STUDY ON COORDINATION OF JOB TRAINING STANDARDS WITH CERTIFICATION STANDARDS FOR MILITARY OCCUPATIONAL SPECIALTIES

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It is with great pleasure that we jointly present this Study on Coordination of Job Training Standards with Certification Standards for Military Occupational Specialties, as directed in Section 599 of the Ronald W. Reagan National Defense Authorization Act for Fiscal Year 2005 (Public Law 108-375).

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EXECUTIVE SUMMARY

Over the years, the Department of Labor (DOL) and the Department of Defense (DoD) have worked closely together on issues related to servicemembers' transition to the civilian labor force. Both Departments have recognized that while the objective of education, training, and experience obtained during an individual's military service is to provide tangible benefits for the nation's defense, those skills can also contribute significantly to the civilian workforce.

In today's global economy, our nation needs an increasingly skilled workforce. As part of the President's High Growth Job Training Initiative, DOL has been working closely with business and industry to identify those skills and occupations that are in high demand. DOL has also been working with the state and local workforce investment systems, community colleges, economic development agencies and industry to target job training toward actual employment opportunities. This is all part of DOL's commitment to help American workers obtain good jobs at good wages with solid career paths in order to leave no worker behind. And there is no more deserving or more valuable group of American workers than our nation's servicemembers and veterans.

The civilian workforce increasingly relies upon credentialing as a way to regulate entry into certain occupations and to promote accountability for performance and public safety. Its value to the military is also being increasingly recognized. Credentialing offers professional growth and development opportunities for individuals in the service and has been used by the military services for both recruiting and retention. Civilian credentialing can be viewed as an opportunity for servicemembers transitioning to the civilian workforce to demonstrate to employers the comparability and value of their military education, training, and experience.

Occupational credentialing is an official recognition of a process of meeting a set of defined standards, generally through education, training, experience, and testing. Licensure, certification, and Registered Apprenticeships are the primary types of occupational credentialing:

Licensure – Licenses are granted by government organizations to regulate the practice of a profession. A license is a mandatory credential.

Certification – Certifications are granted by industry stakeholders to attest to an individual's attainment of knowledge and skills. A certification is a voluntary credential, but often required or preferred by employers.

Apprenticeship – Registered Apprenticeship is a training system, combining

on-the-job learning and related instruction, in which workers learn the practical and theoretical aspects of a skilled occupation leading to a nationally recognized Certificate of Completion of Apprenticeship.

This report outlines the process by which servicemembers can be credentialed and identifies six key steps within that process:

1. ***Identification of certifications relevant to military occupational specialties.*** Civilian occupations related to military occupational specialties are identified along with relevant certifications. A crosswalk using DoD's Defense Manpower Data Center and DOL's Occupational Information Network (O*NET) facilitates this process.

2. ***Comparability analysis identifies gaps between military education, training, and experience and civilian credentialing requirements.*** The Army's GI to Jobs program and the U.S. Military Apprenticeship Program (USMAP) are examples of programs developed to identify potential gaps.

3. ***Servicemembers address knowledge, education, or experience gaps, taking advantage of resources available to them while in the service.*** This includes educational resources that are offered to military servicemembers, such as the Servicemembers Opportunity Colleges (SOC) programs offered by the Army, Navy, Air Force, and Marines and the Community College of the Air Force (CCAF). It also includes financial resources, such as tuition assistance and the Montgomery GI Bill (MGIB).

4. ***Servicemembers complete required exams***. Completion of exams is facilitated by the Defense Activity for Non-Traditional Education Support (DANTES) agreements with selected civilian credentialing agencies that allow exams to be given by military officials at or near military bases.

5. ***Servicemembers provide documentation to credentialing agency.*** The services offer a variety of methods of documenting military training and experience, including the Army American Council on Education Registry Transcripts (AARTS), the Sailor and Marine American Council on Education Registry Transcripts (SMARTS), and the CCAF transcripts. All services also provide transitioning military personnel with a DD Form 214 – Certificate of Release or Discharge from Active Duty, documenting military experiences.

6. ***Servicemembers obtain credential.*** Servicemembers are increasingly being encouraged to obtain credentials during their military service and some services offer promotion incentives for servicemembers who do so.

This report also provides a chart summarizing each of these steps in the process of credentialing a servicemember, along with the specific and differing ways each

of the military services addresses the steps and the relevant civilian organizations or initiatives that support the process. This chart can be found in Chapter 2, Figure 3.

The military services have made significant strides in addressing civilian credentialing, primarily through the following five approaches:

1. Mapping military occupations to their civilian equivalents using information available on civilian licensure and certifications; developing an analysis of skill gaps and identifying paths to fill those skill gaps.

2. Providing opportunities for servicemembers to register with a federally-approved Registered Apprenticeship program while serving in the military.

3. Using civilian/commercial training, in place of military training, which results in a portable civilian credential in equivalent positions.

4. Obtaining civilian academic credit for military training through an equivalency process managed by the American Council on Education.

5. Promoting educational development resulting in academic degrees.

Even with these accomplishments however, more needs to be done. The gaps that exist between requirements for civilian occupational credentials and the world class education, training, and experience provided by the military, continue to make it difficult for transitioning military to make a smooth entry into the appropriate civilian sector employment.

In addition, the complexity of the civilian credentialing process presents many challenges for both military and civilian individuals seeking a credential. These challenges include:

- **Multitude of Participants:** There is no centralized oversight of civilian credentialing. For most civilian occupations, there is no single entity responsible for all of the aspects of credentialing.

- **Lack of Accreditation of Certification Agencies and Uniform Standards:** The accreditation of certification programs is not as prevalent as is accreditation of educational institutions. While there are several major bodies that accredit certification programs, only a relatively small number of certification agencies or programs chose to go through the accreditation process. There has been little research to ascertain the economic value of specific certifications in terms of employment advantage in the labor market or the value assigned to them by business and industry.

- **Lack of Centralized Information on Certification Requirements:** There is no single, centralized source of information on civilian credentialing requirements across occupations.

Additional challenges to credentialing the servicemember include statutory fiscal constraints. Insufficient legal authority exists for the Armed Forces to expend appropriated funds for servicemembers to acquire civilian/commercial occupational credentials. For example, absent specific statutory authority, appropriated funds may not generally be used to pay for commercial certifications, although appropriated funds may be used to pay for commercially contracted training courses that include an examination leading to credentials if the examination logically relates to the training and is part of the purchase price of the course "package." Reserve forces face additional constraints.

But even with these constraints and challenges, the credentialing picture for our servicemembers transitioning into the civilian workforce has improved markedly with the current and continuing programs of each of the military services, and the cooperative efforts between the Departments of Labor and Defense.

CHAPTER 1 – INTRODUCTION

The 21st century brings unique challenges in sustaining a skilled civilian workforce. The demand for qualified workers in a diverse array of occupational areas continues to grow and the global nature of our economy has caused employers in the United States to face increasing competition from foreign countries in their efforts to fill some jobs. As a highly trained, skilled, disciplined, and dedicated group of men and women, transitioning servicemembers represent a unique labor pool that can contribute significantly to the nation's ability to maintain its competitive edge in the world economy.

The Armed Forces spend approximately $8 billion per year for accession, basic skills and advanced training. Training obtained during an individual's military service is intended to provide tangible benefits for the nation's defense. A large portion of that training also provides skills that are directly related to civilian careers, making our nation's military personnel a valuable asset to the civilian labor force upon transitioning from the military. Newly separated veterans, however, experience a higher initial unemployment rate than non-veterans. See Appendix A: Employment Situation of Veterans for the most recent data available on this subject.

Finding ways to facilitate servicemembers' smooth transition to the civilian workforce is critical to our nation's ability to successfully tap into this skilled labor pool and take full advantage of their many skills and highly developed work ethic. Aiding servicemembers in obtaining civilian credentials has increasingly been recognized as an important way of making this transition. Civilian credentials, such as licenses, certifications, and apprenticeships, maximize servicemembers' capacity to demonstrate to civilian employers that their skills are on par with those of their civilian counterparts. As a result, these credentials can help to reduce periods of unemployment and underemployment that servicemembers might otherwise encounter when transitioning to the civilian workforce.

To this end, Section 599 of the Ronald W. Reagan National Defense Authorization Act for Fiscal Year 2005 required the Secretaries of Defense and Labor to:

> jointly carry out a study to determine ways to coordinate the standards applied by the Armed Forces for the training and certification of members of the Armed Forces in military occupational specialties with the standards that are applied to corresponding civilian occupations by occupational licensing or certification agencies of governments and occupational certification agencies in the private sector.

This report presents the results of this joint study.

STUDY OBJECTIVES, SCOPE, AND METHODOLOGY

The Departments of Labor and Defense convened a working group to examine methods by which credentialing of servicemembers has been or can be facilitated. This working group has identified numerous best practices within the Department of Defense (DoD), the military services within DoD, i.e., Army, Navy, Air Force, and Marine Corps, and the Department of Labor (DOL) along with opportunities for collaboration that will enhance servicemembers' ability to become credentialed.

REPORT CONTENT AND ORGANIZATION

The remaining sections of this chapter of the report provide background information on civilian credentialing, examine its importance to transitioning servicemembers, identify the complexities surrounding civilian credentialing, and highlight some of the significant events that have taken place in recent years to facilitate credentialing of servicemembers. Chapter 2 describes the various credentialing scenarios that servicemembers may face when transitioning out of the military, identifies the key types of assistance they need to facilitate credentialing, and details a credentialing process that will meet these needs. Chapter 3 highlights initiatives that are underway in DoD, the military services, and in DOL to improve credentialing opportunities for Soldiers, Sailors, Airmen, and Marines.

BACKGROUND ON CIVILIAN CREDENTIALING

Occupational credentialing is an official recognition of a process by which an individual meets a set of defined standards, generally through education, training, experience, and testing. It is intended to provide assurance that those credentialed professionals engaged in specific occupations meet acceptable standards of quality and will exhibit competency in performance on the job. The existence of such standards is considered to be in the best interest of consumers, other practitioners in that profession, individuals in allied professions, and the public. Credentialed individuals are able to bring about a higher level of performance and qualification throughout their chosen profession.

Industry and government organizations set and revise credentialing standards to ensure that individuals meet the educational and technical qualifications for their profession. The three primary types of occupational credentialing are licensure, certification, and apprenticeships:

- **Licensure** – Government agencies, primarily state agencies, but also federal and occasionally local agencies, grant licenses to individuals to practice a specific occupation, such as a medical doctor, a cosmetologist, or an air traffic control tower operator. Federal, state, or local laws and/or regulations define the standards that individuals must meet to become licensed. Licenses are typically required and issued by a government entity, i.e., individuals are not authorized to practice an occupation in a location without first obtaining the required license. Requirements for obtaining occupational licenses vary by jurisdiction, most often by state. Not all states license the same occupations and for those that do, the requirements can differ substantially. Some states will give special consideration to individuals who already hold a license in another state. For example the licensing board may:

  - Recognize licenses granted by other states as equivalent, called "reciprocity", may require an exam and/or fee;
  - Issue a license based on the individual having met similar requirements out-of-state, called "endorsement" or "license by credentials"; or
  - Credit equivalent out-of-state training, education, and examinations toward the requirements for licensure in that state.

Important Distinction Between Licensure & Certifications

*Licenses are granted by government organizations to regulate the practice of a profession. They are a mandatory credential providing the individual with the **right-to-practice**.*

*Certifications are granted by industry stakeholders to attest to an individual's attainment of knowledge and skills. They are a voluntary credential providing the individual with the **right-to-title**, i.e., once an individual has acquired a certification, that individual is entitled to use the certification label as a title after his/her name.*

- **Certification** – Occupational certification can be broadly grouped into two areas: (1) certifications granted by organizations or professional associations, e.g., Certified Public Accountant (CPA) or Certified Nuclear Medicine Technologist (CNMT), and (2) vendor or product-related certifications, e.g., Certified Novell Engineer (CNE) or Microsoft Certified Systems Engineer (MCSE). Each certifying organization sets its own standards for certification. For many occupations, more than one organization may offer certifications. Certification requirements generally include one or more of the following: education, training, work experience, and examination. Certification is not usually required by law to practice an occupation except in cases where a licensing body or board for a particular occupation in a state includes certification as part of the licensing requirements. However, certifications generally make an individual more employable as some employers require certification of its employees, or may consider certification when making hiring or promotion decisions.

- **Apprenticeships** – Registered Apprenticeship is a training system, combining on-the-job learning and related instruction in which workers learn the practical and theoretical aspects of a skilled occupation. The process of apprenticeship program registration with federal and state government agencies is standards-based, designed to ensure that working apprentices, program sponsors, and the general public can gain a clear understanding of the training content and the measures that are in place to ensure ongoing quality. Employers, employer associations, and joint labor-management organizations, known collectively as apprenticeship sponsors, provide apprentices with instruction that reflects industry needs. Apprentices receive paid on-the-job training, academic instruction, and a nationally recognized Certificate of Completion of Apprenticeship, that equip them with the portable skill sets needed to advance in their chosen field. Currently, departing military veterans may receive credit for their military occupational experience and benefit from "direct entry" into a private industry registered apprenticeship program without the necessity of competition. The result is workers with industry-driven training and employers with a competitive edge.

Educational or academic degrees, while a recognized type of credential and often included in requirements for licensing and certification or in the process of apprenticeship, are not strictly an occupational credential and are not included as such in this report.

IMPORTANCE OF CREDENTIALING TO TRANSITIONING SERVICEMEMBERS

The civilian workforce increasingly relies upon credentialing as a way to regulate entry into an occupation and to promote accountability for performance and public safety. Furthermore, the value of credentialing to the military is also being increasingly recognized. Credentialing offers professional growth and development opportunities for individuals in the service and has been used by the military services for both recruiting and retention. Civilian credentialing can be viewed as an opportunity for servicemembers transitioning to the civilian workforce to demonstrate to employers the comparability and value of their military education, training, and experience. However, not all civilian credentialing agencies formally recognize military education, training, and experience, thus making it difficult for some servicemembers to obtain civilian credentials.

This issue affects a significant number of transitioning personnel. Each year, over 180,000 servicemembers transition from military to civilian life. A 1998

study[1] found that more than one-third of separating enlisted personnel served in military occupations that have civilian equivalents with credentialing requirements, i.e., licensure and certification. While these figures have not been updated in recent years, a number of factors suggest that this proportion is likely to have increased dramatically since that time.

In recent years, there has been an increase in the number of new certification programs. DOL's America's Career InfoNet web site (www.acinet.org), contains a Certification Finder database, which, while not a comprehensive source of all certifications available, currently contains information on over 3,000 different certifications. From the military perspective, Army analysis shows that, as of January 2005, 92% of Army military occupational specialties (MOSs) have civilian job equivalents that are subject to licensure or certification and 95% of the over 400,000 enlisted Soldiers serve in these MOSs. With regard to apprenticeship, the Coast Guard currently has 21 ratings (occupational specialties), the Navy has 69 ratings, and the Marine Corps has 195 occupational specialties that are available for participation for apprenticeship.

Military Occupational Specialties

The various services use differing nomenclature regarding occupational specialties within their respective branches of service:

MOS *– Military Occupational Specialty; Army, Marines*
Ratings *– Navy, Coast Guard*
AFSC *- Air Force Specialty Code*
MOC *– Military Occupational Classification; Umbrella term used across the Services*

Civilian occupational credentials are recognized as important for servicemembers – particularly upon their transition to the civilian workforce – for several reasons:

- Federal, state, or local law may require that an individual possess specific credentials to legally perform some jobs.
- Employers may choose to hire only employees who have certain credentials, or to pay those employees more.
- Credentials may improve an employee's prospects for promotion.
- Credentialed servicemembers demonstrate to prospective civilian employers that their skills are on par with their civilian peers.

In addition, credentials can contribute to military career development, and may be accepted for self-development requirements and in performance evaluations during an individual's military career.

[1] Congressional Commission on Servicemembers and Veterans Transition Assistance, "Barriers to Veterans Employment Presented by Civilian Licensure and Certification", June 4, 1998.

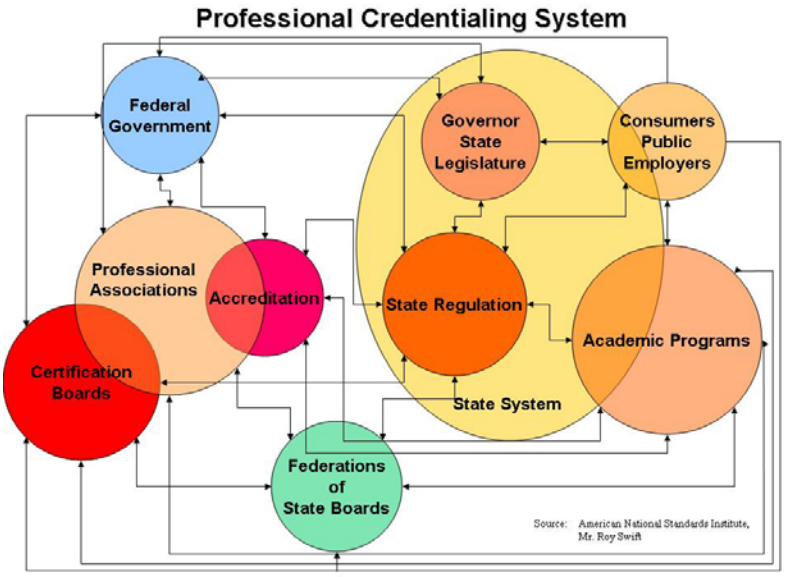
DYNAMICS AND CHALLENGES OF THE CREDENTIALING PROCESS

The complexity of the civilian credentialing process presents many challenges for both military and civilian individuals seeking to obtain a credential. As discussed below, the system of civilian credentialing is very decentralized, making it difficult for individuals to navigate through the system to determine what credentials to pursue. The multi-faceted nature of credentialing complicates the ability to facilitate credentialing of servicemembers. It is often difficult to identify the appropriate civilian partners with which to work, and, as discussed below, some civilian credentials may not have nationwide recognition or applicability. These complexities are being taken into consideration by DOL and DoD as new initiatives are developed to assist individuals in becoming credentialed.

Multitude of Participants

As shown in Figure 1, the civilian credentialing system is very decentralized. There is no single entity responsible for all of the aspects of credentialing. Most certifications are created by private industry or occupational associations, of which there are over a thousand. Occupational licensure is a governmental function but may occur at multiple levels. Some occupations are licensed at the national level by a federal agency, such as the Federal Aviation Administration. Most licensing occurs at the state level, but requirements may vary somewhat among the states. Further, some occupations are licensed in some states but not others. Registered apprenticeship programs are recognized by DOL's Office of Training, Employer and Labor Services (OATELS) and their State Apprenticeship Agency/Council partners. In addition, credentials often have academic and training requirements, so educational institutions and training developers play a role in credentialing as well.

Figure 1: Complexities of the Professional Credentialing System



Lack of Accreditation of Certification Agencies and Uniform Standards

One means to ensure quality certifications is through accreditation of those programs. Accrediting agencies develop evaluation criteria and conduct evaluations to assess whether or not those criteria are met. Institutions and/or programs that request an agency's evaluation and that meet an agency's criteria are then "accredited" by that agency.

Accreditation of educational programs and institutions is a good example of how this process can work to ensure quality. In higher education, the role of accreditation is extensive: 19 institutional organizations accredit approximately 6,300 institutions and more than 60 programmatic organizations (e.g., law, medicine, business, etc.) accredit approximately 17,500 programs.[2] One reason for the comprehensiveness of this system is that educational institutions must be accredited in order for their student enrollees to be eligible to receive federal financial aid.

The accreditation of certification programs is not as prevalent as is accreditation of educational institutions. In the workforce arena, while there are several major bodies that accredit certification programs, only a relatively small number of certification agencies or programs have chosen to go through the accreditation process. Moreover, individuals seeking certification are often unaware of the existence of these accreditation organizations.

[2] Judith S. Eaton, President Council for Higher Education Accreditation (CHEA), CHEA Letter from the President, "The Value of Accreditation: Four Pivotal Roles", May, 2003.

Two major entities that accredit organizations that offer certifications are the American National Standards Institute (ANSI) and the National Commission for Certifying Agencies (NCCA), the accreditation body of the National Organization for Competency Assurance (NOCA). ANSI administers two accreditation programs for personnel certification agencies. One accreditation is based on the new International Standard ISO/IEC 17024 and the other is based on the Conference for Food Protection Accreditation Standards for certification agencies that certify food protection managers. Both programs are based on an internationally recognized process for accrediting organizations and it has been used by ANSI for many years. This process involves both a review of a paper application and the performance of an audit (on-site visit) to validate information provided by each applicant. The use of an onsite audit for accreditation of personnel certification agencies is unique to ANSI. ANSI's accreditation process appears to be a useful quality assurance mechanism. Fewer than 15 certifying organizations have obtained ANSI accreditation to date. The cost of accreditation can be prohibitive for some credentialing organizations.

NCCA was created in 1987 by NOCA as a commission whose mission is to help ensure the health, welfare, and safety of the public through the accreditation of a variety of certification programs or organizations that assess professional competence. NCCA uses a peer review process to: establish accreditation standards, evaluate compliance with these standards, recognize organizations or programs which demonstrate compliance, and serve as a resource on quality certification. NCCA accredited organizations certify individuals in a wide range of professions and occupations. Among NOCA's 300 or so members, as of the year 2000, fewer than 50 had obtained accreditation through NCCA.

In addition to ANSI and NCCA, which provide accreditation across occupational areas, there are also specialty boards, such as the Council on Engineering and Scientific Specialty Boards (CESB), that accredit certifications for specific industries and occupations. These accreditation organizations likely serve an important role in their given industries, but are not widely known to consumers or individuals seeking to determine which certifications are considered to be of good quality.

The legislation that authorized payment of credentialing exam fees through the Montgomery GI Bill (MGIB) contained basic standards that credentialing organizations must meet in order for their certifications to be approved for payment. The Department of Veterans Affairs has responsibility for determining which certifications meet these standards. This oversight provides some level of review of the quality of licenses and certifications, but it is not considered an in-depth accreditation process.

While many certification programs are quite rigorous and their development has included elements such as job analysis, review by subject matter experts, and

test validation, this is not always the case. There is concern that certain entities might issue 'certifications' to those who merely apply and submit a fee. (This issue is similar to the concern within education about 'diploma mills' that may grant degrees for 'life experience' without proper testing or verification.) Without a more formalized accreditation process, it is difficult for any individual seeking a credential to determine whether that credential has value.

Another way to determine the utility of specific certifications is to assess the value assigned to them by business and industry. The best indication of the quality and utility of certifications is whether they are recognized by major industry associations and widely accepted for hiring and promotion purposes by firms within that industry.

Lack of Centralized Information on Certification Requirements

Due to the decentralized nature of the civilian credentialing system, there is no single, centralized source of information on civilian credentialing requirements. Given that there are thousands of credentials, this makes it difficult for the military to compare its education, training, and experience for a given occupational specialty to the civilian credentialing requirements. DOL has attempted to fill this information gap by developing web-accessible databases with contact information for certification and licensure organizations. However, these databases do not include detailed information on actual requirements. The cost of updating and maintaining this type of information, which changes frequently, would be prohibitive.

DOL does have an effort underway to form an electronic clearinghouse of existing industry recognized skill standards, competency models, and competency-based curriculum to augment existing resources on occupational certifications and licensure. The goal is to create a site that will provide industry a means to publicize their emerging skill needs and where businesses, both small and large, educators, and even individuals can go to ascertain the emerging skill demands in the U.S. workplace.

SIGNIFICANT EFFORTS AND EVENTS

In recent years, various efforts have been expended on ways to address the issue of credentialing for our veterans transitioning to civilian employment. See Appendix B: Bibliography of Recent Documents for a list of relevant documentation on this subject. Similarly, numerous events have taken place in recent years that serve to facilitate the credentialing of servicemembers and veterans. These include initiatives targeted directly towards this purpose as well as other initiatives that, while not specifically designed to improve credentialing

opportunities, serve to do so because of their relationship to credentialing. Figure 2 lists these significant events going back to 1972.

Figure 2. Timeline of Significant Efforts and Events

1972 -- Beginnings of Servicemembers Opportunity Colleges (SOC)[1]

1974 -- Community College of the Air Force (CCAF) established

1978 -- SOC Concurrent Admissions Program established for Army Recruiting Command

1979 -- SOCAD (Army Degrees) degree networks established amongst member institutions

1994 -- SOCMAR established for the Marine Corps

1995 -- Army begins development of concept to match civilian degrees and civilian certification/ credentialing to military occupational specialties

1997 -- "Study of Licensure and Certification for Veterans", The American Legion (8/1997)

1998
-- Memorandum of Understanding (MOU) between USDOL/VETS and VA creating an Interagency Task Force on Certification and Licensing of Military Personnel (4/1998 - 12/1999)
-- Army markets first group of Career degrees matched to MOSs to Aviation Service School personnel
-- Congressional Commission on Servicemembers and Veterans Transition Assistance study on "Barriers to Veterans' Employment Presented by Civilian Licensure and Certification" (6/1998)

1999
-- Army Implementation Memorandum on Recruiting/Repositioning initiatives to establish and make available low-or no-cost technology based distance learning opportunities and improve credentialing (8/1999)
-- Oversight Hearing on Veterans' Employment Regarding Civilian Credentialing Requirements for Military Job Skills, House Committee on Veterans' Affairs, Subcommittee on Benefits (9/1999)
-- DoD and each branch of the Service implement standardized fiscal tuition assistance policy (10/99)
-- State Pilots on Veteran Credentialing completed, USDOL/VETS (12/1999)

2000
-- Federal Aviation Administration (FAA) MOU signed with DANTES (5/2000)[2]
-- First Conference on Veterans Transition Assistance (6/2000)
-- Use Your Military Experience and Training (UMET) web site launched, USDOL/VETS (6/2000)
-- Oversight Hearing on Veterans' Employment: Credentialing (Licensure, Certification, Accreditation, and Apprenticeship) Requirements, Committee on Veterans' Affairs, Subcommittee on Benefits (9/2000)
-- Army implements Computer Based Training (eLearning) literacy program for all Soldiers (10/2000)[3]
-- Army Recruiting Command initiates Partnership for Youth Success (PaYS) program (10/2000)[4]
-- Veterans' Benefit and Healthcare Improvement Act of 2000 (11/2000)[5]
-- Army Research Institute conducts study of in-service voluntary education/credentialing programs and their impact on recruiting and retention of Soldier personnel

2001
-- eArmyU portal launched (1/2001)
-- Second Conference on Veterans Transition Assistance (5/2001)
-- Professional Certification and Licensure Advisory (PCLAC) committee established by Secretary of Veterans Affairs (6/2001)
-- The Professional Certification Advisory Board (PCAB) under the Small Business Administration Veterans Development established (10/2001)[6]
-- First PCLAC meeting held in Washington, DC (12/2001)

2002
-- Army's GI to Jobs, Credentialing Opportunities On-Line (COOL) web site launched (www.cool.army.mil) (4/2002)[7]
-- PCLAC Trains the State Approving Agencies (SAA) on professional certification and licensure guidance and governance information (7/2002)
-- DANTES offers Federal Communication Commission (FCC) test funding pilot (2002)

2003
-- DANTES offering the CompTIA test to military members (1/2003)
-- Army authorizes expansion of GI to Jobs Credentialing/certification gap analysis to additional skill identifier training and warrant officer specialties (1/2003)
-- PCLAC reviewed and made recommendations for changes in the *VA Licensing and Certification Tests* (Draft Circular)

2004
-- First DANTES-sponsored FAA Airframe and Powerplant Tests administered to a military member at Sheppard, AFB (6/2004)[8]
-- Preliminary Report on Workforce Recruitment, Retention, and Re-Entry Issues for Military Personnel and Their Spouses, DOD & USDOL (4/2004)
-- Navy's Five Vector Model implemented (6/2004)
-- DANTES begins a Microsoft Voucher Funded Pilot for military members (11/2004)
-- The Veterans Benefits Improvement Act of 2004, Public Law 108-454 (12/2004)

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[1] Consortium of colleges and universities, under the umbrella organization of the American Association of State Colleges and Universities, agree to provide degree programs for Soldiers and Sailors.
[2] Defense Activity for Non-Traditional Educational Support, (www.dantes.doded.mil).
[3] eLearning program allows Soldiers to take Information Technology (IT) and systems training courses free of charge — courses used by Soldiers in preparation for IT industry certification.
[4] Captains of industry agree to the hiring of transitioning Army personnel. (See APPENDIX C: PaYS Partnership Tables for recent data showing program success/production after five years.)
[5] Eligible servicemembers and veterans can use the Montgomery G.I. Bill to pay for up to $2,000 in fees for civilian occupational licensing and certification exams taken on or after March 1, 2001.
[6] Public Law 106-50 established the PCAB -- placed as an Advisory Board group within the federally charted Veterans Corporation.
[7] Replaced UMET web site.
[8] As of 03/2005, four other locations opened: Tinker, AFB; Ft. Eustice; Luke, AFB; and Mobile, AL (USCG).

CHAPTER 2 – CREDENTIALING OF MILITARY SERVICEMEMBERS

Currently, the credentialing status of servicemembers at the time of transition can vary. Some individuals may be in occupational specialties that do not have related civilian credentials. Others may be in occupational specialties that are credentialed yet they may or may not have the credential at the time of separation. This chapter discusses the various credentialing scenarios that might apply to transitioning military personnel, the key needs of servicemembers in terms of assistance with credentialing, and the process that can be used to facilitate credentialing.

SERVICEMEMBERS' CREDENTIALING STATUS AND NEEDS

Potential Credentialing Status at Time of Transition

There are five basic scenarios that describe the potential credentialing status of transitioning servicemembers and veterans. Servicemembers may:

1. **Have civilian equivalents that do not require a license or certification.** Servicemembers seeking employment in this category do not necessarily need to pursue credentialing.

2. **Leave the military with all the civilian credentials they need.** In recent years the DoD and military services have increasingly incorporated civilian credentialing into their training programs. For example, Emergency Medical Technicians in all services are required to obtain certification from the National Registry of Emergency Medical Technicians. Similarly, some military occupations have directly comparable civilian occupations, e.g., culinary specialists compare to chefs. Current fiscal authority exists to use appropriated funds to pay for commercially contracted training courses that include an examination leading to credentials. This authority is limited, however, to instances where the examination logically relates to the training and where it is included as part of the purchase price of the course "package". The Navy has contracted for such "package" courses to meet training requirements where appropriate from cost, timing, and/or location considerations.

3. **Have a certification in the field but not a license.** For these individuals, the transition to the civilian workforce may be relatively seamless because certification and licensure requirements are often similar. These

individuals will need to obtain a license from the appropriate government agency.

4. **Leave the military with the education, training, or experience necessary to become licensed or certified, but lack the civilian credential.** These individuals may have to follow an administrative process that typically requires completing an application, documenting military training and experience, and possibly taking an exam.

5. **Need to supplement their military education or training or obtain additional experience.** These individuals may experience periods of unemployment or underemployment until they are able to get the education, training, or experience they need.

Key Types of Assistance Needed by Servicemembers to Facilitate Credentialing

Servicemembers need three key types of assistance in order to facilitate their ability to become credentialed:

1. Assistance identifying civilian credentials applicable to their Military Occupational Classifications (MOC). This includes identification of:

   - Civilian equivalent of MOC;
   - Credentials relevant to MOC (i.e., certifications, licenses, apprenticeships); and
   - Specific credentialing requirements.

2. Assistance in addressing gaps between military training and experience and civilian credentialing requirements. This includes providing servicemembers with:

   - A detailed description of education, training, experience and other gaps between military training and experience and civilian credentialing requirements; and
   - Resources to enable them to fill gaps (could be financial or programmatic).

3. Assistance with obtaining the civilian credential from the civilian agency. This includes:

   - Access to exams;
   - Payment of exam fees; and
   - Documentation of military education, training, and experience to provide to credentialing agency.

CREDENTIALING THE SERVICEMEMBER: PROCESS AND ROLES

The results of this study show that the process of credentialing servicemembers involves six key steps that are facilitated in different ways by the military services and by civilian public and private sector organizations:

1. **Identification of certifications relevant to military occupational specialties.** Civilian occupations related to military occupational specialties are identified with their relevant certifications. A crosswalk between military occupations and the civilian Standard Occupational Classification-Occupational Information Network (SOC-O*NET) system developed by DoD's Defense Manpower Data Center facilitates this process. This crosswalk is available through DOL's O*NET OnLine Crosswalk function.

2. **Comparability analysis identifies gaps between military education, training, and experience and civilian credentialing requirements.** The Army's GI to Jobs program and the U.S. Military Apprenticeship Program (USMAP) are examples of programs developed to identify potential gaps.

3. **Servicemembers address knowledge, education, or experience gaps taking advantage of various financial and programmatic resources available to them while in the service.** This includes educational resources that are offered to military servicemembers, such as the Servicemembers Opportunity Colleges (SOC) programs offered by the Army, Navy, Air Force, and Marines and the Community College of the Air Force (CCAF). It also includes financial resources, such as tuition assistance and the Montgomery GI Bill.

4. **Servicemembers complete required exams**. Completion of exams is facilitated by the Defense Activity for Non-Traditional Education Support (DANTES) agreements with selected civilian credentialing agencies that allow exams to be given by military officials at or near military bases.

5. **Servicemembers provide documentation to credentialing agency.** The services offer a variety of methods of documenting military training and experience, including the Army American Council on Education Registry Transcripts (AARTS), the Sailor and Marine American Council on Education Registry Transcripts (SMARTS), and the CCAF transcripts. All services also provide transitioning military personnel with a DD Form 214 – Certificate of Release or Discharge From Active Duty, which also documents military experiences.

6. **Servicemembers obtain credential.** Servicemembers are increasingly being encouraged to obtain credentials during their military service and some services offer promotion incentives for servicemembers who do so.

Figure 3 provides a detailed description of these steps and the various ways that the steps are facilitated by the military services and public and private sector organizations. Additional information on each service's unique initiatives is provided in Chapter 3.

Figure 3. Process to Credentialing the Servicemember

	Typical Steps	Relevant Military Programs or Initiatives	Relevant Civilian Organizations or Initiatives
Step 1	**Military and civilian institutions determine civilian licensure, certification, or apprenticeships applicable to MOSs.**		
	a) Match MOS/Naval Rating to equivalent civilian occupation	DMDC's crosswalk to SOC/O*NET, Army COOL	O*NET OnLine Crosswalk search
	b) Obtain description of general civilian requirements	Army COOL	OOH and O*NET OnLine
	c) Research civilian licensure requirements	Army COOL	ACINet - Licensed Occupations
	d) Research civilian certification requirements	Army COOL	ACINet - Certification Finder
	e) Registered Apprenticeship	USMAP	OATELS
	f) If appropriate to the military mission, have civilian organization provide training leading to civilian certification	All Services (applies to a limited number of occupational specialties)	
	g) If appropriate, incorporate civilian credentialing standards into military training	All Services (e.g., aviation, medical, etc.)	
Step 2	**Military services conduct gap analysis with input from civilian credentialing bodies: analyze military training, education, and experience to determine if and how they meet civilian requirements.**		
	a) Request military Programs of Instruction (POI) and training materials from training commands	The Army has completed an extensive comparability analysis process of their MOSs. The Navy has completed an extensive comparative analysis of ratings to certification requirements using JTA in conjunction with NAVMAC occupational codes.	There is no centralized access point to obtain credentialing requirements for civilian occupations. Contact must be made with each credentialing agency to obtain this information.
	b) Review POIs and selected training materials		
	c) Analyze skills obtained in military against civilian training and certification requirements.		
	d) Demonstrate how military meets license requirements	Army COOL	ACINet - Licensed Occupations
	e) Demonstrate how military meets certification requirements	Army COOL; Navy 5VM	ACINet - Certification Finder
	f) Registered Apprenticeship	USMAP	OATELS

Figure 3. (cont'd) Process to Credentialing the Servicemember

If steps 1 and 2 are not conducted, the servicemember must independently do the research and analysis that matches his/her military training, education, and work experience to civilian licensure and certification requirements, as established by licensing bodies, and/or nationally and professionally recognized certification agencies. Then, the servicemember can proceed with steps 3 - 6.

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	Typical Steps	Relevant Military Programs or Initiatives	Relevant Civilian Organizations or Initiatives
Step 3	**Servicemembers address gaps between military training, education, & experience and civilian credentialing requirements.**		
	a) Obtain additional training during current term of service by going through DoD and Service-specific voluntary education systems	DoD VOLED, Army's Continuing Education System (ACES), Navy College Program, Marine Corps Lifelong Learning Division, and Air Force's Voluntary Education Programs and Services	
	b) Obtain appropriate post-secondary certificate, degree, and/or certification exam	Servicemembers Opportunity Colleges (SOC): SOCAD, SOCNAV, SOCMAR; and Community College of the Air Force (CCAF)	Post-secondary educational institutions and certification organizations
	c) Re-enlist, if necessary, to complete additional training, education, or work experience necessary for civilian requirements	Service-specific re-enlistment offices	
	d) Following separation from military, obtain additional civilian education, training, or work experience		Workforce Investment Act (WIA) programs, Post-secondary academic
	e) If appropriate, enroll in Apprenticeship program while in military	USMAP	OATELS
	f) Access financial resources to assist in addressing gaps	Service-specific TA programs, Montgomery GI Bill, TA/VA Top-Up Program	WIA and One-Stop Career Centers, grants and financial aid from U.S. Department of Education, ACINet Financial Aid Center

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Figure 3. (cont'd) Process to Credentialing the Servicemember

	Typical Steps	Relevant Military Programs or Initiatives	Relevant Civilian Organizations or Initiatives
Step 4	**Servicemembers complete required civilian licensure and certification exams. (See note below.)**		
	a) Obtain access to civilian exams	Service-specific Voluntary Education Systems' Test Centers, DANTES certification examinations, national testing centers	National testing centers, e.g., College Board, Prometrics, Sylvan Learning Centers
	b) Access resources to pay for exams	Montgomery GI Bill, DoD and Service-Specific Tuition Assistance system	
	c) If enrolled in Apprenticeship and additional requirements are necessary, transition to civilian Apprenticeship for completion	USMAP	OATELS
	NOTE: For Step 4, DANTES has established Memoranda of Understanding with civilian certification agencies to administer the agency's certification exams to servicemembers at test centers operated by each Service through its respective voluntary and continuing education system.		
	↓		
Step 5	**Servicemembers provide credentialing agency documentation of military training, education, and experience.**		
	Education transcripts	AARTS, SMART, or CCAF	American Council on Education
	VMET	All Services	
	DD214	All Services	
	↓		
Step 6	**Servicemembers obtain the license or certification.**		

Figure 3. (cont'd) Process to Credentialing the Servicemember

Acronyms

5VM	Five Vector Model (Navy)
AARTS	Army/American Council on Education
- http://aarts.army.mil/	Registry Transcript System
ACE	American Council on Education
- http://www.acenet.edu/	
ACES	Army Continuing Education System
- https://www.aces.army.mil/	
ACINet	America's Career Infonet
- http://www.acinet.org/	
CCAF	Community College of the Air Force
- http://www.au.af.mil/au/ccaf/	
COOL	Credentialing Opportunities On-Line (Army)
- https://www.cool.army.mil/	
DANTES	Defense Activity for Non-Traditional Education Support
- http://www.dantes.doded.mil/	
DMDC	Defense Manpower Data Center
- http://www.dmdc.osd.mil/	
JTA	Job Task Analysis
MOS	Military Occupational Specialty (Army, Air Force, & Marine Corps. Navy uses Naval Ratings.)
NAVMAC	Navy Manpower Analysis Center
OATELS	Office of Apprenticeship Training, Employer and Labor Services
- http://www.doleta.gov/atels_bat/	
OOH	Occupational Outlook Handbook
- http://www.bls.gov/oco/	
O*NET	Occupational Information Network
- http://online.onetcenter.org/	
POI	Programs of Instruction
SMART	Sailor/Marine American Council on Education Registry Transcript
- https://smart.cnet.navy.mil/	
SOC (Step 1)	Standard Occupational Code
SOC (Step 3)	Servicemembers Opportunity Colleges
- http://www.soc.aascu.org/	
SOCAD	Servicemembers Opportunity Colleges Army Degree
- http://www.soc.aascu.org/socad/	
SOCMAR	Servicemembers Opportunity Colleges Marine Corps
- http://www.soc.aascu.org/socmar/	
SOCNAV	Servicemembers Opportunity Colleges Navy
- http://www.soc.aascu.org/socnav/	
USMAP	United Services Military Apprenticeship Program
- https://www.cnet.navy.mil/usmap/	
TA	Tuition Assistance
VA	Department of Veterans Affairs
- http://www.va.gov/	
VOLED	Voluntary Education Programs
- http://www.voled.doded.mil/	
VMET	Verification of Military Experience and Training
WIA	Workforce Investment Act

CHAPTER 3 – CURRENT INITIATIVES TO FACILITATE CREDENTIALING

Efforts to facilitate the credentialing of servicemembers have been ongoing in DoD, the military services, and DOL. This chapter of the report summarizes some of the key initiatives that are currently planned or underway.

JOINT DOL AND DOD EFFORTS

Over the years, the Departments of Labor and Defense have worked closely together on issues related to servicemembers' transition. A number of joint-efforts have been conducted, including joint participation on the Task Force on Licensure and Certification of Veterans, operation of the Transition Assistance Program, and collaboration on the development of a Military Resume Writer. Many of these initiatives are discussed in more detail in the following sections, under the agency which had or has the lead on the initiative. More recently is the Memorandum of Understanding (MOU) that was executed between the Departments of Defense and Labor on July 11, 2003.

The MOU, initiated by the Secretaries of Labor and Defense, directed the Departments to study and undertake activities of mutual interest that may expand recruitment, job search services, training, placement, licensing and certification, and other services for military personnel, veterans, and their families. The Departments expressed particular interest in expanding services that related to and supported the following: (1) recruitment; (2) retention; and (3) re-entry. It is anticipated that additional efforts regarding the military to civilian credentialing issue will be undertaken under the auspices of this MOU.

DOD AND THE MILITARY SERVICES

The various components of the military have addressed the challenges and opportunities related to credentialing using a number of specific methods. These methods include:

1. Mapping military occupations to their civilian job equivalents using information available on civilian licensure and certifications; developing an analysis of any skill gaps; and identifying learning pathways to obtain skills not acquired through the military occupational specialty.

2. Providing opportunities for servicemembers to register with a federally-approved apprenticeship program while serving in the military.

3. Using civilian/commercial training which results in a portable civilian credential in place of military training in equivalent positions.

4. Obtaining civilian academic credit for military training through an equivalency process managed by the American Council on Education.

5. Promoting educational development resulting in academic degrees.

Key methods used by DoD and each of the services are described below.

DEPARTMENT OF DEFENSE: CROSS-SERVICE INITIATIVES

Transition Assistance

The key to transition assistance is knowledge of available resources and a firm understanding of how to use them. By law, all transitioning military personnel are required to receive pre-separation counseling no less than 90 days prior to leaving active duty. An effective transition also requires planning and action on the servicemember's part. The Transition Assistance program recommends members set up a pre-separation counseling appointment at least 180 days prior to separation. During this meeting/counseling session members receive counseling concerning their benefits and rights, as well as services available to them. They are given DD Form 2648, "Pre-separation Counseling Checklist", and assisted in its completion. The checklist helps each member identify their individual needs and develop a personal plan for securing the assistance to meet their needs. The Transition Assistance office considers this checklist to be extremely important to the member and they are not permitted to out-process the installation until they have completed the form.

Through the Transition Assistance Program (TAP), discussed further under the Department of Labor section of this report, servicemembers are counseled on resumes, medical care, finance, employment opportunities, dress, interview processes, and other important issues that will assist in their transition to the civilian work force.

DANTES

In addition to its work with DOL on the MOU Working Group (discussed above), DoD's primary method of addressing credentialing issues is through its organizational unit called the Defense Activity for Non-Traditional Education Support (DANTES):

The DANTES mission is to support the off-duty, voluntary education programs of the various branches of the military and to conduct special projects and

development activities in support of education related functions of the services. DANTES has made a comprehensive attempt to enhance the servicemembers' ability to become credentialed through its Certification Examination Program. DANTES coordinates with civilian credentialing boards to develop agreements that grant military officials the authority to administer certification and licensure examinations. DANTES then provides military personnel world-wide access to national and professional certification examinations through the services-funded testing centers. DANTES currently has approximately 60 agreements with nationally recognized certification associations. Additionally, DANTES provides a calendar of nationally recognized certification programs and web-based Certification Program Handbooks for service test center officials to order certification examinations.

In addition to agreements with each service branch, DANTES has Memorandum of Agreements with the Army National Guard, Air Force Reserve, and the Army Reserve to offer a reimbursement payment system to eligible servicemembers taking certification examinations. For example, upon receiving results from a professional certification or licensure test, the servicemember submits the results along with payment confirmation to the DANTES Headquarters. The Defense Finance System then provides reimbursement directly to the servicemember.

DANTES also has an on-going contract with the National Institute of Automotive Services Excellence (ASE) to pay for exams administered at base education centers worldwide. Each authorized servicemember is limited to three ASE specialty exams per administrative period.

DANTES currently has funded pilot programs for Microsoft testing, whereby servicemembers have the opportunity to take one Microsoft test at no cost to them, and for Federal Communications Commission (FCC) testing, managed by the National Radio and Telecommunications Engineers (NARTE).

Troops To Teachers

DoD established Troops to Teachers (TTT) in 1994. The National Defense Authorization Act for FY 2000 transferred the oversight and funding for TTT to the U.S. Department of Education, but continued operation by the DoD.

Reflecting the focus of No Child Left Behind Act of 2001, the primary objective of TTT is to help recruit quality teachers for schools that serve low-income families throughout America. TTT helps relieve teacher shortages, especially in math, science, special education and other high-needs subject areas, and assists military personnel in making successful transitions to second careers in teaching.

DEPARTMENT OF DEFENSE: THE SERVICES

UNITED STATES ARMY

The U.S. Army has robust continuing education and credentialing programs for Soldiers that enhance the capability of America's Soldiers on duty around the world and also improve their ability to ultimately transition back to the civilian sector. The Army strives to provide Soldiers and their families with access to the types of programs and services available to their peers in the civilian sector. Voluntary education services are very much a part of the Army's support structure and personnel life cycle. In keeping its commitment to lifelong learning in support of readiness, transformation, and the well-being of the force, the Army provides an integrated system of continuing education/credentialing programs and services to provide Soldiers opportunities for self-development and to meet personnel and professional education/credentialing goals. This integrated system, called the Army Continuing Education System (ACES), provides Soldiers, their family members, Department of Army civilians, and retirees lifelong learning opportunities to continue their professional and personal self development.

The ACES is a network of 113 Education Centers and 130 Army Learning Centers across the world, including Bosnia Herzegovina, Macedonia/Kosovo, Honduras, Bahrain, Egypt, Qatar, Saudi Arabia, Uzbekistan, and Afghanistan. The comprehensive programs and services made available to Soldiers and their family members demonstrates the Army's commitment to lifelong learning and building a "learning organization". Army's worldwide system is a visible demonstration of Army's investment in its workforce and growing leaders needed to meet future missions and fulfillment of Army's role in the National Security Strategy. The ACES programs support the enlistment, retention, and transition of Soldiers.

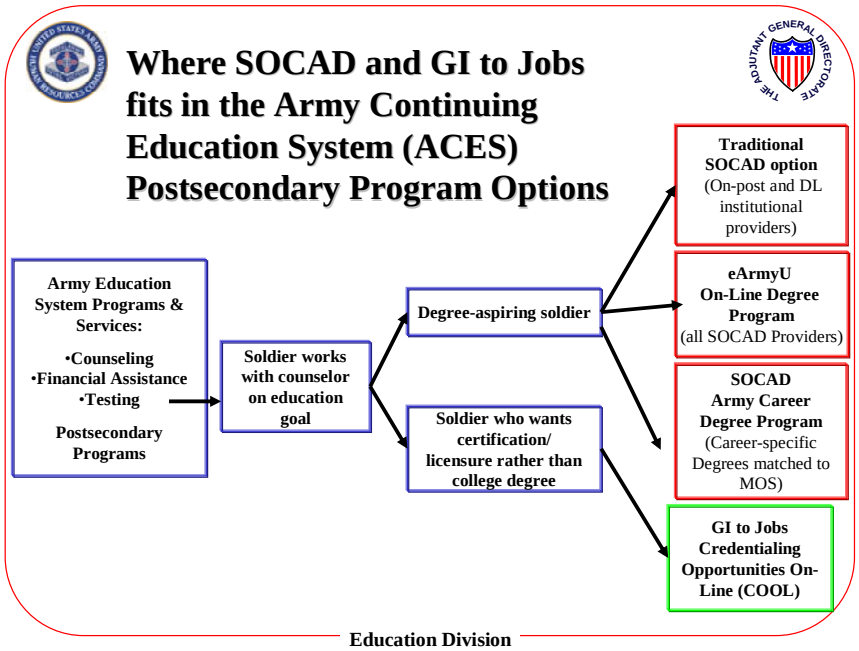
Participation in ACES programs and services is at an all time high, demonstrating the personal sacrifices Soldiers are willing to make in order to continue their education and remain competitive while in the service and after their transition. Army ACES program statistics from fiscal year 2004 show that a total of 151,795 Soldiers enrolled in 244,726 postsecondary courses. Of those Soldiers, 5,160 enrolled in 3,569 courses from deployed locations. Fifty-seven thousand (57,000) of those Soldiers enrolled in 175,465 online courses through eArmyU. The Army spent over $111 million dollars for traditional classroom and non-eArmyU distance learning courses; and, over $57 million on eArmyU costs. Soldiers completed 3,032 associate, 1,840 bachelors, and 1,485 graduate degrees, along with 234 certificates. One thousand-fifty-nine (1,059) eArmyU degrees were conferred. Army Education Centers and Multi-use Army Learning Centers provide Soldiers a wide variety of on- and off-duty educational opportunities.

Army major programs and services and new education initiatives:

Soldiers have access to programs supporting high school degree completion and developing the functional academic skills necessary for job proficiency and preparedness for advanced military schooling or college preparation, if needed. Also, leader development programs are available to assist Non-commissioned Officers with high leadership potential to better perform their roles as supervisors, trainers, and communicators. At the request of commanders, Soldier training courses are available to support unit readiness by providing individual training oriented toward specific mission, organization, or equipment requirements. Professional counseling services are at the heart of the Army's continuing education program. Counselors assist Soldiers in identifying vocational / educational / credentialing goals, developing plans for attaining those goals in a cost-effective, timely manner, and providing educational transition assistance at separation or retirement. The academic testing program allows Soldiers to sit for exams for school admission, college credit, and/or certification Army-wide. Army Education Centers world-wide offer a wide variety of postsecondary programs--certificates, associate, bachelors, and master's degrees--through U.S. vocational technical schools, colleges, and universities.

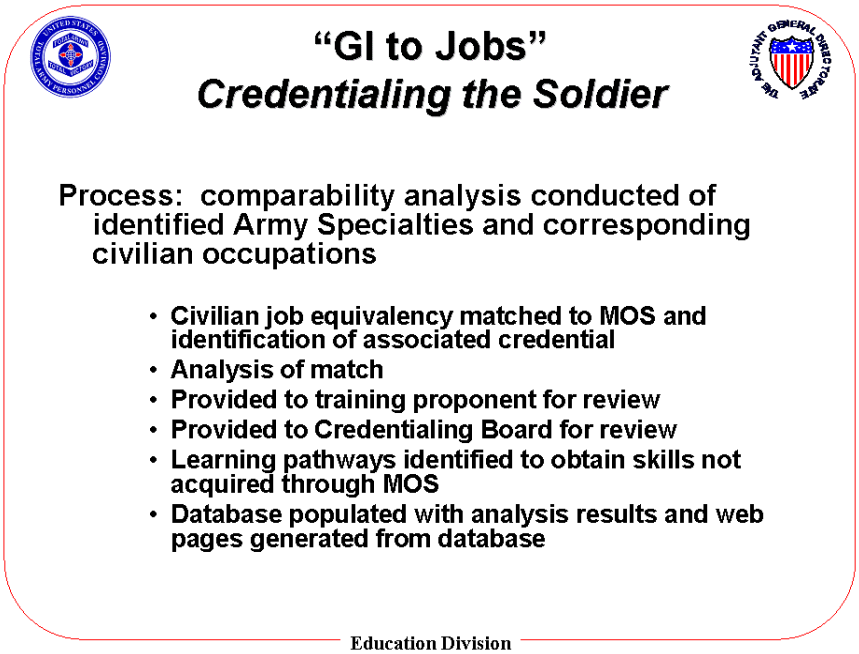
To ensure Soldiers can complete undergraduate degrees, the Army provides degree opportunities through the Servicemembers Opportunity Colleges Army Degree (SOCAD) system. The SOCAD is a system of associate and baccalaureate degree programs that offers degrees in over 30 different technical fields of study through an Army-wide network of more than 120 accredited institutions. The system guarantees Soldier transfer of credit and acceptance of non-traditional credits. The Army has also developed occupational degree programs called Army Career Degrees. This initiative includes developing and adding MOS matched to civilian occupational-specific degrees to the SOCAD system and linking to each MOS on the GI to Jobs initiative, the Credentialing Opportunities On-Line site. The objective is to custom design degree programs for enlisted Military Occupational Specialties. These programs provide a degree option to Soldiers not wishing to pursue purely academic degrees, which maximize credit for military experience and minimize the amount of college study. This initiative is a partnership with not only SOC and the Army Training and Doctrine and Medical Commands, but also the American Council on Education, Office of Military Evaluations, and colleges and universities within the higher academic community. The partnership is critical to ensuring degree program quality and acceptance. To date, the Army has developed and established 75 degree programs that encompass 65 MOSs. Army Career Degrees are implemented or in progress for 270,835 Soldiers, or 67 % of the enlisted force. The offering of occupation-specific degrees helps to enhance military training, provides Soldiers with expanded degree, certification, and licensing opportunities, and increases Soldier awareness of certification requirements for specific occupations.

Figure 4. SOCAD and GI to Jobs



The GI to Jobs initiative serves Soldiers who may not want a college degree by providing a rich source of information about civilian credentialing opportunities related to their Army training. Established as a recruiting and retention incentive, it is specifically aimed at providing learning pathways to certificates/licenses for the non-degree seeking Soldier.

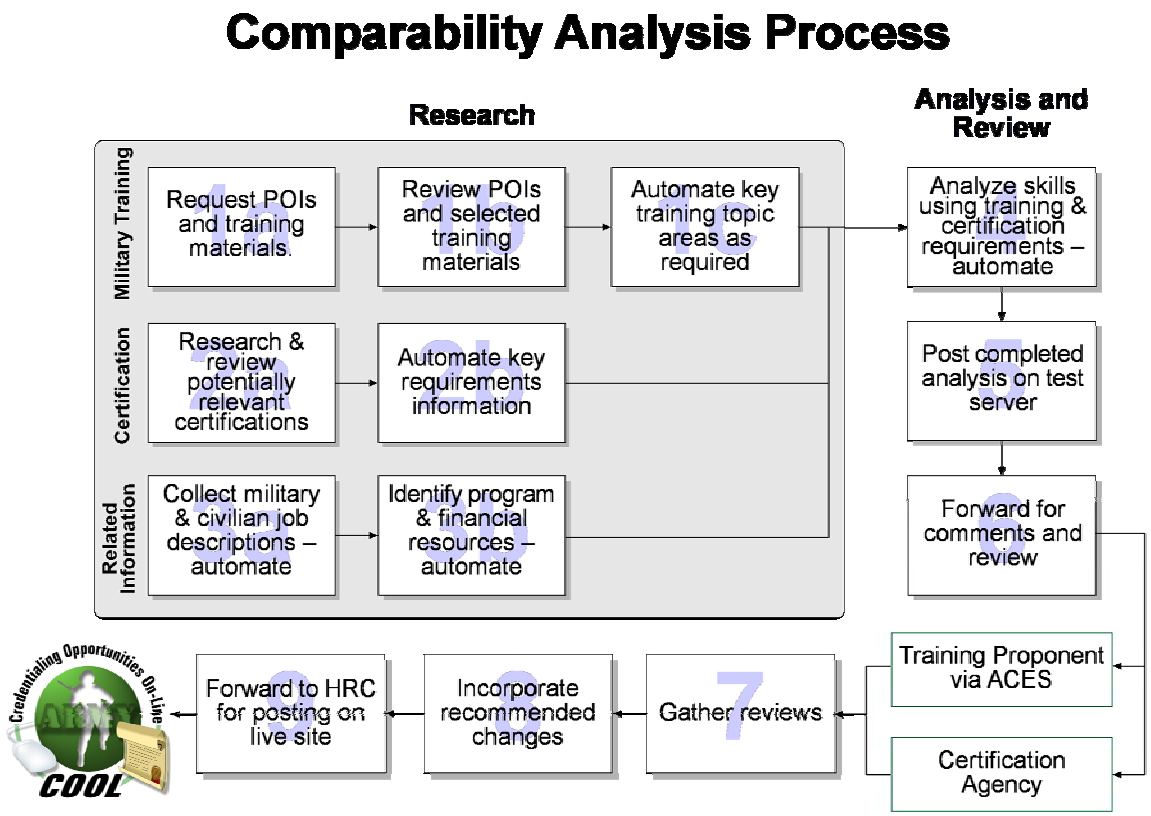
Figure 5. Comparability Analysis Process Summary



The majority of Army MOSs have been fully reviewed and matched to civilian-related occupational certifications. As of January, 2005, with 175 of 191 MOSs analyzed, an Army analysis determined that 92% of Army MOSs have civilian job equivalents that are subject to licensure or certification and 95% of the over 400,000 enlisted Soldiers serve in these MOSs. Fourteen percent (14%) of the MOSs have directly related certifications that are fully attainable during the first term of service, with another 42% possibly attainable during the first term of service. Seventy-seven percent (77%) of the occupations have certification options while 23% have a federal or state license requirement, which may also have a certification option.

A major component of the GI to Jobs initiative is the completion of comprehensive comparability analyses, which identify potential gaps between Army training and civilian credentialing requirements. The Army has also instituted a policy that allows the award of promotion points for individuals who have voluntarily obtained a certification related to their MOS. This policy serves as an incentive for Soldiers to become credentialed during their military enlistment service.

Figure 6: Army Comparability Analysis for Assessing Credentialing Opportunities



The results of the comparability analyses are provided on the Credentialing Opportunities On-Line (COOL) web site, www.cool.army.mil. Since its launch in April 2002, the COOL web site has had over 1.2 million hits for information. COOL provides information on how Soldiers can fulfill the requirements for civilian certifications and licenses related to their MOSs. The site helps Soldiers fully understand what it takes to obtain credentials, including identifying in detail additional training that may be needed, what to study, where to take tests, and even what resources are available to help pay for tests and related fees.

The development of COOL was a major effort requiring an initial expenditure of approximately $1 million and updating costs of approximately $230 thousand per year. The Army estimates that the initial cost of building on the COOL effort to support comparable credentialing initiatives across all of the other military services would be approximately $2.0 million, and that annual updating and maintenance costs would be approximately $1.5 million per year.

The Partnership for Youth Success program, better known as PaYS, www.armypays.com, is one of the GI to Jobs cooperating activities that links with the Army certification web site to assist new recruits with information on how to obtain civilian certification if required by hiring company before transition from the Army. PaYs is a program that allows a potential recruit to enlist with a guaranteed civilian job waiting for him when he leaves the Army. See APPENDIX C: PaYS Partnership Tables for detailed production information. Pursuing civilian credentials can provide the Soldier with personal development opportunities and promotion points while in service and enhanced job and pay opportunities when they reenter civilian life. The Army has exerted efforts to increase outside agencies' awareness of the Army's mission, education and training programs, and services to try to eliminate barriers to credentialing and licensing wherever possible.

In 2001, Army Education launched a unique and innovative e-learning program called eArmyU. The program helps to build today's and tomorrow's future force by offering unprecedented academic access, choice, and flexibility in an online learning environment. eArmyU allows Soldiers to access certificate or degree programs, apply for admission, submit assignments, communicate with classmates, and assess their progress from one integrated site. Web-based courses can be completed at any time from any location, allowing Soldiers to study at times that are most convenient to them, wherever they are stationed. This flexibility helps Soldiers to continue their studies even as their responsibilities, schedules, and locations change.

Through eArmyU, regular active duty and Active Guard Reserve enlisted Soldiers have easy access to 148 online certificate and degree programs offered by 29 regionally-accredited colleges and universities. Credits transfer across institutions, enabling Soldiers to quickly and conveniently progress with their educational goals as they transition from post to post. eArmyU revolutionizes

Army education through state-of-the-art virtual learning and develops educated, technology-savy Soldiers who can succeed in the network-centric missions and battlespace of the 21st century. It strengthens the Army's commitment to an agile, versatile and adaptive force by integrating educational opportunity with troop readiness.

eArmyU provides Soldiers with two enrollment options: laptop or eCourse (course-by-course). All program enrollees receive course materials, Internet Service Provider, e-mail account, eArmyU "Boot Camp" tutorial, round-the-clock helpdesk support, online academic tutoring and program mentoring as part of tuition. The program streamlines existing Army education systems and advances Army distance learning to support a global, customer-focused education platform. eArmyU is a smart, streamlined and effective learning opportunity that, due to its unique portal technology, advances the Army into a rapidly developing e-learning market. Twenty-eight percent (28%) of the Soldiers extended or reenlisted to participate, 27% are new students to college education, and 47% of Soldiers have returned to college after a hiatus of 12 months or more. eArmyU students are currently taking courses from 50 countries, 4 U.S. territories, and all 50 states.

Through the automated Army/American Council on Education Registry Transcript Service (AARTS), eligible Soldiers and veterans can document their military training, job experience, and other educational achievements while on active duty. This is of particular importance for Soldiers seeking certification or licensure. Now through Army Knowledge Online, Soldiers and veterans have real-time access to their transcripts. Official transcripts can be ordered through the AARTS web site at http://aarts.army.mil. This service is available in partnership with the American Council on Education and is both endorsed and applauded by colleges and universities across the U.S. The AARTS transcripts expedite the process of recognizing military non-traditional learning experience for college credit. Since this program's inception in 1987, close to two million transcripts have been provided. Currently about 150 colleges and universities are receiving electronic delivery of official transcripts. This is a win-win for Soldiers, veterans, institutions, and the Army – and the transcripts listing of ACE-recommended credit for military training and experience helps colleges translate recommendations into credit awards and in-turn save the Army tuition assistance dollars.

Army's continuing education policy directs that ACES programs and services be made available for Reserve Component Soldiers. The U.S. Army Reserve and the Army National Guard operate varying degrees of ACES programs and services to meet their unique needs and priorities. Reserve Component Soldiers access education programs in their local communities. Some Regional Support Commands and states have established education centers in local armories equipped with distance learning capabilities that provide counseling and testing services. Also, those living near an Army installation may participate in programs

and services offered by the local Army Education Center. Reserve Component Soldiers may also access academic testing programs and distance learning opportunities through DANTES.

Since fiscal year 2000, the Reserve Component has had a tuition assistance program similar to the Active Component. The Reserve Component administers the tuition assistance program through their Reserve Support Command Education Services Specialists and Army National Guard Education Services Officers. In addition to federal tuition assistance, Army National Guard Soldiers may receive state tuition assistance funds or attend public colleges and universities in their state on a tuition-free basis.

When Reserve Component Soldiers are mobilized, they are eligible to participate in the ACES programs and services available to Active Component Soldiers, including tuition assistance. Currently however, mobilized Reserve Component officers are ineligible for either Active (or, because of activation, Reserve Component) tuition assistance because they cannot fulfill the 2-year Active Duty Service Obligation incurred by using tuition assistance on active duty. This Active Duty Service Obligation requirement is statutory—contained in U.S. Code Title 10, Section 2007. This inequity has the potential to have a negative effect on the retention of today's Reserve Component officers, and the recruitment of new officers. A recently completed Army Research Institute (ARI) study indicated that participation in in-service education programs supported by ACES results in positive outcomes for both individual Soldiers as well as the Army. These outcomes include: reduced first-term attrition, increased reenlistment, and enhanced job performance.

The Army is committed to providing quality programs and services to build a stronger force and to support transition of its servicemembers to continue their contribution to the nation in the civilian sector.

NAVY AND MARINE CORPS

As mentioned later in this report, both the Navy and Marine Corps actively participate in the USMAP apprenticeship program, which provides certification of the occupationally specific training of Sailors and Marines, providing recognition that is equal to that received by their private industry counterparts. In many Navy and Marine Corps fields (69 ratings for the Navy and 195 MOSs for the Marine Corps), hours spent in the training classroom and on the job translate directly to journeyman points in the civilian sector. The DOL certification upon completion of a USMAP program is also listed on the academic page of the Sailor/Marine American Council on Education Registry Transcript (SMART). SMART documents American Council on Education (ACE) recommended college credits for military training and occupational experience, College Level Examination Program tests, DANTES Subject Standardized Tests, and Defense Language Proficiency Tests taken and passed; and as an addendum, additional coursework

or training that may not necessarily lead to college credit. An official SMART is an academically accepted record that is validated by ACE, and its primary purpose is to assist active duty Sailors and Marines in obtaining college credit for their military training and experience.

Additionally, both the Navy and Marine Corps provide Tuition Assistance for Sailors and Marines who attend college during their free time, and provide opportunities for personnel, even when deployed, to take undergraduate or graduate college courses, acquire basic academic skills, obtain a high school diploma, and enroll in certificate or vocational/technology programs. For example, courses are made available through distance learning or by bringing instructors aboard ships while underway. The Navy's program is called Navy College Program (NCP) and includes Tuition Assistance, NCP for Afloat College Education (NCPACE), NCP Distance Learning Partnerships, and Academic Skills programs, as well as coordination with DANTES on DoD-wide education initiatives. The Marine Corps calls their program Marine Corps Life Long Learning and includes similar elements: Tuition Assistance, the Marine Deployed Education Program, the Marine Corps Satellite Education Network, the Military Academic Skills Program, etc. Through these programs, Sailors and Marines have the advantage of being able to accelerate degree completion by applying college credit earned for military training and experience and through college-equivalent testing to meet degree requirements (all of which is documented on SMART for both Marines and Sailors). Distance learning and deployed learning opportunities also make courses available to Sailors and Marines any time, anywhere.

Because the mobile lifestyle of service members can be a hindrance to completing a degree, the Servicemembers Opportunity Colleges (SOC) was formed. SOC is a consortium of more than 1800 colleges and universities that provide educational opportunities for service members and their families. SOC further coordinates associate and bachelor's degrees in a variety of curriculum areas for the Army (SOCAD), Navy (SOCNAV), Marine Corps (SOCMAR), and Coast Guard (SOCCOAST). Within each curriculum or degree network, member colleges agree to accept each other's credits in transfer and have only minimal residency requirements, thus allowing Sailors and Marines to avoid having to retake courses after relocation. The "home" college issues an official evaluation of all prior learning, which serves as the student's long-range degree plan.

Navy's New Human Resource Management System (Five Vector Model)

The Chief of Naval Operations (CNO) tasked his Officer and Enlisted Community leaders and Echelon Commanders to examine their respective Human Capital Strategies in June 2004, in an effort to position the Navy to:

- Win the war for talent in a competitive marketplace;

- Grow, develop and sustain a skills and competency based workforce to meet the demands of a more agile and technology based Navy; and
- Take advantage of "Total Force" concept of operations that enabled a seamless integration of the Navy's active, reserve, civilian, and contractor components.

Competency-focused, the resulting new human resource strategy defines the work, recruits people, and develops the workforce around the competencies required to execute the Navy mission (present and future). Tenets of professional and personal growth create opportunities for Sailors (and those Marines who attend Navy technical schools or schools where Navy is the DoD Executive Agent) through education, training, mentoring and experience. In a performance-based culture, clear expectations against measurable objectives are established in support of the Navy mission.

Through a force-wide occupational job analysis, conducted by the Naval Personnel Development Command (NPDC), with support from the Navy Manpower Analysis Center (NAVMAC) and SkillsNET, the Navy has currently identified the requisite knowledge, skills, and abilities for its enlisted service members. Officer and civilian job analysis efforts are currently in progress. Standardized taxonomy for work, workplace, and worker requirements provides a foundational basis for certification and credentialing efforts which attest to and publicly recognize individual attainment of the knowledge and skill qualifications needed to work in a specific role, job, within an occupational cluster, or across an industry sector. SkillObjects™ is made up of composite elements that include the standardized taxonomy supported by DOL and O*NET occupational descriptors, dictionary, and linkages. SkillObject™ characteristics include the Skill Title, or key occupational skill required to perform the work; primary behaviors (task statements) required to perform the skill at various proficiency levels; the enabling knowledge, skills, and abilities needed to perform the skill; affective traits (emotive characteristics); tools, equipment and software devices required to perform the skill; resources (manuals, aids, and documents to support performance), and performance statement/measures based upon skill performance/proficiency standards.

The Navy has developed and implemented the Five Vector Model (5VM), a human resource management system which allows Sailors and other Navy-related personnel to access occupational (skill) requirements, conduct gap analysis, access associated learning opportunities, and display their learning accomplishments. The 5VM encompasses Professional, Personal Development, Leadership, Performance, and Certification and Qualification occupational requirements.

In an effort to align military and civilian occupational requirements, the Navy frequently utilizes equivalent civilian training, which may lead to a civilian certification. Jobs within the construction, information technology, aviation, and

service industries (food service, and health service) are examples of the already identified military/civilian alignment. However, as mentioned earlier, funding and legislation roadblocks narrow the civilian credentialing opportunities currently available for Navy and Marine Corps service members.

During initial examination of available civilian credentials for Sailors, the Navy discovered that a centralized government repository of certifications/credentials does not exist. Given the large volume of civilian certifications that may directly relate to Sailors' jobs, and the absence of a centralized credentialing repository, responsibility for review of applicable credentials by ratings fell to NPDC and subordinate commands. The information gleaned by NPDC will be used to determine which civilian credentials most closely match work performed by Sailors.

Within NPDC subordinate commands, Navy rating Subject Matter Experts (SMEs) are assigned to develop the Professional and Certification and Qualification vectors of the 5VM for their rating. As a part of developing the Certifications and Qualifications vector, the SME's will review and assist in the validation of respective Navy Type Commander and Naval Systems Commander certification requirements.

This validation process will be accomplished by a comparison of applicable Job Task Analysis (JTA) data and individual certification attainment requirements. Navy training will be developed by using JTA data in the future. Because of this, there exists a strong potential to align Navy JTA data with civilian credential requirements, which will allow Sailors the possibility of obtaining civilian credentials through Navy training. Once credentials have been determined to be valid by the Learning Center and the Type Commander, a Business Case Analysis (BCA) is performed and recommendations are made for funding considerations. Assuming that statutory authority to use appropriated funds for credentials for Sailors has been enacted, the credential will then be placed on the "approved list" for use by the fleet.

AIR FORCE

The Air Force has concentrated its credentialing efforts in the academic area. The Community College of the Air Force (CCAF) documents servicemembers' training and education with an official transcript and affords them the opportunity to obtain an associate degree from a regionally accredited institution. CCAF is the only federally chartered institution that awards an associate degree to enlisted personnel. It is also the world's largest community college. It is open only to enlisted men and women in the U.S. Air Force. This regionally accredited institution offers associate in applied science degree programs in five broad career areas:

- Aircraft and missile maintenance;

- Electronics and telecommunications;
- Allied health;
- Logistics and resources; and
- Public and support services

CCAF is the repository of credits toward certification in the conference of the Airplane and Powerplant license for enlisted personnel who choose to obtain this certification. There are a number of career field managers who are in the process of developing similar programs for their career fields.

The training provided by the Air Force in a number of career fields leads to civilian credentials awarded to Airmen. Among these are career fields such as Air Traffic Control (FAA certification), Medical Technician (Emergency Medical Technician and American Red Cross), and Computer Maintenance (Microsoft Certification).

The Indiana Military Apprenticeship Program (INMAP) was set up as a means of providing apprenticeship certification and training to members of the Indiana National Guard (Army and Air Force). Individuals who successfully complete the program will receive a certificate of Completion of Apprenticeship issued by the US Department of Labor for the trade the individual is registered in. This certificate is recognized nationwide and is comparable to a bachelor's degree, with the added benefit of having work experience to back up the classroom training. This training will allow the individual to enter the civilian work force with documented, recognized industry training in trades (AFSC's) used by the Air Force.[3]

DEPARTMENT OF LABOR

Education, training, and experience that are obtained during an individual's military service are intended to provide tangible benefits for the nation's defense, but can also contribute significantly to a skilled civilian workforce. In today's global economy, our nation needs an increasingly skilled workforce. As part of the President's High Growth Job Training Initiative, DOL has been working closely with business and industry to identify those skills and occupations that are in high demand. DOL has also been working with the state and local workforce investment systems, community colleges, economic development agencies, and industry to target job training toward actual employment opportunities. This is all part of DOL's commitment to help American workers obtain good jobs at good wages with solid career paths.

[3] An Air Force Specialty Code (AFSC) is the basic grouping of positions requiring similar skills and qualifications. In turn, the Air Force Specialty (AFS) is grouped into career field ladders, career field subdivisions, and career fields to provide for career development in different aspects of a career field. An AFS may be subdivided by alphabetical "shredouts" to identify specialization in a specific type of equipment or function. (*AFI 36-2108, Classification of Enlisted Personnel*)

DOL has a broad array of programs and initiatives that are relevant to transitioning military personnel. Those initiatives most closely aligned with credentialing the servicemember are discussed in this section.

NATIONAL APPRENTICESHIP SYSTEM

For more than 65 years, DOL and the State Apprenticeship Agency/Councils have partnered with private sector employers, labor management organizations, and public sector sponsors in the establishment of Registered Apprenticeship National Standards and Guidelines. Registered Apprenticeship provides a systematic approach to voluntary uniform training standards that are recognized on a national basis. Registered Apprenticeship also serves as a national credentialing program that utilizes both time-based and competency/ performance-based training methodologies. DOL approves apprenticeable occupations utilizing industry and public input, provides technical assistance to sponsors in the establishment of Registered Apprenticeship programs, and maintains apprenticeship training records. An example of this partnership is the National Institute for Metalworking Skills (NIMS) registered program, a competency-based program recognized by multiple employer associations. The sponsors' investment in apprenticeship and its organization's human capital results in a return on investment that is exemplified by increased employee productivity, improved employee earning capacity, and enhanced economic contributions to the community. Additionally, there are clear indications that nationally recognized Registered Apprenticeship credentials earned in the military services can aid the transition to civilian life by providing a transferable skill credential applicable to civilian employment.

United Services Military Apprenticeship Program

The National Apprenticeship Standards for the United Services Military Apprenticeship Program (USMAP) were developed to provide general policy and guidance to Military Commanding Officers responsible for training and development of apprentices registered with DOL's Office of Apprenticeship Training, Employer and Labor Services, (OATELS). Currently, the participating military services include the U.S. Navy, Marine Corps and Coast Guard.

The ultimate objective of the USMAP registered apprenticeship program is to provide military members a civilian recognized occupational certification that is based on the servicemember's training and military experience. Currently there are 18,243 registered apprentices and 124 occupations recognized in the program. Many of these occupations have been cross-walked to their private industry counterpart.

The USMAP is actively increasing the number of credentialing apprenticeship trade opportunities by adding military occupations annually from each participating service. Currently the Coast Guard has 21 ratings, Navy has 69

ratings, and Marine Corps has 195 occupational specialties covered under USMAP trades available for participation in apprenticeship programs.

Military personnel who completed their apprenticeship under the USMAP are well trained for employment opportunities in private industry, thus enhancing their transition to civilian life. Apprenticeship provides motivation to active duty military personnel to advance within their occupational specialties, as well as skilled individuals to meet national skilled workforce requirements. Apprenticeship training has proven to be beneficial to the military services, the individual and private industry.

Helmets To Hard Hats

DOL is currently in the process of revising a number of National Apprenticeship Guideline Standards to include the "Helmets to Hard Hats" program that permits direct entry into civilian apprenticeship programs and credit for work experience to transitioning veterans with training and experience in related military occupations. This program has resulted in a major coordination effort between DOL, employer/sponsors, and labor management organizations nationwide. (See Appendix D: Apprenticeship Programs in the Military and Fast Facts on Apprenticeship in the U.S. for more detailed information.)

Department of Veterans Affairs

Currently, DOL is coordinating opportunities with the Department of Veterans Affairs to implement the provisions of the Veteran Benefits Improvement Act of 2004. DOL and State Apprenticeship Agency/Council representatives continue to assist State Veterans Affairs Offices in the process of approving apprenticeship programs for veterans' benefits.

See APPENDIX D: Apprenticeship Programs in the Military and Fast Facts on Apprenticeship in the U.S. for detailed information on the Apprenticeship program.

ELECTRONIC TOOLS

Military Resume Writer

The Military Resume Writer (MRW), developed jointly by DOL and DoD, is an online resume-writer tool intended for use by transitioning military personnel and recently separated veterans to prepare quality resumes that will appeal to civilian employers. The MRW integrates data from DoD on military occupational specialties with extensive information contained in DOL's civilian resume writer. Users are led through a step-by-step process to craft a resume that is then accessible to thousands of employers through DOL's America's Job Bank.

The MRW was designed to ensure that military education, training, and experience are accurately and concisely captured on the resume. It includes a section that enables users to input information on licenses and certifications they have obtained as well as apprenticeships in which they have participated. It is accessible from the DoD Transition Portal as well as through America's Job Bank.

Servicemembers' Career Guidance Tool

In the course of its work with transitioning servicemembers, DOL's Veterans Employment and Training Service (VETS) identified a potential need for a web-based Career Guidance Tool that would serve the needs of three groups of transitioning servicemembers: Transitioning Specialists, Transitioning Generalists, and Career Switchers. Transitioning Specialists are servicemembers who plan to apply for civilian jobs requiring specific occupational skills that are consistent with their military experience. Transitioning generalists are servicemembers who do not have occupational skills that correspond to civilian occupations. Career Switchers are servicemembers considering additional education or training in preparation for a new civilian career. The Tool, as envisioned, would include comprehensive career information to suit the unique needs of transitioning servicemembers.

Prior to developing such a tool, it is important to determine whether it would be feasible to develop the tool, the potential scope of the development effort, and the issues (from both a technology and a content standpoint) that would be encountered in developing the tool. Therefore, DOL sponsored a project to explore the feasibility of developing a web-based Career Guidance Tool to meet the needs of transitioning servicemembers.

The feasibility assessment is in its final stages and the report is expected to be finalized shortly. A prototype of the Tool has been developed demonstrating the features of the proposed Tool, which include, among other things, information on civilian licenses, certifications, and apprenticeships relevant to military occupational specialties.

A Credentialing Center tool will be added to DOL's America's Career InfoNet web site, www.acinet.org, shortly. This was developed based on the work under the DOD/DOL MOU and is designed to make credentialing information more readily available to both civilians and servicemembers. This site will bring together five credentialing resources in a single location: Certification Finder, Licensed Occupations, DOL Registered Apprenticeship, United States Military Apprenticeship Program (USMAP), and Army's Credentialing Opportunities Online (COOL).

Credentialing Information Sources

As noted above, DOL has developed a number of comprehensive information sources capturing a variety of civilian labor market information, including

information on credentialing. These information sources can aid in the ability of individuals to identify relevant credentials and obtain contact information for the credentialing agency.

America's Career InfoNet (www.acinet.org) is a national, no-fee career and labor market information web site with resources and tools for counselors, teachers and trainers to help jobseekers make informed career decisions and to support a demand-driven workforce investment system.

The **Certification Finder** tool in America's Career InfoNet is a directory of civilian occupational certifications containing over 3,000 entries that can be searched by occupational area, industry, or keyword. (http://www.acinet.org/acinet/certifications_new/cert_search_occupation.asp?id=14,&nodeid=17)

The **Licensed Occupations** tool in America's Career InfoNet (http://www.acinet.org/acinet/lois_start.asp?id=14,&nodeid=16) provides access to occupational licensing requirements searchable by state, occupation, or agency. This tool includes information on licenses that may be required by law in order to practice in a particular occupation. (Information is supplied by states, so complete information for all states, or all agencies, and licenses within a state, may not be included or updated on the same schedule.)

The Army coordinated with DOL to incorporate the information contained in the Certification Finder Tool into its COOL database facilitating the Army's ability to identify certifications relevant to Army occupational specialties. The COOL web site also provides links to these tools for individuals who want to explore credentials that may not be related to their occupational specialties.

Civilian Occupation Descriptions

O*NET, the Occupational Information Network, is a comprehensive database of worker attributes and job characteristics. O*NET OnLine (http://online.onetcenter.org) is a web application that enables users to query, view, and print information contained in the O*NET database. The O*NET database contains detailed information, including knowledge, skills, & abilities (KSAs), tasks, general and detailed work activities, work context, interests, work values, and styles, for over 800 occupations covering the U.S. workforce. The O*NET system is based on the 2000 Standard Occupational Classification, so that O*NET data also link to related occupational, educational, and employment and wage information databases.

Military personnel can use the Crosswalk feature of O*NET OnLine to enter their Military Occupational Classification (MOC) code or title to identify related civilian occupations and directly access the O*NET reports for them. (The MOC to

O*NET-SOC crosswalk is supported by the work of the Defense Manpower Data Center.)

The **Occupational Outlook Handbook** (http://www.bls.gov/oco/home.htm) is a reference work produced by DOL's Bureau of Labor Statistics. Every two years it provides an updated narrative description of hundreds of major occupations in the U.S. workplace. The Occupational Outlook Handbook is a nationally recognized source of career information, designed to provide valuable assistance to individuals making decisions about their future work lives. Revised every two years, the Handbook describes what workers do on the job, working conditions, the training and education needed, earnings, and expected job prospects in a wide range of occupations. The Army's COOL web site provides links to descriptions contained in the Occupational Outlook Handbook for Soldiers seeking information about comparable jobs in the civilian workforce. Moreover, education counselors across the service use the Handbook to counsel servicemembers on career options.

Career Voyages (www.careervoyages.gov) is a popular new demand-driven career guidance web site designed to appeal to youth and career changers that highlights useful and relevant information on in-demand careers that are part of the President's High Growth Job Training Initiative. That initiative has identified twelve sectors at the national level that: (1) are projected to add substantial numbers of new jobs to the economy; or (2) have a significant impact on the economy overall; or (3) impact the growth of other industries, or (4) are being transformed by technology and innovation requiring new skills sets for workers; or (5) are new and emerging businesses that are projected to grow. Career Voyages also just unveiled a feature that allows searches of the high-demand occupations by Military Occupational Classification code or crosswalks from its listing of civilian occupations to related military careers.

TRANSITION ASSISTANCE PROGRAM

Veterans of the U.S. Armed Forces are less likely, overall, to be unemployed than non-veterans, according to the most recently available statistics. However, according to the same report, recently discharged veterans had a higher initial jobless rate than non-veterans. See Appendix A: Employment Situation of Veterans.

In an effort to address this issue, DOL established the Transition Assistance Program (TAP) employment workshops. These workshops, taught by trained facilitators, are designed to offer job search assistance and related services to separating servicemembers and spouses during their transition to civilian life and a civilian career. These TAP workshops are a partnership between DOL, DoD, and the Department of Veterans Affairs (VA). Eligible participants include Armed Forces Members within one year of their separation date or within two years of their retirement date. Subjects covered include personal appraisal, career

exploration, strategies for an effective job search, interviews, reviewing job offers, and methods for accessing support and assistance. During the career exploration portion of the workshop, credentialing is discussed along with how to access web-based information on relevance of military training to civilian credentials.

STATUTORY FISCAL CONSTRAINTS ON THE MILITARY SERVICES

Use of the MGIB, DANTES, and Apprenticeship programs provide only a partial solution for the Armed Forces to assist servicemembers to obtain civilian occupational credentials. MGIB and DANTES are available to servicemembers only on a voluntary, off-duty basis. These programs are of limited use to servicemembers who are deployed for extended periods of time. Insufficient legal authority exists for the Armed Forces to expend appropriated funds for servicemembers to acquire civilian/commercial occupational credentials. The established rule, set forth in a line of Comptroller General decisions going back nearly a century, specifies that the expenses associated with credentials are a servicemember's expense and not a necessary expense of the government agency. Therefore, absent specific statutory authority, appropriated funds may not generally be used to pay for commercial certifications. In 2002, Congress enacted specific statutory authority approving the use of appropriated funds to pay for credentials for civilian employees of the government (5 USC §5757). That statutory authority does not extend to military members.

Current statutory authority permits only the use of appropriated funds to pay for commercially contracted training courses that include an examination leading to credentials. This authority is limited, however, to instances where the examination logically relates to the training and where it is included as part of the purchase price of the course "package", as mentioned earlier in this report. No authority exists to reimburse a servicemember for a certification that is not part of a course "package". DoD has forwarded a proposal to Congress seeking such legislative authority, in the form of an amendment to Title 10, authorizing the use of appropriated funds to pay for credentials for servicemembers, similar to that recently enacted by Congress for civilian personnel. Such legislative relief represents an optimal resolution of the fiscal constraints on the Armed Forces assisting servicemembers in obtaining credentials.

In addition, mobilized Reserve Component officers are currently ineligible for either Active or, because of activation, Reserve Component tuition assistance because they cannot fulfill the 2-year Active Duty Service Obligation incurred by using tuition assistance on active duty. This Active Duty Service Obligation requirement is statutory—contained in U.S. Code Title 10, Section 2007.

SUMMARY

There is no more deserving or more valuable group of American workers than our nation's servicemembers and veterans. They are a highly trained, skilled, disciplined, and dedicated group of men and women that have served this country. Both the Department of Labor and the Department of Defense recognize the debt we owe these servicemembers and veterans. Both Departments also recognize that transitioning servicemembers represent a unique labor pool that can contribute significantly to the nation's ability to maintain its competitive edge in the world economy.

Facilitating servicemembers' smooth transition to the civilian workforce is critical to our nation's ability to successfully tap into this skilled labor pool and take full advantage of their many skills and highly developed work ethics. Aiding servicemembers in obtaining civilian credentials has increasingly been recognized as an important element of this transition. Civilian credentials, such as licenses, certifications, and apprenticeships, maximize servicemembers' ability to demonstrate to civilian employers that their skills are on par with those of their civilian counterparts. As a result, these credentials can reduce periods of unemployment and underemployment that servicemembers sometimes encounter when transitioning to the civilian workforce.

A number of constraints and challenges to this process of credentialing the servicemember have been identified in this report. But even with these constraints and challenges, the credentialing picture for our servicemembers making the transition into the civilian workforce has improved markedly with the current and continuing programs of each of the military services, and the cooperative efforts between the Departments of Labor and Defense

APPENDIX A: Employment Situation of Veterans

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EMPLOYMENT SITUATION OF VETERANS: AUGUST 2003

Veterans of the U.S. Armed Forces were less likely to be unemployed than nonveterans in August 2003, the Bureau of Labor Statistics of the U.S. Department of Labor reported today. Veterans had an unemployment rate of 4.5 percent, compared with 5.9 percent for nonveterans. Veterans who had been recently discharged from the Armed Forces had a jobless rate of 6.9 percent. Nine percent of all veterans had a service-connected disability. (Beginning with this release, the focus has been expanded to cover all veterans, not just those who served during the Vietnam era.)

The survey of veterans was conducted for the Bureau of Labor Statistics by the U.S. Census Bureau as a special supplement to the August 2003 Current Population Survey (CPS). The 2003 supplement was co-sponsored by the U.S. Department of Veterans Affairs and the U.S. Department of Labor's Veterans Employment and Training Service. Such a biennial supplement has been conducted since 1985. For a description of the survey, including definitions of terms used in this release, see the Technical Note.

Characteristics of Veterans

There were 23.7 million veterans (men and women) in the civilian noninstitutional population as of August 2003. About 15 million, or nearly two-thirds, served during either World War II, the Korean War, or the Vietnam era. Accordingly, 62 percent of all veterans were at least 55 years old and nearly 40 percent were 65 years old or over. Only about 1 percent of all veterans were under the age of 25. About 8.6 million veterans served during other service periods, which include the periods between World War II, the Korean War, and the Vietnam era, as well as the period from the end of the Vietnam era in May 1975 to the present. The majority of all veterans, 87 percent, were white, 10 percent were black, 1 percent were Asian, and 5 percent were of Hispanic or Latino ethnicity. Six percent of all veterans (1.4 million) were women. (See tables 1 and 2.)

The unemployment rates of male veterans ages 25 to 34 (4.7 percent) and ages 35 to 44 (3.8 percent) were lower than the rates of their nonveteran peers (6.3 and 4.8 percent, respectively) in August 2003. Among those 45 to 54 years old, however, veterans had a higher jobless rate than nonveterans (5.4 versus 3.6 percent). Female veterans ages 25 to 34 had a relatively high unemployment rate of 8.2 percent, but the rate was much lower for those ages 35 to 44 (3.4 percent). Among female nonveterans in these age groups, unemployment rates did not differ nearly as much—6.2 percent for those 25 to 34 years and 5.2 percent for those 35 to 44 years old. Female veterans ages 45 to 54 had a jobless rate of 5.4 percent, little different from their nonveteran contemporaries.

The rate of unemployment for black veterans was much lower than for black nonveterans—4.8 percent compared with 11.3 percent in August 2003. For whites, the unemployment rate for veterans was only somewhat lower than the rate for nonveterans—4.5 percent versus 5.1 percent. Among Hispanics, veterans and nonveterans both had unemployment rates around 7 percent.

The employment distribution for male veterans and nonveterans was very similar. About 90 percent of male veterans were employed in four of the five major occupational categories: management and professional occupations; production, transportation, and material moving occupations; sales and office occupations; and natural resources, construction, and maintenance occupations. Among women, around three-fourths of veterans as well as nonveterans worked in two major job categories—management and professional occupations and sales and office occupations. (See table 3.)

Disabled Veterans

In August 2003, about 2.2 million veterans, or 9 percent of the total, reported having a service-connected disability. (See table 4.) Veterans with a service-connected disability are assigned a disability rating by the Department of Veterans Affairs. Ratings range from 0 to 100 percent, in increments of 10 percentage points, depending on the severity of the condition. Nearly half of disabled veterans reported a disability rating of less than 30 percent, while 21 percent had a rating of 60 percent or higher.

The incidence of service-connected disabilities was not very different between those who served during World War II, the Korean War, and the Vietnam era and those who served during other service periods. However, veterans of the three selected wartime periods were more likely than other veterans to have a very serious disability. Among disabled veterans of World War II, the Korean War, and the Vietnam era, 24 percent had a disability rating of 60 percent or more; among disabled veterans of other service periods, 14 percent reported such a disability rating.

Only one-third of the disabled veterans of World War II, the Korean War, and the Vietnam era were in the labor force in August 2003. This low rate of labor force participation reflects the age of this group (80 percent were 55 years or older) as well as the effect of their disabilities. Among veterans of these periods who did not have a service-connected disability, 46 percent were in the labor force. The unemployment rate of disabled veterans of the selected wartime periods was 3.5 percent.

Among veterans of other service periods with a disability, 75 percent were in the labor force, essentially the same as the proportion for nondisabled veterans from these periods. The unemployment rate of disabled veterans from other service periods was 6.1 percent.

About 16 percent of employed disabled veterans worked for the federal government. This compares with 6 percent of nondisabled veterans and 2 percent of nonveterans. Nearly 30 percent of disabled veterans were employed in federal, state, and local government combined, compared with 17 percent of nondisabled veterans and 14 percent of nonveterans. (See table 5.)

Veterans Recently Discharged from Active Duty

Nearly 450,000 veterans were discharged from active duty between January 2001 and August 2003. Women made up 13 percent of these recently discharged veterans, blacks made up 12 percent, and Hispanics made up 9 percent. All of these percentages were greater than these groups' share of total veterans. The labor force participation rate for recently discharged veterans was 89 percent, and their unemployment rate was 6.9 percent. (See table 6.)

One in five recently discharged veterans had a service-connected disability. Nearly three-fifths of the newly separated veterans with a disability had a disability rating of 30 percent or higher, compared with about two-fifths of veterans discharged between 1991 and 2000. (See table 7.)

NOTE: This release has been changed to reflect a shift in focus from veterans of the Vietnam era to veterans from all service periods. Because of the changing composition of the veteran population, this news release does not identify Vietnam-era veterans separately as was done in prior releases based on the biennial veterans supplement.

Technical Note

The estimates in this release were obtained from a supplement to the August 2003 Current Population Survey (CPS), a monthly survey of about 60,000 households which provides the national data on total employment and unemployment. The CPS is conducted by the U.S. Census Bureau for the Bureau of Labor Statistics (BLS).

The supplement was co-sponsored by the U.S. Department of Veterans Affairs and by the U.S. Department of Labor's Veterans Employment and Training Service. Questions were asked of persons 18 years of age and older regarding their prior service in the U.S. Armed Forces and whether they had a service-connected disability.

Information in this release will be made available to sensory impaired individuals upon request. Voice phone: 202-691-5200; TDD message referral phone number: 1-800-877-8339.

Reliability of the estimates

Statistics based on the CPS are subject to both sampling and nonsampling error. When a sample, rather than the entire population, is surveyed, there is a chance that the sample estimates will differ from the "true" population values they represent. The exact difference, or *sampling error*, varies depending on the particular sample selected, and this variability is measured by the standard error of the estimate. There is about a 90-percent chance, or level of confidence, that an estimate based on a sample will differ by no more than 1.6 standard errors from the "true" population value because of sampling error. BLS analyses are generally conducted at the 90-percent level of confidence.

The CPS data also are affected by *nonsampling error*. Nonsampling error can occur for many reasons, including the failure to sample a segment of the population, inability to obtain information for all respondents in the sample, inability or unwillingness of respondents to provide correct information, and errors made in the collection or processing of the data. Standard practice in the CPS is for one member of the household to answer questions for all the household members. In the case of the supplementary questions about veterans, however, several attempts were made to collect the information directly from the veterans. This was done because some of the information would be best provided by the veterans themselves.

For a full discussion of the reliability of data from the CPS and information on estimating standard errors, see the "Explanatory Notes and Estimates of Error" section of the BLS monthly periodical, *Employment and Earnings*.

Definitions

The definitions underlying the data in this release are as follows:

Veterans are men and women who previously served on active duty in the U.S. Armed Forces. Members of the Reserves and National Guard are counted as veterans if they had ever been called to active duty.

Nonveterans are men and women who never served on active duty in the U.S. Armed Forces.

World War II, Korean War, and Vietnam-era veterans are men and women who served in the Armed Forces during these periods, regardless of where they served.

Veterans of other service periods are men and women who served in the Armed Forces at any time other than World War II, the Korean War, and the Vietnam era. Although U.S. Armed Forces were engaged in several armed conflicts during other service periods, these conflicts were more limited in scope and included a smaller proportion of the Armed Forces than the three selected wartime periods. Veterans who served during one of the selected wartime periods and during another period are classified as World War II, Korean War, and Vietnam-era veterans.

Veteran status is provided from responses to the question, "Did you ever serve on active duty in the U.S. Armed Forces?"

Period of service is provided from answers to the question asked of veterans, "When did you serve?" The following service periods are identified:

Vietnam era — February 1961-May 1975
Korean War — June 1950-January 1955
World War II — September 1940-July 1947
Other service periods — All other periods

Vietnam-era veterans are those who served anywhere between August 5, 1964, and May 7, 1975, plus those who were in Southeast Asia between February 28, 1961, and August 4, 1964.

Presence of service-connected disability is provided by answers to the question, "Has the Department of Veterans Affairs (VA) or the Department of Defense determined that you have a service-connected disability; that is, a health condition or impairment caused or made worse by military service?"

Service-connected disability rating is based on answers to the question, "What is your current service-connected disability rating?" Answers can range from 0 to 100 percent, in increments of 10 percentage points. Ratings are determined from a rating schedule published in the Code of Federal Regulations, Title 38, "Pensions, Bonuses, and Veterans' Relief," Part 4—"Schedule for Rating Disabilities." The rating schedule is "primarily a guide in the evaluation of disability resulting from all types of diseases and injuries encountered as a result of or incident to military service. The percentage ratings represent, as far as can practicably be determined, the average impairment in earning capacity resulting from such diseases and injuries and their residual conditions in civil occupations." Part 4 contains a listing of hundreds of possible disorders and assigns ratings of 0 through 100 percent in steps of 10 percent for each, with instructions for rating multiple disorders.

Year of discharge is determined by answers to the question, "In what year were you last separated from active duty in the Armed Forces?"

Table 1. Employment status of persons 18 years and over by veteran status, period of service, sex, race, and Hispanic or Latino ethnicity, August 2003, not seasonally adjusted

(Numbers in thousands)

Veteran status, period of service, sex, race, and Hispanic or Latino ethnicity	Civilian noninstitutional population	Civilian labor force						Not in labor force
		Total	Percent of population	Employed		Unemployed		
				Total	Percent of population	Total	Percent of labor force	
TOTAL								
Total, 18 years and over	212,931	143,737	67.5	135,427	63.6	8,310	5.8	69,194
Veterans	23,731	13,483	56.8	12,882	54.3	601	4.5	10,248
WW II, Korean War, and Vietnam era	15,158	6,953	45.9	6,630	43.7	323	4.7	8,204
Other service periods	8,573	6,530	76.2	6,252	72.9	278	4.3	2,044
Nonveterans	189,200	130,253	68.8	122,545	64.8	7,709	5.9	58,947
Men								
Total, 18 years and over	102,223	77,001	75.3	72,686	71.1	4,315	5.6	25,222
Veterans	22,331	12,603	56.4	12,049	54.0	554	4.4	9,728
WW II, Korean War, and Vietnam era	14,690	6,804	46.3	6,491	44.2	313	4.6	7,885
Other service periods	7,641	5,799	75.9	5,558	72.7	241	4.2	1,843
Nonveterans	79,892	64,398	80.6	60,638	75.9	3,761	5.8	15,494
Women								
Total, 18 years and over	110,708	66,736	60.3	62,741	56.7	3,995	6.0	43,972
Veterans	1,400	880	62.9	833	59.5	47	5.4	520
WW II, Korean War, and Vietnam era	468	149	31.9	139	29.7	10	6.9	319
Other service periods	932	731	78.5	694	74.5	37	5.0	201
Nonveterans	109,308	65,855	60.2	61,907	56.6	3,948	6.0	43,453
White								
Total, 18 years and over	174,865	118,160	67.6	112,205	64.2	5,954	5.0	56,705
Veterans	20,696	11,521	55.7	11,008	53.2	513	4.5	9,175
WW II, Korean War, and Vietnam era	13,633	6,230	45.7	5,941	43.6	288	4.6	7,403
Other service periods	7,062	5,291	74.9	5,066	71.7	224	4.2	1,772
Nonveterans	154,169	106,639	69.2	101,198	65.6	5,441	5.1	47,530
Black or African American								
Total, 18 years and over	24,458	16,318	66.7	14,568	59.6	1,750	10.7	8,141
Veterans	2,278	1,480	65.0	1,409	61.8	72	4.8	798
WW II, Korean War, and Vietnam era	1,114	524	47.0	489	43.9	35	6.6	590
Other service periods	1,164	956	82.2	920	79.0	37	3.8	208
Nonveterans	22,180	14,838	66.9	13,159	59.3	1,679	11.3	7,343
Asian								
Total, 18 years and over	9,016	6,088	67.5	5,729	63.5	359	5.9	2,928
Veterans	225	131	58.5	130	57.7	2	1.3	93
WW II, Korean War, and Vietnam era	134	51	38.1	51	37.9	–	–	83
Other service periods	90	80	88.9	79	87.3	1	1.9	10
Nonveterans	8,792	5,957	67.8	5,600	63.7	357	6.0	2,835
Hispanic or Latino ethnicity								
Total, 18 years and over	26,270	18,392	70.0	17,052	64.9	1,340	7.3	7,879
Veterans	1,078	700	64.9	654	60.7	45	6.5	379
WW II, Korean War, and Vietnam era	548	299	54.6	277	50.5	23	7.6	249
Other service periods	530	400	75.5	378	71.2	22	5.6	130
Nonveterans	25,192	17,692	70.2	16,397	65.1	1,295	7.3	7,500

NOTE: Veterans are men and women who served in the U.S. Armed Forces during World War II, the Korean War, the Vietnam era, and all other service periods. Nonveterans are men and women who never served in the U.S. Armed Forces. Other service periods include the periods between World War II and the Korean War, between the Korean War and the Vietnam era, and since the end of the Vietnam era in May 1975. More detailed information appears in the Technical Note of this release. Estimates for the above race groups (white, black or African American, and Asian) do not sum to totals because data are not presented for all race groups. In addition, persons whose ethnicity is identified as Hispanic or Latino may be of any race and, therefore, are classified by ethnicity as well as by race. Dash represents or rounds to zero.

Table 2. Employment status of persons 18 years and over by veteran status, period of service, and age, August 2003, not seasonally adjusted

(Numbers in thousands)

Veteran status, period of service, and age	Civilian noninstitutional population	Civilian labor force						Not in labor force
		Total	Percent of population	Employed		Unemployed		
				Total	Percent of population	Total	Percent of labor force	
TOTAL								
VETERANS								
Total, 18 years and over	23,731	13,483	56.8	12,882	54.3	601	4.5	10,248
18 to 24 years	294	252	85.9	232	79.1	20	7.9	41
25 to 34 years	1,495	1,370	91.7	1,300	87.0	70	5.1	125
35 to 44 years	2,919	2,657	91.0	2,557	87.6	100	3.8	261
45 to 54 years	4,266	3,612	84.7	3,418	80.1	195	5.4	654
55 to 64 years	5,865	4,043	68.9	3,878	66.1	165	4.1	1,822
65 years and over	8,893	1,548	17.4	1,497	16.8	52	3.3	7,344
WW II, Korean War, and Vietnam era[1]								
Total, 35 years and over	15,158	6,953	45.9	6,630	43.7	323	4.7	8,204
35 to 44 years	25	20	(2)	17	(2)	3	(2)	5
45 to 54 years	2,864	2,403	83.9	2,265	79.1	138	5.8	461
55 to 64 years	4,806	3,430	71.4	3,284	68.3	146	4.3	1,377
65 years and over	7,462	1,100	14.7	1,064	14.3	36	3.3	6,361
Other service periods								
Total, 18 years and over	8,573	6,530	76.2	6,252	72.9	278	4.3	2,044
18 to 24 years	294	252	85.9	232	79.1	20	7.9	41
25 to 34 years	1,495	1,370	91.7	1,300	87.0	70	5.1	125
35 to 44 years	2,893	2,637	91.1	2,540	87.8	97	3.7	256
45 to 54 years	1,402	1,209	86.2	1,153	82.2	56	4.7	193
55 to 64 years	1,059	613	57.9	594	56.1	19	3.1	445
65 years and over	1,431	448	31.3	432	30.2	16	3.5	983
NONVETERANS								
Total, 18 years and over	189,200	130,253	68.8	122,545	64.8	7,709	5.9	58,947
18 to 24 years	27,069	19,423	71.8	17,239	63.7	2,184	11.2	7,646
25 to 34 years	37,553	30,883	82.2	28,939	77.1	1,944	6.3	6,670
35 to 44 years	40,791	33,881	83.1	32,190	78.9	1,691	5.0	6,910
45 to 54 years	36,355	29,649	81.6	28,478	78.3	1,171	3.9	6,707
55 to 64 years	22,094	13,217	60.0	12,653	57.4	565	4.3	8,817
65 years and over	25,398	3,201	12.6	3,047	12.0	155	4.8	22,197
MEN								
VETERANS								
Total, 18 years and over	22,331	12,603	56.4	12,049	54.0	554	4.4	9,728
18 to 24 years	227	199	87.6	179	78.8	20	10.0	28
25 to 34 years	1,296	1,205	92.9	1,148	88.6	56	4.7	91
35 to 44 years	2,553	2,346	91.9	2,257	88.4	89	3.8	206
45 to 54 years	3,923	3,342	85.2	3,161	80.6	180	5.4	581
55 to 64 years	5,732	3,988	69.6	3,828	66.8	159	4.0	1,744
65 years and over	8,600	1,524	17.7	1,475	17.1	49	3.2	7,077
WW II, Korean War, and Vietnam era[1]								
Total, 35 years and over	14,690	6,804	46.3	6,491	44.2	313	4.6	7,885
35 to 44 years	25	20	(2)	17	(2)	3	(2)	5
45 to 54 years	2,729	2,292	84.0	2,163	79.2	129	5.6	437
55 to 64 years	4,723	3,405	72.1	3,260	69.0	145	4.3	1,319
65 years and over	7,212	1,088	15.1	1,052	14.6	36	3.3	6,125

See footnotes at end of table.

Table 2. Employment status of persons 18 years and over by veteran status, period of service, and age, August 2003, not seasonally adjusted — Continued

(Numbers in thousands)

Veteran status, period of service, and age	Civilian noninstitutional population	Civilian labor force						Not in labor force
		Total	Percent of population	Employed		Unemployed		
				Total	Percent of population	Total	Percent of labor force	
MEN — Continued								
Other service periods								
Total, 18 years and over	7,641	5,799	75.9	5,558	72.7	241	4.2	1,843
18 to 24 years	227	199	87.6	179	78.8	20	10.0	28
25 to 34 years	1,296	1,205	92.9	1,148	88.6	56	4.7	91
35 to 44 years	2,528	2,326	92.0	2,240	88.6	86	3.7	202
45 to 54 years	1,194	1,050	87.9	999	83.7	51	4.9	144
55 to 64 years	1,009	583	57.8	568	56.3	14	2.5	426
65 years and over	1,388	436	31.4	423	30.5	13	2.9	952
NONVETERANS								
Total, 18 years and over	79,892	64,398	80.6	60,638	75.9	3,761	5.8	15,494
18 to 24 years	13,450	10,032	74.6	8,935	66.4	1,097	10.9	3,418
25 to 34 years	18,065	16,563	91.7	15,512	85.9	1,051	6.3	1,502
35 to 44 years	18,894	17,437	92.3	16,607	87.9	830	4.8	1,457
45 to 54 years	15,906	14,039	88.3	13,532	85.1	507	3.6	1,867
55 to 64 years	7,657	5,187	67.7	4,968	64.9	218	4.2	2,470
65 years and over	5,920	1,139	19.2	1,083	18.3	57	5.0	4,781
WOMEN								
VETERANS								
Total, 18 years and over	1,400	880	62.9	833	59.5	47	5.4	520
18 to 24 years	67	53	(2)	53	(2)	–	–	13
25 to 34 years	199	166	83.3	152	76.5	14	8.2	33
35 to 44 years	366	311	85.0	300	82.1	10	3.4	55
45 to 54 years	343	271	78.9	256	74.6	14	5.4	73
55 to 64 years	133	55	41.5	49	37.2	6	(2)	78
65 years and over	292	25	8.4	22	7.4	3	(2)	268
WW II, Korean War, and Vietnam era[1]								
Total, 35 years and over	468	149	31.9	139	29.7	10	6.9	319
35 to 44 years	–	–	–	–	–	–	–	–
45 to 54 years	135	111	82.4	102	75.6	9	8.2	24
55 to 64 years	83	25	29.8	24	28.5	1	(2)	58
65 years and over	250	13	5.1	13	5.1	–	–	237
Other service periods								
Total, 18 years and over	932	731	78.5	694	74.5	37	5.0	201
18 to 24 years	67	53	(2)	53	(2)	–	–	13
25 to 34 years	199	166	83.3	152	76.5	14	8.2	33
35 to 44 years	365	310	85.0	300	82.1	10	3.4	55
45 to 54 years	208	159	76.6	154	74.0	5	3.4	49
55 to 64 years	50	30	(2)	26	(2)	5	(2)	19
65 years and over	43	12	(2)	9	(2)	3	(2)	31
NONVETERANS								
Total, 18 years and over	109,308	65,855	60.2	61,907	56.6	3,948	6.0	43,453
18 to 24 years	13,619	9,391	69.0	8,304	61.0	1,087	11.6	4,228
25 to 34 years	19,488	14,319	73.5	13,427	68.9	893	6.2	5,168
35 to 44 years	21,897	16,444	75.1	15,583	71.2	861	5.2	5,453
45 to 54 years	20,449	15,609	76.3	14,946	73.1	663	4.2	4,840
55 to 64 years	14,377	8,030	55.9	7,684	53.4	346	4.3	6,347
65 years and over	19,479	2,062	10.6	1,964	10.1	98	4.8	17,416

[1] Because of the aging of the population, there are no longer any veterans of these eras under 35 years of age.

[2] Data not shown where base is less than 75,000.

NOTE: Veterans are men and women who served in the U.S. Armed Forces during World War II, the Korean War, the Vietnam era, and all other service periods. Nonveterans are men and women who never served in the U.S. Armed Forces. Other service periods include the periods between World War II and the Korean War, between the Korean War and the Vietnam era, and since the end of the Vietnam era in May 1975. More detailed information appears in the Technical Note of this release. Dash represents or rounds to zero.

Table 3. Employed persons 18 years and over by occupation, veteran status, period of service, and sex, August 2003, not seasonally adjusted

(Percent distribution)

Occupation	Veterans			Nonveterans
	Total	WW II, Korean War, and Vietnam era	Other service periods	
TOTAL				
Total, 18 years and over (thousands)	12,882	6,630	6,252	122,545
Percent	100.0	100.0	100.0	100.0
Management, professional, and related occupations	35.1	36.7	33.5	34.7
Management, business, and financial operations occupations	18.4	20.6	16.0	14.2
Professional and related occupations	16.8	16.0	17.5	20.5
Service occupations	11.2	9.5	13.0	16.3
Sales and office occupations	18.5	17.5	19.5	26.2
Sales and related occupations	10.6	10.7	10.4	11.4
Office and administrative support occupations	7.9	6.8	9.1	14.8
Natural resources, construction, and maintenance occupations	16.1	16.4	15.7	10.3
Farming, fishing, and forestry occupations	.5	.5	.4	.9
Construction and extraction occupations	8.0	8.4	7.6	6.1
Installation, maintenance, and repair occupations	7.6	7.5	7.7	3.3
Production, transportation, and material moving occupations	19.1	19.9	18.2	12.5
Production occupations	8.8	9.3	8.4	7.0
Transportation and material moving occupations	10.3	10.6	9.8	5.5
Men				
Total, 18 years and over (thousands)	12,049	6,491	5,558	60,638
Percent	100.0	100.0	100.0	100.0
Management, professional, and related occupations	34.6	36.6	32.2	31.9
Management, business, and financial operations occupations	18.6	20.7	16.1	15.4
Professional and related occupations	16.0	15.8	16.2	16.6
Service occupations	10.8	9.3	12.6	12.8
Sales and office occupations	17.4	17.1	17.8	17.1
Sales and related occupations	10.7	10.8	10.5	10.9
Office and administrative support occupations	6.7	6.3	7.3	6.2
Natural resources, construction, and maintenance occupations	17.1	16.7	17.5	19.8
Farming, fishing, and forestry occupations	.5	.5	.5	1.4
Construction and extraction occupations	8.4	8.5	8.3	12.0
Installation, maintenance, and repair occupations	8.1	7.7	8.7	6.4
Production, transportation, and material moving occupations	20.1	20.2	20.0	18.3
Production occupations	9.3	9.4	9.2	9.2
Transportation and material moving occupations	10.8	10.8	10.8	9.2
Women				
Total, 18 years and over (thousands)	833	139	694	61,907
Percent	100.0	100.0	100.0	100.0
Management, professional, and related occupations	43.2	42.3	43.3	37.4
Management, business, and financial operations occupations	15.3	16.3	15.1	13.1
Professional and related occupations	27.8	26.1	28.2	24.3
Service occupations	16.3	14.7	16.7	19.6
Sales and office occupations	34.2	36.6	33.7	35.1
Sales and related occupations	9.3	4.3	10.3	11.8
Office and administrative support occupations	24.9	32.3	23.4	23.2
Natural resources, construction, and maintenance occupations	2.0	1.5	2.1	1.1
Farming, fishing, and forestry occupations	–	–	–	.4
Construction and extraction occupations	1.8	.5	2.0	.4
Installation, maintenance, and repair occupations	.2	.9	–	.3
Production, transportation, and material moving occupations	4.4	4.9	4.3	6.8
Production occupations	2.2	1.9	2.2	4.9
Transportation and material moving occupations	2.2	3.0	2.1	1.9

NOTE: Veterans are men and women who served in the U.S. Armed Forces during World War II, the Korean War, the Vietnam era, and all other service periods. Nonveterans are men and women who never served in the U.S. Armed Forces. Other service periods include the periods between World War II and the Korean War, between the Korean War and the Vietnam era, and since the end of the Vietnam era in May 1975. More detailed information appears in the Technical Note of this release. Occupations reflect the introduction of the 2002 Census occupational classification system derived from the 2000 Standard Occupational Classification system. Dash represents or rounds to zero.

Table 4. Employment status of veterans 18 years and over by period of service, presence of service-connected disability, reported disability rating, and sex, August 2003, not seasonally adjusted

(Numbers in thousands)

Period of service, presence of disability, reported disability rating, and sex	Civilian noninstitutional population	Civilian labor force						Not in labor force
		Total	Percent of population	Employed		Unemployed		
				Total	Percent of population	Total	Percent of labor force	
TOTAL								
VETERANS								
With service-connected disability	2,168	988	45.5	941	43.4	47	4.8	1,181
Less than 30 percent disability rating	976	533	54.6	509	52.1	25	4.6	442
30 to 50 percent disability rating	508	269	52.9	260	51.1	9	3.4	239
60 percent or higher disability rating	459	97	21.1	90	19.6	7	7.1	362
Disability rating not reported	226	89	39.4	82	36.5	7	7.4	137
Without service-connected disability	18,175	10,374	57.1	9,901	54.5	473	4.6	7,802
Presence of disability not reported	3,387	2,122	62.6	2,041	60.2	81	3.8	1,265
WW II, Korean War, and Vietnam era								
With service-connected disability	1,521	500	32.9	482	31.7	18	3.5	1,021
Less than 30 percent disability rating	630	242	38.5	233	36.9	10	4.0	388
30 to 50 percent disability rating	351	144	41.0	144	41.0	–	–	207
60 percent or higher disability rating	367	62	17.0	58	15.9	4	(1)	304
Disability rating not reported	172	51	29.6	47	27.5	4	(1)	121
Without service-connected disability	11,633	5,398	46.4	5,129	44.1	269	5.0	6,236
Presence of disability not reported	2,004	1,056	52.7	1,019	50.9	37	3.5	948
Other service periods								
With service-connected disability	648	488	75.3	458	70.7	30	6.1	160
Less than 30 percent disability rating	346	291	84.1	276	79.8	15	5.1	55
30 to 50 percent disability rating	157	125	79.4	116	73.7	9	7.2	32
60 percent or higher disability rating	92	34	37.2	31	34.3	3	(1)	58
Disability rating not reported	53	38	(1)	35	(1)	3	(1)	15
Without service-connected disability	6,542	4,976	76.1	4,772	72.9	204	4.1	1,566
Presence of disability not reported	1,383	1,066	77.1	1,022	73.9	44	4.2	317
Men								
VETERANS								
With service-connected disability	2,009	899	44.7	862	42.9	37	4.1	1,110
Less than 30 percent disability rating	915	491	53.6	471	51.5	20	4.0	424
30 to 50 percent disability rating	458	236	51.4	230	50.1	6	2.6	222
60 percent or higher disability rating	414	87	21.0	82	19.9	5	5.4	327
Disability rating not reported	222	86	38.6	79	35.6	7	7.7	137
Without service-connected disability	17,154	9,739	56.8	9,290	54.2	449	4.6	7,416
Presence of disability not reported	3,168	1,965	62.0	1,897	59.9	68	3.5	1,203
WW II, Korean War, and Vietnam era								
With service-connected disability	1,479	490	33.2	473	32.0	17	3.5	988
Less than 30 percent disability rating	623	242	38.9	233	37.4	9	3.9	380
30 to 50 percent disability rating	336	137	40.6	137	40.6	–	–	200
60 percent or higher disability rating	347	60	17.4	56	16.2	4	(1)	287
Disability rating not reported	172	51	29.6	47	27.5	4	(1)	121
Without service-connected disability	11,249	5,272	46.9	5,012	44.6	260	4.9	5,977
Presence of disability not reported	1,962	1,042	53.1	1,006	51.3	36	3.5	920
Other service periods								
With service-connected disability	530	409	77.0	389	73.3	20	4.8	122
Less than 30 percent disability rating	293	249	85.0	238	81.5	10	4.1	44
30 to 50 percent disability rating	122	99	81.4	93	76.4	6	6.1	23
60 percent or higher disability rating	66	26	(1)	26	(1)	1	(1)	40
Disability rating not reported	50	35	(1)	32	(1)	3	(1)	15
Without service-connected disability	5,905	4,467	75.6	4,278	72.4	189	4.2	1,438
Presence of disability not reported	1,206	923	76.5	891	73.9	32	3.5	283

See footnotes at end of table.

Table 4. Employment status of veterans 18 years and over by period of service, presence of service-connected disability, reported disability rating, and sex, August 2003, not seasonally adjusted — Continued

(Numbers in thousands)

Period of service, presence of disability, reported disability rating, and sex	Civilian noninstitutional population	Civilian labor force						Not in labor force
		Total	Percent of population	Employed		Unemployed		
				Total	Percent of population	Total	Percent of labor force	
Women								
VETERANS								
With service-connected disability	159	89	55.7	79	49.4	10	11.4	71
Without service-connected disability	1,021	635	62.2	611	59.8	24	3.8	386
Presence of disability not reported	220	157	71.5	144	65.5	13	8.3	63
WW II, Korean War, and Vietnam era								
With service-connected disability	42	10	([1])	9	([1])	–	–	32
Without service-connected disability	384	126	32.8	117	30.4	9	7.3	258
Presence of disability not reported	42	13	([1])	13	([1])	1	([1])	28
Other service periods								
With service-connected disability	117	79	67.3	69	59.0	10	12.4	38
Without service-connected disability	637	509	79.9	494	77.6	15	2.9	128
Presence of disability not reported	178	143	80.7	131	73.7	12	8.6	34

[1] Data not shown where base is less than 75,000.

NOTE: Veterans are men and women who served in the U.S. Armed Forces during World War II, the Korean War, the Vietnam era, and all other service periods. Nonveterans are men and women who never served in the U.S. Armed Forces. Other service periods include the periods between World War II and the Korean War, between the Korean War and the Vietnam era, and since the end of the Vietnam era in May 1975. A service-connected disability is a health condition or impairment caused or made worse by military service. The associated disability rating, which can range from 0 to 100 percent, is determined from a rating schedule published in the U.S. Code of Federal Regulations, "Title 38." More detailed information appears in the Technical Note of this release. Dash represents or rounds to zero.

Table 5. Employed persons 18 years and over by veteran status, period of service, presence of service-connected disability, and class of worker, August 2003, not seasonally adjusted

Veteran status, period of service, and presence of disability	Total employed (thousands)	Percent distribution by class of worker							
		Total	Agriculture and related industries	Nonagricultural industries					
				Total	Wage and salary workers				Self-employed and unpaid family workers
					Private sector	Government			
						Total	Federal	State and local	
Veterans[1]	12,882	100.0	2.1	97.9	71.7	17.3	6.4	10.9	9.0
With service-connected disability	941	100.0	1.5	98.5	62.7	29.8	15.9	13.9	6.0
Without service-connected disability	9,901	100.0	2.3	97.7	71.9	16.6	5.7	10.9	9.2
WW II, Korean War, and Vietnam era[1]	6,630	100.0	2.8	97.2	68.9	17.1	6.6	10.6	11.3
With service-connected disability	482	100.0	1.7	98.3	58.6	31.7	16.6	15.1	8.0
Without service-connected disability	5,129	100.0	3.2	96.8	69.1	16.4	5.8	10.6	11.3
Other service periods[1]	6,252	100.0	1.4	98.6	74.6	17.5	6.2	11.3	6.5
With service-connected disability	458	100.0	1.3	98.7	67.0	27.8	15.1	12.7	3.8
Without service-connected disability	4,772	100.0	1.4	98.6	75.0	16.7	5.5	11.3	6.9
Nonveterans	122,545	100.0	1.8	98.2	77.5	13.7	2.0	11.7	6.9

[1] Includes veterans who did not report presence of disability.

NOTE: Veterans are men and women who served in the U.S. Armed Forces during World War II, the Korean War, the Vietnam era, and all other service periods. Nonveterans are men and women who never served in the U.S. Armed Forces. Other service periods include the periods between World War II and the Korean War, between the Korean War and the Vietnam era, and since the end of the Vietnam era in May 1975. A service-connected disability is a health condition or impairment caused or made worse by military service. The associated disability rating, which can range from 0 to 100 percent, is determined from a rating schedule published in the U.S. Code of Federal Regulations, "Title 38." More detailed information appears in the Technical Note of this release.

Table 6. Employment status of veterans 18 years and over by year of discharge from the Armed Forces, sex, race, and Hispanic or Latino ethnicity, August 2003, not seasonally adjusted

(Numbers in thousands)

Year of discharge, sex, race, and Hispanic or Latino ethnicity	Civilian noninstitutional population	Civilian labor force						Not in labor force
		Total	Percent of population	Employed		Unemployed		
				Total	Percent of population	Total	Percent of labor force	
TOTAL								
Prior to 1971	10,881	3,755	34.5	3,577	32.9	178	4.7	7,126
1971 to 1980	3,380	2,577	76.3	2,435	72.0	142	5.5	803
1981 to 1990	2,244	1,925	85.8	1,861	82.9	65	3.4	318
1991 to 2000	2,239	2,031	90.7	1,935	86.5	96	4.7	207
2001 to 2003	445	394	88.5	367	82.4	27	6.9	51
Year not available	4,543	2,800	61.6	2,707	59.6	93	3.3	1,742
Men								
Prior to 1971	10,569	3,703	35.0	3,528	33.4	175	4.7	6,866
1971 to 1980	3,208	2,443	76.2	2,310	72.0	133	5.5	765
1981 to 1990	1,954	1,699	87.0	1,645	84.2	54	3.2	255
1991 to 2000	1,975	1,809	91.6	1,724	87.3	86	4.7	165
2001 to 2003	387	347	89.5	320	82.6	27	7.7	41
Year not available	4,238	2,602	61.4	2,522	59.5	80	3.1	1,636
Women								
Prior to 1971	312	52	16.6	49	15.7	3	(1)	260
1971 to 1980	172	134	78.1	125	72.8	9	6.9	38
1981 to 1990	290	226	78.1	215	74.2	11	5.0	64
1991 to 2000	264	222	84.0	211	80.1	10	4.7	42
2001 to 2003	58	47	(1)	47	(1)	–	–	10
Year not available	305	199	65.3	186	61.0	13	6.6	106
White								
Prior to 1971	10,065	3,486	34.6	3,321	33.0	165	4.7	6,580
1971 to 1980	2,970	2,306	77.6	2,177	73.3	129	5.6	664
1981 to 1990	1,796	1,551	86.3	1,502	83.6	49	3.1	245
1991 to 2000	1,828	1,653	90.5	1,572	86.0	81	4.9	174
2001 to 2003	366	319	87.2	293	80.0	26	8.2	47
Year not available	3,670	2,205	60.1	2,142	58.4	63	2.9	1,465
Black or African American								
Prior to 1971	559	175	31.3	163	29.1	12	7.1	384
1971 to 1980	293	191	65.2	178	60.6	14	7.1	102
1981 to 1990	348	293	84.4	278	80.0	15	5.2	54
1991 to 2000	319	291	91.4	287	90.2	4	1.3	27
2001 to 2003	55	52	(1)	51	(1)	1	(1)	3
Year not available	705	477	67.8	452	64.1	25	5.3	227
Hispanic or Latino ethnicity								
Prior to 1971	332	106	31.8	91	27.4	15	14.0	227
1971 to 1980	161	139	86.0	131	81.0	8	5.7	23
1981 to 1990	124	108	87.3	105	84.5	3	3.2	16
1991 to 2000	150	137	91.0	133	88.1	4	3.2	14
2001 to 2003	40	29	(1)	20	(1)	9	(1)	11
Year not available	270	181	66.9	175	64.7	6	3.2	89

[1] Data not shown where base is less than 75,000.

NOTE: Veterans are men and women who served in the U.S. Armed Forces during World War II, the Korean War, the Vietnam era, and all other service periods. Nonveterans are men and women who never served in the U.S. Armed Forces. Other service periods include the periods between World War II and the Korean War, between the Korean War and the Vietnam era, and since the end of the Vietnam era in May 1975. More detailed information appears in the Technical Note of this release. Estimates for the above race groups (white and black or African American) do not sum to totals because data are not presented for all race groups. In addition, persons whose ethnicity is identified as Hispanic or Latino may be of any race and, therefore, are classified by ethnicity as well as by race. Asians are not shown separately, as most estimates are too small to meet publication standards. Dash represents or rounds to zero.

Table 7. Employment status of veterans 18 years and over by year of discharge from the Armed Forces, presence of service-connected disability, and reported disability rating, August 2003, not seasonally adjusted

(Numbers in thousands)

Year of discharge, presence of disability, and reported disability rating	Civilian noninstitutional population	Civilian labor force						Not in labor force
		Total	Percent of population	Employed		Unemployed		
				Total	Percent of population	Total	Percent of labor force	
Prior to 1976								
With service-connected disability	1,186	306	25.8	286	24.1	19	6.3	881
Less than 30 percent disability rating	499	145	29.2	137	27.5	9	5.9	353
30 to 50 percent disability rating	257	80	31.0	77	29.9	3	3.7	177
60 percent or higher disability rating	271	41	15.0	36	13.5	4	([1])	230
Disability rating not reported	160	40	24.8	36	22.5	4	([1])	120
Without service-connected disability	11,779	5,036	42.8	4,794	40.7	242	4.8	6,743
1976 to 1990								
With service-connected disability	418	234	55.9	227	54.4	6	2.7	184
Less than 30 percent disability rating	223	161	72.1	155	69.7	5	3.3	62
30 to 50 percent disability rating	97	52	53.8	52	53.8	–	–	45
60 percent or higher disability rating	89	14	15.9	14	15.9	–	–	75
Disability rating not reported	10	7	([1])	6	([1])	1	([1])	3
Without service-connected disability	3,059	2,648	86.5	2,533	82.8	115	4.3	412
1991 to 2000								
With service-connected disability	407	340	83.6	325	79.9	15	4.4	67
Less than 30 percent disability rating	212	195	92.0	185	86.9	11	5.5	17
30 to 50 percent disability rating	106	98	92.0	95	89.9	2	2.2	9
60 percent or higher disability rating	62	25	([1])	23	([1])	2	([1])	36
Disability rating not reported	27	22	([1])	22	([1])	–	–	5
Without service-connected disability	1,816	1,676	92.3	1,598	88.0	78	4.7	140
2001 to 2003								
With service-connected disability	92	77	84.0	71	77.0	6	8.3	15
Less than 30 percent disability rating	31	27	([1])	27	([1])	–	–	4
30 to 50 percent disability rating	41	36	([1])	33	([1])	4	([1])	5
60 percent or higher disability rating	13	8	([1])	7	([1])	1	([1])	6
Disability rating not reported	6	5	([1])	3	([1])	2	([1])	1
Without service-connected disability	352	316	89.6	295	83.8	21	6.6	36

[1] Data not shown where base is less than 75,000.

NOTE: Veterans are men and women who served in the U.S. Armed Forces during World War II, the Korean War, the Vietnam era, and all other service periods. Nonveterans are men and women who never served in the U.S. Armed Forces. Other service periods include the periods between World War II and the Korean War, between the Korean War and the Vietnam era, and since the end of the Vietnam era in May 1975. Categories do not add to totals shown on other tables because data are not shown for veterans whose presence of disability was not reported, and because information on the year of discharge was not available for approximately 4.5 million veterans. A service-connected disability is a health condition or impairment caused or made worse by military service. The associated disability rating, which can range from 0 to 100 percent, is determined from a rating schedule published in the U.S. Code of Federal Regulations, "Title 38." More detailed information appears in the Technical Note of this release. Dash represents or rounds to zero.

APPENDIX B: Bibliography of Recent Documents

August 19, 1997-- **Volume 1: Study of Civilian Licensure and Certification for Veterans;** submitted to The American Legion Washington Office; submitted by DynCorp with HumRRO

June 4, 1998--Congressional Commission on Servicemembers and Veterans Transition Assistance**, Barriers to Veterans' Employment Presented by Civilian Licensure and Certification**; prepared by DynCorp.

December 4, 1998--**Interim Report on Activities of the Interagency Task Force on Certification and Licensing of Transitioning Military Personnel**; U.S. Department of Labor, U.S. Department of Veterans Affairs.

January 15, 1999—**Final Report of the Congressional Commission on Servicemembers and Veterans Transition Assistance**; U.S Department of Labor, U.S. Department of Defense, U.S. Department of Veterans Affairs, Small Business Administration

September 9, 1999-- **Testimony to the House Committee on Veterans' Affairs Subcommittee on Benefits - Oversight Hearing on Veterans' Employment Regarding Civilian Credentialing Requirements for Military Job Skills**

May 1, 2000--**Report on the Status of the Interagency Task Force on Certification and Licensing of Transitioning Military Personnel**; U.S. Department of Labor, U.S. Department of Veterans Affairs

September 27, 2000—**Testimony to the House Committee on Veterans' Affairs**
Subcommittee on Benefits - Oversight Hearing on Licensing and Credentialing of Military Job Skills for Civilian Employment

May 16-17, 2001—**Transition Assistance: The Role of Certification;** Summary of Events and Various Presentations at the Second Annual Conference

April 29, 2003—**Transforming the Military to Civilian Workforce Development Model (Implementing a Trans-organizational Process)**; F. Paul Briggs

April, 2004—**Workforce Recruitment, Retention, and Re-Entry Issues for Military Personnel and Their Spouses**, A Preliminary Report; U.S. Department of Labor, U.S. Department of Defense

June 28, 2004—**Priorities/Work Plan of the DOD-DOL MOU working group**

September, 2004—**Feasibility Assessment of a Web-Based Career Guidance Tool for Transitioning Military Servicemembers**; a Study Design Report/Work Plan prepared by Personnel Decisions Research Institutes, Inc.

PaYS Partnership Production - RA Public

Partner	Available Jobs	Sold FY 04	Sold FY 05	Total Sold
ALASKA STATE TROOPERS	110	0	40	40
ARIZONA DEPARTMENT OF PUBLIC SAFETY	9	42	11	55
ARKANSAS STATE POLICE	7	40	6	47
AUSTIN POLICE DEPARTMENT, TX	30	0	0	0
BALTIMORE COUNTY POLICE DEPARTMENT	476	188	87	275
BOSTON FIRE DEPARTMENT	431	1	68	69
BROWARD COUNTY SHERIFF, FL	723	108	91	539
CHARLOTTE MECKLENBURG POLICE DEPT, NC	164	45	51	257
CINCINNATI POLICE DEPT, OH	79	53	48	101
CITY OF HARRISBURG, PA	11	15	3	37
CITY OF NAPLES, FL	42	59	10	72
COLLIER COUNTY SHERIFFS OFFICE, FL	1,637	285	209	494
LOS ANGELES POLICE DEPARTMENT, CA	1,009	369	404	1,200
MARYLAND TRANSPORTATION AUTHORITY POLICE	47	22	8	124
NEW YORK STATE POLICE	467	428	159	780
NORTH CAROLINA STATE HIGHWAY PATROL	39	43	27	81
NYPD	737	188	204	488
OHIO STATE HIGHWAY PATROL	85	67	41	241
PIERCE COUNTY SHERIFF, WA	13	15	8	23
PINELLAS COUNTY SHERIFFS OFFICE, FL	49	69	20	134
RALEIGH POLICE DEPARTMENT, NC	351	148	107	381
RICHMOND CITY POLICE, VA	196	118	39	164
ROCKFORD POLICE DEPARTMENT, IL	40	72	15	87
SARASOTA COUNTY SHERIFFS OFFICE, FL	16	39	6	45
ST PETERSBURG POLICE DEPARTMENT, FL	60	34	21	133
STATE OF WISCONSIN	391	0	17	17
TALLAHASSEE POLICE DEPARTMENT, FL	224	0	76	76
VERMONT STATE POLICE	29	28	8	71
WASHINGTON STATE PATROL	23	59	9	69
As of 17 May 2005	7,495	2,535	1,793	6,100

APPENDIX C: PaYS Partnership Tables (cont'd)

PaYS Partnership Production - RA Corporate

Partner	Available Jobs	Sold FY 04	Sold FY 05	Total Sold
AIB	85	32	8	134
ALLIANT ENERGY	323	1	48	49
BALLY TOTAL FITNESS	6,453	0	147	147
BELL SOUTH	4	4	5	39
BENNING CONSTRUCTION COMPANY	61	3	6	17
BEST BUY	1,477	0	23	23
BURLINGTON NORTHERN SANTA FE	21,939	0	21	21
CATERPILLAR INC.	184	29	16	147
CINTAS	38,874	336	1,113	1,449
CLEVELAND CLINIC	107	7	2	13
CORRECTIONAL SERVICES CORPORATION	26	23	25	48
D.M. BOWMAN INC	2,096	3	0	3
DELL	5	7	0	8
DYNCORP	0	0	0	203
E D S	159	17	15	206
EASTERN SHIPBUILDING GROUP	285	22	13	45
GENERAL DYNAMICS LAND SYSTEMS	0	0	0	3
GOODYEAR	912	264	206	1,175
HALLIBURTON	8	26	1	272
HARLEY DAVIDSON	126	0	18	18
HCA	7,825	390	319	1,849
IRONWOOD PLASTICS	13	0	0	8
JOHN DEERE	163	41	42	320
JOHNS HOPKINS HOSPITAL	243	18	11	75
JX ENTERPRISES INC.	118	17	12	113
KCI TECHNOLOGIES INC.	3	2	1	3

APPENDIX C: PaYS Partnership Tables (cont'd)

LOCKHEED MARTIN	45	38	1		194
MCCANN INDUSTRIES INC.	90	32	11		137
MIDAS	3,006	12	61		73
MILSCO MANUFACTURING CO	78	0	0		0
MIZUNO USA	1	1	1		6
MONRO MUFFLER BRAKE, INC	0	0	0		6
NATIONAL FREIGHT INDUSTRIES	22,540	22	274		296
NATIONAL TIRE & BATTERY	0	21	5		581
NELLO L. TEER COMPANY	1	0	0		0
NEW ENGLAND MOTOR FREIGHT	605	15	28		43
NORTHCREST MEDICAL CENTER	24	1	1		9
PENN UNITED TECHNOLOGY INC	53	21	4		25
QUESTON CONSTRUCTION INC.	0	2	0		2
RANGER CONSTRUCTION INDUSTRIES INC	932	2	68		70
REEVES CONSTRUCTION COMPANY	7	3	0		3
ROADWAY EXPRESS	3,360	160	39		391
RUAN TRANSPORTATION MANAGEMENT SYSTEMS	252	20	9		140
RUSH ENTERPRISES	430	93	42		280
SCHNEIDER NATIONAL	3,216	154	64		838
SEARS AUTO CENTER	16,628	505	439		1,650
SEARS LOGISTICS SERVICES, INC.	1,215	233	164		956
SOUTHWEST AIRLINES CO.	7,281	824	741		3,587
SOUTHWEST RESEARCH INSTITUTE	234	25	12		37
STATE FARM INSURANCE COMPANIES	7	3	5		160
STEWART AND STEVENSON	0	6	0		7
SUPERIOR BULK	1,027	0	83		83
TARGET CORPORATION	46	9	13		26
THE PEPSI BOTTLING GROUP	2,233	347	232		6,582
TIME WARNER CABLE	27,699	0	261		261
WALGREENS	15,804	91	305		396
WARREN CAT	915	0	9		9
WASTE MANAGEMENT INC.	2,708	0	10		10
WHITE ROCK QUARRIES	2	4	0		4
As of 17 May 2005	191,928	3,886	4,934		23,250

APPENDIX D: Apprenticeship Programs in the Military and Fast Facts on Apprenticeship in the U.S.

United Services Military Apprenticeship Program (USMAP)

Location	Services Covered	Number of Occupations	Registered Apprentices
Pensacola, FL	Navy, Marines & Coast Guard	124	18,243 [1]

[1] Data as of 02-25-05

Army – Air National Guard Initiative

State	Number of Programs/Activity Progress	Occupations	Registered Apprentices
Indiana	7	177	316
Iowa	1	50	1,000 [1]
Ohio	Initial meetings held		
Pennsylvania	Developing standards at three bases; meetings being held with two other bases		
New Hampshire	Initial meetings held		
Missouri	4	23	15 [2]
Massachusetts	15	38	158
Kentucky	Developing standards for ANG and Air Guard (separate programs)	9+	not available
Kansas	1 (Covers both Army and Air Guard)	3	60-80 [3]
Alabama	Initial meetings held with Air National Guard		
South Carolina	Two Federal programs registered with U.S. Navy Brigs	2	not available

[1] New program registered 02-05-04 – estimated apprentice registrations in March 2005.
[2] Low number due to deployment.
[3] Agreements pending

NATIONAL APPRENTICESIP SYSTEM STATISTICS ON VETERANS

Total Number of Apprentices in RAIS [23 BAT States]	Number of Veterans	%	Number that Received Credit For Previous Experience
192,089	13,935	7	41% [1]

ESTIMATED APPRENTICES IN NON-RAIS SAC STATES

Total Number of Apprentices	Number of Veterans	%	Number that Received Credit For Previous Experience
203,563	14,000 [2]	7	not available

[1] Data taken from FY 2002, 2003, and 2004

[2] Estimate based upon historical averages – comparable to RAIS data.

HELMETS TO HARDHATS (Direct Entry into Registered Apprenticeship)

State	# of Participating Programs	Occupations	Industry
NATIONAL	Undetermined number in almost every state. Placements during 2004 exceeded 15,482 veterans.	Estimated to be 15 to 20 nationally	Construction
Iowa	6 1	15 1	Construction Manufacturing
Missouri	2	3	Construction
Georgia	1	2	Construction

Civilian (C) / Military (M) Apprenticeships

State	Number of Programs/Activity Progress	Occupations	Registered Apprentices
Maine (C)	Portsmouth Naval Shipyard, Kittery	27	883
Nevada (M)	Navy Installation U.S. Air Force Bases (2)	1 1	5 8
Washington (M)	Puget Sound Naval Shipyard - Navy & NAVSEA	19	621
California (M)	Navy, Marine Corps, Air Force	49	241
Hawaii (C)	Pearl Harbor Naval Shipyard	26	685
Tennessee (C)	Visions Unlimited (Manufacturing) – Standards in development	not available	not available
South Dakota (C)	Ellsworth AFB	1	1
Texas (C)	1. Corpus Christi Army Depot 2. Kelly Aviation Center, San Antonio 3. Fort Hood Texas 4. Shepard AFB, Texas	4	32

Fast Facts on Registered Apprenticeship in the U.S.

Apprentices and Participation Trends

- In 2003, 133,909 individuals entered the apprenticeship system.
- Nationwide, there are 480,000 apprentices currently obtaining the skills they need to succeed while earning the wages they need to build financial security.
- In 2003, 28,768 graduated from the apprenticeship system.

Apprenticeship Sponsors and Trends

- There are currently 29,326 apprenticeship programs across the nation.
- In 2003, 1,790 new apprenticeship programs were established nationwide. Building on the foundation set by traditional partner industries such as Construction and Manufacturing, 359 of these programs were in new and merging partner industries.

Public-Private Investment and Partnerships

- The federal government invests $21 million annually in the apprenticeship system.
- Apprenticeship sponsors pay most of the training costs. Apprentices' wages increase as their skill and productivity levels increase.
- The Construction industry contributes an estimated $250 million annually to support apprenticeship in the industry.
- In recent years, apprenticeship partnerships have been formed with branches of the U.S. military.
- Currently, there are hundreds of academic partnerships with 2- and 4-year colleges that offer Associate and Bachelor's degrees in conjunction with apprenticeship certificates.

Operation

- Apprenticeship programs are operated by both the public and private sectors. Apprenticeship sponsors, who are employers, employer associations, and labor-management organizations, register programs with federal and state government agencies. Sponsors provide on-the-job learning and academic instruction to apprentices according to their industry standards and licensing requirements.

Program Dividends

- Because apprentices pay income taxes on their wages, it is estimated that every dollar the federal government invests in apprenticeship yields more than $50 in revenues.