems. Lack of cultural understanding often leads to inaccurate perceptions.
- Be fair and consistent with "perks" such as parking and office space. In addition, little things—such as use of the library or fitness center, being listed in the phone book, being included on the organization chart, and having an ID card—are often very important.
- Recognize the accomplishments of individuals and small groups.
- Address issues of differences; provide language training to supervisors/managers as well as English as a Second Language to new employees.
- Be sensitive to the traditions of all employees (holidays, informal celebrations, etc.) and employee groups.
- Often, individuals who choose to join organizations with a different culture seek the opportunity to "make a difference" or are following a calling. Reinforce their sense of importance and legitimize their role and create opportunities for them to have a visible effect in the organization.

Hospitals

Mission and Purpose
Hospitals provide quality health care to patients.

Workforce Composition
Doctors and nurses are the key health care providers. Most are employees of the hospital; others are independent contractors. Some are unionized. All are required to be professionally certified in their specialty and many are part of professional organizations (e.g., the American Medical Association). In addition, a wide range of other employees are associated with hospitals, from lab workers and nutritionists to ambulance drivers and physical therapists. There is also a variety of support personnel (food service, custodial, maintenance, administrative, etc.) who are essential to hospital operations. Many of them, however, are not hospital employees.

Workforce Assessment
Hospitals have organizational structures with complex (and frequently changing) work processes. Most of the mission-related work in hospitals is decentralized and carried out by small, integrated work units in different areas of the hospital: wards, operating rooms, or emergency rooms. Because hospital work goes on 24 hours a day, seven days a week, the composition of the work teams often changes from shift to shift or day to day. As a result the work team must be guided by well-developed and agreed-upon procedures, protocols, and processes to ensure consistent outcomes. Although the teams may be small, they are often diverse in terms of both expertise and culture. Each individual has a critical role and there needs to be superb training and trust between team members. Quality personnel and a superb training and education program are the keys to success.

Many hospitals are moving away from a hierarchical and bureaucratic structure toward one of shared governance, particularly at smaller internal work units. Technology is playing an increasing role in hospital operations, not only in administration but also in diagnosis and treatment. Research is now an integral part of most major hospitals.

Hospitals (as well as health care professionals and hospital administrators) are subject to increasingly complex laws and standards and are vulnerable to malpractice suits. Key decisions about which procedure to use and the length of hospitalization are influenced by cost and approval by insurers. All these stakeholders are not committed to the same purpose or mission as the hospital.

In a hospital setting, the doctors are in charge—although sometimes they are not even hospital employees. The doctors are guided by both hospital procedures and protocols and the professional processes that they learned in medical school and have refined by subsequent experience and education to examine, evaluate, diagnose, and treat patients. Many other individuals are part of the team—nurses, laboratory technicians, specialists—they all support the patient's needs through the direction provided by the attending physician.

As noted, some members of the team are not hospital employees but are contractors supporting the hospital staff. Others, such as ambulance personnel, may be independent of the hospital. Some hospital employees, e.g., nurses, may belong to unions.

Leadership

According to a senior official at a nationally recognized hospital, the leader establishes the standards and expectations. The official said that it is critical to "get the right people on the bus, and then into the right seats." In work teams, the leaders often are viewed as partners rather than bosses. An important leadership challenge is to develop a sense of mission and commitment among the workers who are not in direct medical contact with the patients. They are frequently paid less and are less visible than the health care providers.

Workforce Integration

There used to be a stereotype in hospitals: Doctors were male and leaders, nurses were female and subordinates. That is no longer the case; today, over half the doctors graduating from medical schools are female, and male nurses are common. At hospitals, the workforce integration issues are often between different work team members who typically have differences in education and nationality.

Hospitals today are composed of a variety of work units that often have little personal contact with each other, if any, and are not always part of the same organization. This presents a challenge to building community and developing cross-team processes.

Selection, Education, and Training of Workforce

As noted earlier, selection is critical. Most health care professionals are self-selected. They must go through a long training/education program at considerable personal sacrifice, and they have an ethos of service. Because there are rapid changes in the medical field, continuous education is essential. This requires both individual and group training. In the later, it is important to create a culture where individuals in training are expected to think independently and challenge others and the status quo. Cultural differences (based on area of responsibility or diversity) are inevitable in training programs and must be addressed openly.

Here again, it is preferable to preclude workforce issues from arising through common policies and procedures and a quick response. Because hospitals operate 24/7, there are fewer opportunities for direct contact between team members who may work at different times. Communication is critical and issues must be addressed quickly and fairly when they arise.

Lessons Learned and Best Practices

Mission and purpose are key. The mission must be understood by everyone in the organization (particularly those who are not doctors or nurses). The leader of emergency services with extensive experience at a major hospital suggested several key factors important for workforce integration:

- Find ways to build bridges of communication between different work groups that are dependent on one another but often have little direct contact (operating staff and custodians, ward personnel and food service providers, lab technicians and emergency room staff).

- Continuously review processes and procedures; ensure that all stakeholders are involved in policy changes.
- Create forums for communication on procedures; develop a culture of "candid interaction."
- Address and remove barriers to communications and trust at all levels.
- Empower experts to make decisions in their areas of expertise.
- Remove obstacles that preclude effectiveness or limit creativity and change.
- Reward and recognize excellence, particularly team successes.
- Share responsibility, accountability, and credit. For example, one hospital has an on-call "acting administrator" at all times. Responsibility and workload are thus shared while competencies of team members are developed.
- Be creative: One hospital has a "Collaboration Committee" that is cross-functional in membership and is empowered to make significant changes to emergency room procedures. An outside organizational development consultant was brought in to get the process started, but the committee now operates independently. In addressing issues, it seeks understanding and consensus, not unanimity.
- Make mentors of all staff, thus giving them a stake in continuous improvement.

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