

ARI Research Note 2002-05

**Contract for Manpower and Personnel Research and
Studies II (COMPRS-II)
Annual Report – Year Three**

Human Resources Research Organization

Selection and Assignment Research Unit

January 2002

**U.S. Army Research Institute
for the Behavioral and Social Sciences**

Approved for public release; distribution is unlimited.

20020206 136

**U.S. Army Research Institute
for the Behavioral and Social Sciences**

A Directorate of the U.S. Total Army Personnel Command

**ZITA M. SIMUTIS
Acting Director**

Research accomplished under contract
for the Department of the Army

Human Resources Research Organization

Technical review by

Michelle Zazanis

NOTICES

DISTRIBUTION: This Research Note has been cleared for release to the Defense Technical Information Center (DTIC) to comply with regulatory requirements. It has been given no primary distribution other than to DTIC and will be available only through DTIC or the National Technical Information Service (NTIS).

FINAL DISPOSITION: This Research Note may be destroyed when it is no longer needed. Please do not return it to the U.S. Army Research Institute for the Behavioral and Social Sciences.

NOTE: The views, opinions, and findings in this Research Note are those of the author(s) and should not be construed as an official Department of the Army position, policy, or decision unless so designated by other authorized documents.

REPORT DOCUMENTATION PAGE

1. REPORT DATE (dd-mm-yy) January 2002		2. REPORT TYPE Interim		3. DATES COVERED (from... to) August 10, 2000 – August 9, 2001	
4. TITLE AND SUBTITLE Contract for Manpower and Personnel Research and Studies II (COMPRS-II) Annual Report–Year Three				5a. CONTRACT OR GRANT NUMBER DASW01-98-D-0047	
				5b. PROGRAM ELEMENT NUMBER 622785	
6. AUTHOR(S) Human Resources Research Organization (HumRRO)				5c. PROJECT NUMBER A790	
				5d. TASK NUMBER 6900B	
				5e. WORK UNIT NUMBER C05	
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Human Resources Research Organization 66 Canal Center Plaza, Ste 400 Alexandria, VA 22314				8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES) U. S. Army Research Institute for the Behavioral & Social Sciences 5001 Eisenhower Avenue Alexandria, VA 22333				10. MONITOR ACRONYM ARI	
				11. MONITOR REPORT NUMBER Research Note 2002-05	
12. DISTRIBUTION/AVAILABILITY STATEMENT Approved for public release; distribution is unlimited.					
13. SUPPLEMENTARY NOTES Ron Tiggie, Contracting Officer's Representative					
14. ABSTRACT (<i>Maximum 200 words</i>): This report documents and summarizes the activities of the first 3 years of a 5-year (1 base year and 4 option years) project to provide the U.S. Army Research Institute for the Behavioral and Social Sciences (ARI) non-personal, short- and medium-term scientific and technical support services in the solution of problems related to manpower and personnel. The program is referred to as the Contract for Manpower and Personnel Research and Studies II (COMPRS-II). HumRRO's primary responsibilities are to administer COMPRS-II for ARI under firm fixed-priced contracts by managing three inter-related tasks: (a) managing the COMPRS program in accordance with established operating procedures; (b) receiving and processing individual Statements of Tasks from ARI; and (c) managing, reporting progress on, and documenting the completion of delivery orders.					
15. SUBJECT TERMS Manpower, Personnel, Training					
SECURITY CLASSIFICATION OF			19. LIMITATION OF ABSTRACT Unlimited	20. NUMBER OF PAGES 45	21. RESPONSIBLE PERSON (Name and Telephone Number) Ron Tiggie (703) 617-8293
16. REPORT Unclassified	17. ABSTRACT Unclassified	18. THIS PAGE Unclassified			

Standard Form 298

CONTRACT FOR MANPOWER AND PERSONNEL RESEARCH AND STUDIES II (COMPRS-II) ANNUAL REPORT – YEAR THREE

CONTENTS

Introduction.....	1
Summary of Activities	1
DO 0001 Year 1 Contract Administration.....	4
DO 0002 Soldier Characteristics for the 21 st Century: Phase II: Execution.....	5
DO 0003 Transition and Training for the Total Army Transition Division Contract Quality Assurance Program.....	6
DO 0004 Summary Report on Retention and Reacquisition of Knowledge and Skills	7
DO 0005 Update LROC/SOC Database and Construct a SOC Longitudinal Database.....	8
DO 0006 Initial Data Collection and Preliminary Analyses for Recruiting and Training Excellence (1 st Rate).....	9
DO 0007 Pre-Implementation Research on the Assessment of Individual Motivation (AIM): Data Analysis.....	10
DO 0008 Update of U.S. Army Research Institute's Officer Personnel Research Data Bases for 1997 and 1998.....	11
DO 0009 Training Base Attrition Study – I.....	12
DO 0010 Task Knowledge Commonality Model (TKCAM) Application For MOS 11B, MOS 11H, and MOS 11M	13
DO 0011 Preparation of ARI Special Report on the Enlisted Personnel Allocation System (EPAS).....	14
DO 0012 Data Collection Support for TRADOC-99-CEP-0101, Manned And Unmanned Aerial Platform Operations on the Digitized Battlefield (Air Maneuver Recon Teams).....	15
DO 0013 Automated Data Collection System Modification and Development.....	16
DO 0014 Automation of Army's Basic Skills Program	17
DO 0015 NCO Characteristics for the 21 st Century: Assessment and Validation.....	18
DO 0016 Year 2 Contract Administration.....	19
DO 0017 Impact of ACES on Soldier Retention and Performance: A Research Plan	20
DO 0018 Army Recruiting Market Segmentation Survey.....	21
DO 0019 Support for Evaluation of Basic Research Proposals.....	22
DO 0020 First Term Soldier Attrition and Management.....	23
DO 0021 MOS Consolidation for the Future Battlefield.....	24
DO 0022 Pilot Test of Spanish Language Entrance Screening Test: Phase I.....	25
DO 0023 Update of ARI's Officer Personnel Research Data Bases for 1999 and 2000	26
DO 0024 Evaluation of the Buddy-Team Assignment Program.....	27
DO 0025 Addressing Operational Issues in Support of the Institutionalization of AIM.....	28
DO 0026 Year 3 Contract Administration	29
DO 0027 Improving Selective Reenlistment Bonus (SRB) Allocation Procedures in the Army	30

CONTENTS (Continued)

DO 0028	Task Knowledge Commonality Analysis Method (TKCAM) User's Manual Update.....	31
DO 0029	A Social Sciences Analysis of the Balkan Conflict	32
DO 0030	Adoption of New Army Aptitude Area Composites.....	33
DO 0031	Impact of the Army Continuing Education System (ACES) on Soldier Retention and Performance: Database Development.....	34
DO 0032	Special Report on Distance Learning.....	35
DO 0033	Impact of the Army Continuing Education System (ACES) on Soldier Retention and Performance: Database Analyses	36
DO 0034	Personnel and Training Decisions Which Could be Supported with Research, Analysis, or Data: A Case Study of MOS Minimum Enlistment Standards.....	37

Appendix A.	ARI COMPRS-II Program Descriptions	A-1
-------------	--	-----

List of Tables

Table 1.	Summary of Delivery Order Activity.....	2
Table 2.	Summary of Program Costs	2

Contract for Manpower and Personnel Research and Studies II (COMPRS-II)

Annual Report-Year Three

Introduction

This report documents the first 3 years of a 5-year (1 base year and 4 option years) project to provide the U.S. Army Research Institute (ARI) non-personal, short- and medium-term scientific and technical support services in the solution of problems related to manpower and personnel. The program is referred to as the Contract for Manpower and Personnel Research and Studies II (COMPRS-II). HumRRO's primary responsibilities are to administer COMPRS-II for ARI under firm fixed-priced contracts by managing three inter-related tasks: (a) managing the COMPRS program in accordance with established operating procedures; (b) receiving and processing individual Statements of Tasks from ARI; and (c) managing, reporting progress on, and documenting completion of delivery orders.

There are three programs under COMPRS-II. They are summarized below and are described in detail in Appendix A:

- **Quick Reaction (QR) Program** - Intended to provide ARI responsive, short-term research or studies and analysis dealing with manpower and personnel issues for which ARI in-house capability is not available. Each of the QR Program delivery orders (DOs) shall be completed within a period of time specified in the DO, with the maximum allowable completion normally being within 12 months of the date of the DO.
- **Attitude and Opinion Survey (AOS) Program** - Intended to give ARI the ability to conduct surveys to provide information for accession and force management decision-making. Each of the AOS Program DOs shall be completed within a period of time specified in the DO, with the maximum allowable completion normally being within 12 months of the date of the DO or 18 months if Office of Management and Budget (OMB) approval is required.
- **Medium-Term (MT) Program** - Intended to give ARI the ability to conduct a limited number of research efforts or studies and analyses whose duration would not normally exceed 24 months after the contractor receives the DO.

Summary of Activities

Table 1 summarizes DO activity for the first 3 contract years. Table 2 summarizes the total DO award amounts associated with each program in each year. During this past year of the contract, 11 more DOs were initiated, including DO #0026 which continues the overall management of the contract vehicle. All of the remaining DOs were in the QR program.

Table 1. Summary of Delivery Order Activity

	Year 1	Year 2	Year 3
Number DOs initiated	13	10	11
Contract Administration	1	1	1
Quick Reaction	10	5	10
Attitude/Opinion Survey	1	1	0
Medium Term	1	3	0
Number active DOs as of August 9, 2001	N/A	N/A	15

Table 2. Summary of Program Costs

	Year 1	Year 2	Year 3
Contract Administration	\$ 26,010	\$ 27,006	\$ 28,053
Quick Reaction	\$ 1,978,345	\$ 1,053,316	\$ 1,175,225
Attitude/Opinion Survey	\$ 87,603	\$ 1,466,501	\$ 0
Medium Term	\$ 306,468	\$ 2,465,080	\$ 0
Total	\$ 2,398,426	\$ 5,011,903	\$ 1,203,278

Summaries for each DO initiated during the first year of the contract follow. Each summary provides the following information:

- The DO number and title.
- The program area.
- The DO contracting officer's representative (DO-COR), assistant DO-COR, if one is assigned, and the contractor's project director.
- The DO status (either ongoing or completed), to include the dates.
- The project background.

- The objectives of the project.
- The key deliverables of the DO.
- Findings/outcomes for completed DOs.
- Report citations for completed DOs.

These summaries are not intended to provide significant detail about each DO; that information can be provided by the DO-COR upon request. The summaries are intended to give a very brief overview of each effort as well as to provide a snapshot of the contract's activities.

DO# 0001	Title: Year 1 Contract Administration
Program Area QR _____ AOS _____ MT _____	DO-COR: Dr. Judith Brooks DO-ACOR: Project Director: Dr. Deirdre Knapp
Status: Completed (August 20, 1998-November 19, 1999)	
DO Summary	
<p>Background: Providing information on manpower and personnel issues to Army decision-and policy-makers is often a complex, dynamic, multi-stage, iterative process. The accuracy and timeliness of information provided to decision-makers are of paramount importance in the quality of decisions and policies. Over the next decade, the U.S. Army will experience an increasing requirement to bring individuals into the Army who are trainable in a wide variety of skill areas. To meet and maintain its high quality manpower needs of the 1990s, the Army will have to develop and implement programs that allow it to locate, assess, assign, and use human resources more efficiently and effectively than it ever has before. As new Army policies are being developed to enhance the Army's ability to man the force, the Army needs programs of research and studies that will provide a quick response mechanism to gather and analyze data on the expected or actual short-term effectiveness of those policies.</p> <p>Scientific and technical support services are being used that lead to the development and implementation of programs of research and studies on the expected or actual effectiveness of Manpower, Personnel, and Training (MPT) programs. These efforts are part of ARI's MPT program to man the force by conducting research and studies to improve the Army's ability to recruit, identify, assess, classify, assign, lead, train, and maintain the personnel required for the Army</p>	
<p>Project Objectives: The objectives of this delivery order are to administer the Contract for Manpower and Personnel Research and Studies II (COMPRS-II) for ARI under firm fixed-priced contracts by performing three inter-related tasks: (a) managing the COMPRS program in accordance with established operating procedures; (b) receiving and processing individual Statements of Tasks from ARI; and (c) managing, reporting progress on, and documenting completion of delivery orders.</p>	
<p>Key Deliverables: The following Delivery Orders were issued during Year 1:</p> <ul style="list-style-type: none"> • DO 0001 Year 1 Contract Administration • DO 0002 Soldier Characteristics for the 21st Century: Phase II: Execution • DO 0003 Transition and Training for the Total Army Transition Division Contract Quality Assurance Program • DO 0004 Summary Report on Retention and Reacquisition of Knowledge and Skills • DO 0005 Update LROC/SOC Database and Construct a SOC Longitudinal Database • DO 0006 Initial Data Collection and Preliminary Analyses for Recruiting and Training Excellence (1st Rate) • DO 0007 Pre-Implementation Research on the Assessment of Individual Motivation (AIM): Data Analysis • DO 0008 Update of the U.S. Army Research Institute's Officer Personnel Research Data Bases for 1997 and 1998 • DO 0009 Training Base Attrition Study – I • DO 0010 Task Knowledge Commonality Model (TKCAM) Application for MOS 11B, MOS 11H, and MOS 11M • DO 0011 Preparation of ARI Special Report on the Enlisted Personnel Allocation System (EPAS) • DO 0012 Data Collection Support for TRADOC-99-CEP-0101, Manned and Unmanned Aerial Platform Operations on the Digitized Battlefield (Air Maneuver Recon Teams) • DO 0013 Automated Data Collection System Modification and Development 	
Findings/Outcomes: n/a	
<p>Report Citations: Human Resources Research Organization. (1999). <i>COMPRS-II Year 1 – Standard Operating Procedures (SOP)</i> (Study Note 99-01). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences.</p> <p>Human Resources Research Organization (2000). <i>Contract for Manpower and Personnel Research and Studies II (COMPRS-II) Annual Report – Year 1</i> (ARI Research Note 2000-03). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences.</p>	

DO# 0002	Title: Soldier Characteristics for the 21st Century: Phase II: Execution
Program Area QR _X_ AOS ____ MT ____	DO-COR: Dr. Michael Rumsey DO-ACOR: Project Director: Dr. Laura Ford
Status: Completed (September 13, 1998 – September 30, 1999)	
DO Summary	
<p>Background: On 21 March 1997, MG Arthur T. Dean, Director of Military Personnel Management, Deputy Chief of Staff for Personnel, requested that ARI “immediately undertake a ‘quick study’ to determine the desired characteristics, qualities and aptitudes for the enlistee of the 21st century.” ARI responded with a two-part program, known as Soldier21. The first part, involving a review and summary of available information supplemented by a “target of opportunity” data collection, was completed and reported to MG Dean in January 1998. The second part was a more comprehensive effort involving the collection of new data. In May 1998, a contract effort was initiated to develop the methodology for this second part and to examine how the execution of this methodology and the execution of a related project, 21st Century NCOs (NCO21), could be merged for optimum efficiency.</p> <p>This study addressed two separate issues for the future Army: determining the most important knowledges, skills, and attributes (KSAs) for soldier selection (Soldier21) and identifying the most important KSAs for promotion to and within the noncommissioned officer (NCO) ranks (NCO21). The future Army eras that were explored were Army XXI (2000-2010) and the Army After 2010 (2010-2025). The Soldier21 study was an attempt to anticipate changes that should be considered for the Army selection and classification systems so as to select enlisted applicants who can better meet the task demands of the Army in the 21st century. The NCO portion of the project examined the battlefield of the future and how it will require NCOs who can train forces to operate effectively in digital environments with increased mission diversity, fewer soldiers, and numerous organizational and social changes. The NCO promotion system for the 21st century will need new measurement procedures to evaluate the full scope of performance needed to successfully meet future job requirements. To do so, jobs, units, and missions that are indicative of future conditions were examined and analyzed in order to outline the KSAs that could be utilized in a future performance-based promotion system. In other words, this project explored the factors that will affect jobs in the future. In turn, the KSAs that will be needed to succeed in the Army of the future were identified. Work on the continuation of the NCO21 portion of this research program has continued under Delivery Order #15.</p>	
<p>Project Objectives: The objectives for this delivery order were to identify soldier requirements in two future Army eras in terms of (a) the required characteristics to effectively perform the job of a first term enlisted soldier, and (b) the individual attributes to effectively perform at three levels of NCO jobs – Junior NCOs (Corporal E4-E5), Mid-level NCOs (E6-E7), and Senior NCOs (E8-E9). Another objective was to identify potential alternative measures for the attributes identified as critical in the 21st century Army.</p>	
<p>Key Deliverables: Key deliverables for this effort consisted of (a) a summary of future conditions relevant to Army jobs, (b) a summary of forecasted job demands, and (c) a final technical report.</p>	
<p>Findings/Outcomes: The KSAs found to be potentially relevant for future selection (first tour soldiers) and promotion (NCOs) purposes were identified for five target groups: (1) For AXXI first tour soldiers the four most important KSAs were General Cognitive Aptitude, Conscientiousness/Dependability, Reading Skill, and Working Memory; (2) For AXXI Junior NCOs the four most important KSAs were Conscientiousness/Dependability, MOS/Occupation-Specific Knowledge and Skill, General Cognitive Aptitude, and Motivating and Leading Others; (3) For AXXI Mid-level NCOs the four most important KSAs were Judgment and Decision Making; General Cognitive Aptitude; Directing, Monitoring and Supervising Others; and Motivating and Leading Others; (4) For AXXI Senior NCOs the four most important KSAs were General Cognitive Aptitude, Motivating and Leading Others, Judgment and Decision Making, and Concern for Soldier Quality of Life; (5) For AA2010 Battle Force NCOs the three most important KSAs were Judgment and Decision Making, General Cognitive Aptitude, and Knowledge of Battlefield Function Integration.</p> <p>One difference between KSAs for selection and KSAs for NCO promotion is that additional KSA information is potentially available for promotion decisions. That is, various aspects of an individual’s current and past performance could be assessed and serve as predictors of future performance.</p>	
<p>Report Citations: Ford, L. A., Campbell, R. C., Campbell, J. P., Knapp, D. J., & Walker, C. B. (2000). <i>21st Century Soldiers and Noncommissioned Officers: Critical Predictors of Performance</i> (ARI Technical Report 1102). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences.</p>	

DO# 0003	Title: Transition and Training for the Total Army Transition Division Contract Quality Assurance Program
Program Area QR _____ AOS _____ MT <input checked="" type="checkbox"/>	DO-COR: Ms. Susan Harvey, ASA (M & RA [HR XXI]) DO-ACOR: Ms. Naomi Lynch, ASA (M & RA [HR XXI]) Project Director: Mr. Eric Wetzel
Status: Completed (September 11, 1998 – June 30, 2000)	
DO Summary	
<p>Background: HumRRO has a long history with the Transition Acquisition Branch (TAB) of the Total Army Transition Division (TATD) which includes support of quality assurance (QA) program and management information system (MIS) development. These two programs are critical to an organization such as the TAB, which monitors a five billion dollar indefinite quantities contract (IQC) providing human resources support services to the Army and other federal government agencies. On 23 February 1999, TAB was transferred from PERSCOM to the Assistant Secretary of the Army for Manpower and Reserve Affairs (ASA [M&RA]). The organization formerly known as TAB is now the Human Resources XXI office (HR XXI). Under ASA (M&RA), the market and potential uses of the IQC have expanded and the possibility of the HR XXI office operating under a cost reimbursable format was being considered. These organizational and potential functional changes necessitated modifications to both the QA program and MIS, along with the development of a business and marketing plan for HR XXI's use in a cost reimbursable environment.</p>	
<p>Project Objectives: The objectives of this delivery order were to provide HR XXI with the necessary support to make a smooth transition to their new organizational structure, and to lay the ground work for their expanded mission while updating/finalizing the QA program and MIS developed under a previous COMPRS-I delivery order.</p>	
<p>Key Deliverables: The final deliverables for this project included a revised QA program, as well as MIS and business and marketing plans for the re-focused organization.</p>	
<p>Findings/Outcomes: A 2-volume final report updating the previously developed QA and MIS program documentation was delivered directly to the COR on September 24, 1999. These volumes were deemed "Procurement Sensitive – For Official Use Only" by the COR and marked accordingly. The Business and Marketing Plans were delivered directly to the COR by HumRRO consultants and subcontractors.</p>	
<p>Report Citations: Due to the sensitive nature of these documents, no report citations were made.</p>	

DO# 0004	Title: Summary Report on Retention and Reacquisition of Knowledge and Skills
Program Area QR <u> X </u> AOS <u> </u> MT <u> </u>	DO-COR: Dr. Robert Wisher DO-ACOR: Project Director: Dr. Deirdre Knapp (with Dr. John Ellis of K. Ellis Human Resources Services & Consulting)
Status: Completed (September 16, 1998 – July 30, 1999)	
DO Summary	
Background: ARI required assistance from an expert in the field of learning and memory to prepare a summary review of research on skill retention and reacquisition. The summary review, approximately 20 pages in length, was to cover research done by ARI and other military laboratories in remembering skills taught in the classroom and field for periods of up to several years.	
Project Objectives: The objective of this effort was to provide a non-technical document with supporting photographs and graphic material to inform the military reader of the importance and value of research on skill retention and reacquisition.	
Key Deliverables: The key deliverable was a final report	
Findings/Outcomes: The report has been completed and published as an ARI Special Report.	
Report Citations: Wisher, R.A., Sabol, M.A., & Ellis, J.A. (1999). <i>Staying Sharp: Retention of Military Knowledge and Skills</i> (ARI Special Report 39). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences.	

DO# 0005	Title: Update LROC/SOC Database and Construct a SOC Longitudinal Database
Program Area QR _____ AOS <u> X </u> MT _____	DO-COR: Ms. June T. Jones DO-ACOR: Project Director: Dr. Gina Medsker
Status: Completed (September 25, 1998 – August 31, 1999)	
DO Summary	
<p>Background: ARI has been conducting surveys of officer attitudes for several years, including the Longitudinal Research on Officer Careers (LROC) surveys in 1988, 1989, 1990, and 1992, and the Survey of Officer Careers (SOC) in 1996 and 1998. The purpose of this effort was to produce both a Longitudinal Database and a Trend Database for ARI. The databases will be used to continue monitoring Army officers on issues of concern to the Army and the officer corps. Current SOC results, in conjunction with previous SOC and LROC results, will help the Army understand what happens to officers during their careers and the types and extent of impacts that events, behaviors, and attitudes/opinions have on officers' career plans. Results of the 1998 SOC will also help the Army track officer reactions to the new Officer Personnel Management System XXI (OPMS XXI).</p>	
<p>Project Objectives: The objectives of this project were to provide (a) a fully documented SOC Longitudinal Database that includes respondents who have data for both 1996 and 1998 SOC surveys, (b) a SOC Trend Database which adds the 1998 SOC Cross-Sectional Database to the existing LROC/SOC database, and (c) a set of charts displaying the results for both the SOC Longitudinal and Trend Databases.</p>	
<p>Key Deliverables: Key deliverables include an edited 1998 SOC raw data file and final editing program, the 1996-98 SOC Longitudinal Database and codebook, the SOC-LROC Trend Database and codebook, and charts for all items that appeared in both the 1996 and 1998 SOC based on the 1996-1998 Longitudinal Database.</p>	
<p>Findings/Outcomes: Electronic data sets, codebooks, and briefing charts were provided to ARI in accordance with the contract deliverable requirements.</p>	
<p>Report Citations: n/a</p>	

DO# 0006	Title: Initial Data Collection and Preliminary Analyses for Recruiting and Training Excellence (1 st Rate)
Program Area QR _X_ AOS ____ MT ____	DO-COR: Dr. Trueman Tremble DO-ACOR: Project Director: Dr. Bill Strickland
Status: Completed (September 28, 1998 – December 31, 1999)	
DO Summary	
<p>Background: In 1996, the Office of the Assistant Secretary of the Army (Manpower and Reserve Affairs; ASA M&RA) asked ARI to draft a broad-based proposal for carrying out a five- to six-year comprehensive, integrated research program examining the multiple causes of first-term Army enlisted attrition. This proposal suggests that variables influencing attrition include personal variables (e.g., expectations, values, and background), organizational variables (e.g., culture and climate within the Army), and extra-organizational variables (e.g., attitudes of significant others, opportunities for civilian employment). When considered in combination, these variables determine the individual's "fit" within the organization and the likelihood that he or she will be successful in the Army.</p> <p>In support of this long-term effort, ARI developed a multi-phased project. Phase I of the project began in August 1997 and was completed in January 1998. The objective for that initial phase was to develop and assess a prototype database for tracking first-term enlisted personnel attrition. The results from Phase I established the methodology for developing comprehensive attrition databases for subsequent phases.</p> <p>Phase II of the project began in June 1998 and ended in October 1999. Phase II had three primary objectives: (a) design and plan the overall five- to six-year attrition effort which incorporates both longitudinal and concurrent designs; (b) develop comprehensive sampling plans for both the longitudinal and concurrent designs; and (c) develop, field test, and gain approval for appropriate surveys and other measures in preparation for the data collection phases.</p> <p>This delivery order constituted Phase III of the attrition program. The objectives of Phase III were to execute the initial data collection phase of the study and to conduct preliminary analyses of the data. Data from a subset of fiscal year 1999 soldiers entering training served as a longitudinal cohort to be followed through their first-term of enlistment. Concurrent samples of soldiers in various stages of their first-term were collected and used for comparison.</p>	
<p>Project Objectives: There were two objectives of this effort:</p> <ol style="list-style-type: none"> 1. To execute the initial data collection phase of the attrition research program using the research measures, data collection plan, and sampling plan developed in Phase II of the project. 2. To conduct preliminary analyses of the data collected during this phase. 	
Key Deliverables: Technical Report	
<p>Findings/Outcomes: Administration of the Soldier Reception Survey was completed in August, while the End of Training and Exit Surveys were completed in December. Preliminary analyses of scales within the surveys indicate that they will likely be useful for subsequent data modeling efforts.</p>	
<p>Report Citations: Sipes, D.E., & Sadacca, R. (2000). <i>Initial data collection and preliminary analyses for research on first-term soldier attrition and management (Project First Term)</i> (ARI Research Note 2000-10). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences.</p>	

DO# 0007	Title: Pre-Implementation Research on the Assessment of Individual Motivation (AIM): Data Analysis
Program Area QR _X_ AOS ____ MT ____	DO-COR: Dr. Mark Young DO-ACOR: Dr. Michael Rumsey Project Director: Dr. Brian Waters
Status: Completed (September 28, 1998 – November 30, 1999)	
DO Summary	
<p>Background: Over the past decade, there has been a resurgence of interest in using personality (or temperament) assessments for personnel decisions. The military has been no exception. The Assessment of Background and Life Experiences (ABLE) was designed to assess six personality constructs that were identified as having a potential to be predictive of job-related criteria. Research indicated that, while the ABLE had predictive validity for certain aspects of job performance and for first-term attrition, it was also susceptible to the effects of faking and coaching. Also, while evidence of the predictive validity of ABLE was found for various criteria in the standard instruction condition, the validity estimates were near zero for the same criteria in the faking and coaching conditions. At least in part on the basis of these results, the ABLE was not operationally implemented in the Army.</p> <p>ARI developed the Assessment of Individual Motivation (AIM) in an effort to build an assessment tool that would provide scores for the constructs measured by ABLE, but in a way that was resistant to the effects of faking and coaching. Preliminary research using the AIM indicated that the instrument was predictive of first-term attrition and was less susceptible to the effects of faking and coaching than the ABLE. These positive preliminary findings piqued the Army's interest in using the AIM as a pre-enlistment screen for attrition, and a program of research was initiated to (a) determine whether the use of AIM for pre-enlistment screening would be viable for the Army and (b) remove obstacles to its implementation.</p> <p>This delivery order extended the AIM development work begun under Delivery Order # 75 of COMPRS-I.</p>	
<p>Project Objectives: The project objectives were as follows:</p> <ol style="list-style-type: none"> 1. Create the database needed for carrying out AIM Phase I research. 2. Determine the validity of the existing AIM against 3-month attrition. 3. Refine and evaluate two initial AIM alternate forms. 4. Create and evaluate revised AIM alternate forms. 5. Conduct research to establish testing policies for those applicants who have high scores on the faking scale or who score below the AIM cut score. 6. Assess the potential for adverse impact in the AIM. 	
<p>Key Deliverables: Key project deliverables were:</p> <ol style="list-style-type: none"> 1. SAS dataset and code book 2. Alternate AIM forms 3. Plans for faking policy research and for policy research on applicants who fail AIM 4. Final report 	
<p>Findings/Outcomes: The Army implemented the AIM as a screen for Category II applicants in FY 2000.</p>	
<p>Report Citations:</p> <p>Heggestad, E. D., Young, M. C., Strickland, W. G., & Rumsey, M. G. (1999). <i>The Assessment of Individual Motivation: Evaluation of validity and development of alternate forms</i> (FR-WATSD-99-66). Alexandria, VA: Human Resources Research Organization. (not for public release)</p> <p>Heggestad, E.D, Lightfoot, M.A., & Waters, B.K. (1999). <i>Pre-implementation research on the assessment of individual motivation (AIM). Phase I: Item development</i> (HumRRO Final Report FR-WATSD-99-22). Alexandria, VA: Human Resources Research Organization. (not for public release)</p> <p>Young, M.C. Heggestad, E.D., & Nason, E. (1999, September). Assessment of Individual Motivation (AIM) pre-implementation research and implementation plans. In L. Looper, Chair, <i>Screening, selection, attrition, and retention</i>. Symposium conducted at the meeting of the Military Operations Research Society, Alexandria, VA.</p>	

DO# 0008	Title: Update of U.S. Army Research Institute's Officer Personnel Research Data Bases for 1997 and 1998
Program Area QR _X_ AOS ____ MT ____	DO-COR : Dr. Peter M. Greenston DO-ACOR: Project Director: Ms. Lori Ramsey (Fu Associates)
Status: Completed (September 28, 1998 - September 15 1999)	
DO Summary	
<p>Background: ARI's Selection and Assignment Research Unit (SARU) required an update to a group of U.S. Army personnel databases that could be used as a ready source of career history information for analysis of career path issues such as attrition, retention, and promotion. In addition, the databases could serve as a complement to survey data collected to study leader development, organizational commitment, and other issues. In order to satisfy these research requirements, it was necessary to collect, process, and add current personnel and training data to the Officer Longitudinal Research Data Base (OLRDB) and the Officer Educational Testing Data Base (OSETDB). The OLRDB is constructed primarily of officer personnel data from the Officer Master File (OMF) and separation history from the Separation Officer Master File (SOMF). The OSETDB contains officer personnel data from the OMF and SOMF and academic aptitude measures in the form of standardized scores collected from the Educational Testing Service and the American College Testing Program.</p>	
<p>Project Objectives: The objective of this project was to collect annual source data files for 1997 and 1998 and to update the OLRDB and the OSETDB with officer personnel data maintained by Personnel Command (PERSCOM) and the Defense Manpower Data Center (DMDC). In addition, modifications were made to the existing update process to develop procedures that are Y2K compliant.</p>	
<p>Key Deliverables: Key project deliverables were (a) a 1997 and 1998 version of the OLRDB Longitudinal and Core data sets on computer tape, (b) a 1997 and 1998 version of the OSETDB on computer tape, (c) a final study report for the 1997 and 1998 OLRDB and OSETDB data sets, and (d) a CD-ROM copy of the OLRDB and OSETDB Longitudinal data sets.</p>	
<p>Findings/Outcomes: In addition to delivery of the actual data sets, the final report produced in this project describes the procedures performed to add 1997 and 1998 personnel data to the Longitudinal and Core OLRDB data sets.</p>	
<p>Report Citations: Ramsey, L.J., & Meade, K.F. (1999). <i>Update of U.S. Army Research Institute's Officer Personnel Research Data Bases for 1997 and 1998</i>. FU Associates/HumRRO contract final report.</p>	

DO# 0009	Title: Training Base Attrition Study -- I
Program Area QR _X_ AOS ____ MT ____	DO-COR: Dr. Trueman Tremble DO-ACOR: Project Director: Dr. Bill Strickland
Status: Completed (February 11, 1999 – October 31, 2000)	
DO Summary	
<p>Background: In November 1998, the Chief of Staff of the Army (CSA) directed the Deputy Chief of Staff for Personnel (DCSPER) to conduct a study to determine why soldiers separate from the Army while at the initial entry training (IET) base. The directive called for study of the soldiers who leave service in calendar year (CY) 1999.</p> <p>When ARI received this tasking, it had already initiated an effort sponsored by the Assistant Secretary of the Army, Manpower and Reserve Affairs (ASA (M&RA)) to study first-term attrition issues known as "First Term Recruiting and Training Excellence" (or First Rate, see DO#6). The objective of First Rate is to determine the causes of attrition during the first term of enlistment. Central to achievement of First Rate's objective is the collection of data on a cohort of first-term soldiers over the course of the initial enlistment period, beginning with entry at Army reception battalions and ending with exit from service or term completion.</p> <p>The plans underway for First Rate provide the start for a timely response to the CSA tasking. The types of data obtained through the established First Rate procedures, however, reflect only part of the attrition equation. That is, they represent reasons and explanatory factors for attrition as perceived by the soldiers, especially soldiers who are separating. The other part of the equation reflects the views of the organization. Response to the CSA request will include assembly of official views on the soldiers who leave service. Linking soldiers' own views with official views may help clarify reasons for attrition and suggest strategies for controlling attrition rates.</p> <p>The purpose of this effort was to obtain the information for a focused and timely response to the CSA tasking. The work added to the sample of incoming soldiers being studied while in training base in CY99. In addition, it involved the collection and use of information not originally planned for First Rate – specifically, personnel data from official records.</p>	
<p>Project Objectives: The objective of this delivery order was to determine why soldiers leave the Army while in the entry training base.</p>	
<p>Key Deliverables: Key project deliverables consisted of:</p> <ol style="list-style-type: none"> 1. Two expanded progress reports. 2. Briefing materials supporting the expanded progress reports, for ARI use in presenting updates to the DCSPER. 3. A final Technical Report. 4. Briefing materials describing the study's findings, suitable for presentation to the Chief of Staff. 	
<p>Findings/Outcomes: Correlates of attrition were consistent with previous research: education level, AFQT category, gender, race/ethnicity, and MOS were reliably related to attrition. Survey data provided some improvement in the ability of the statistical model to predict which soldiers would attrit. Early ratings in Basic Combat Training by drill sergeants indicated discernable differences between non-attritees and attritees on both objective measures of physical fitness and subjective ratings of core values, motivation, and discipline. The results of the project should prove useful for identifying soldiers who are at risk for early attrition, in order to implement appropriate interventions to prevent such an outcome.</p>	
<p>Report Citations: Sipes, D.E. (Sunny), Strickland, W.J., Laurence, J.H., DiFazio, A.S., & Wetzels, E.S. (2000). <i>Training base attrition: Analyses and findings</i> (FR-00-38). Alexandria, VA: Human Resources Research Organization.</p>	

DO# 0010	Title: Task Knowledge Commonality Model (TKCAM) Application for MOS 11B, MOS 11H, and MOS 11M
Program Area QR <u> X </u> AOS <u> </u> MT <u> </u>	DO-COR: Mr. Bill Badey DO-ACOR: Project Director: Dr. Bill Strickland (with Mr. Alan Akman of Akman Associates)
Status: Completed (February 18, 1999 – September 30, 1999)	
DO Summary	
<p>Background: Occupational mergers or shred-outs require updates to officer and enlisted individual and advanced technical task training. AR 611-1, Military Occupational Classification Structure and Implementation (Sep 97), requires documentation of occupational restructures as well as updates to job descriptions contained in various Army Regulations and Pamphlets. The Task Knowledge Commonality Model (TKCAM) is a tool designed specifically to allow users to analyze the feasibility of occupational mergers or shred-outs, to define new occupational structures, and to assist in the initial identification of tasks which can be considered critical to individual and unit survival on the battlefield.</p> <p>The Commandant, United States Army Infantry School (USAIS), Fort Benning, GA, is considering the merger of MOS 11B (Infantryman), MOS 11H (Heavy Antiarmor Weapons Infantryman), and MOS 11M (Fighting Vehicle Infantryman) to improve the efficiency of field combat operations. He requested ARI's assistance in applying the TKCAM methodology to help determine the advisability of carrying out the proposed merger.</p>	
<p>Project Objectives: The project had three objectives:</p> <ol style="list-style-type: none"> 1. Present a comprehensive course of instruction on TKCAM principles and practices at the USAIS. 2. Validate TKCAM user findings made by the USAIS. 3. Collect and provide lessons learned and proposed changes to improve the TKCAM USER'S MANUAL design and processes. 	
<p>Key Deliverables: Key deliverables were as follows:</p> <ol style="list-style-type: none"> 1. Briefing to the Office of Infantry Proponency 2. TKCAM Summary Report 3. Observations and Lessons Learned Letter Report 	
<p>Findings/Outcomes: As noted by MG Ernst, CG USAIC, in a Certificate of Appreciation, "Based upon . . .the Task Knowledges Commonality Analysis Method, the Infantry is now in a position to speak with facts on the question of MOS restructure feasibility."</p>	
Report Citations: n/a	

DO# 0011	Title: Preparation of ARI Special Report on the Enlisted Personnel Allocation System (EPAS)
Program Area QR <u> X </u> AOS <u> </u> MT <u> </u>	DO-COR: Dr. Peter Greenston DO-ACOR: Project Director: Dr. Mary Ann Lightfoot
Status: Completed (April 13, 1998 – April 30, 1999)	
DO Summary	
<p>Background: ARI required a description of EPAS and how it fits within Army personnel classification research, development, and operational systems. The special report should be for an audience of Army managers—military and civilian, with diverse backgrounds. The “story” of EPAS includes what it is, how it works, what it will do for the Army when it is operational, and how it can be enhanced in the near future to provide even greater utility and efficiency. EPAS is an algorithm, implemented by linear programming software, which optimizes the Army’s enlisted personnel classification system, while accounting for realistic constraints. EPAS was designed, developed, and tested by ARI over 15 years. It is currently being installed in the Army’s operational recruit selection and classification mainframe software called REQUEST.</p>	
<p>Project Objectives: The objective of this project was to prepare an ARI Special Report that describes EPAS development and its role in improving classification in the Army. The audience for this special report is Army management.</p>	
<p>Key Deliverables: The key deliverable is an ARI Special Report.</p>	
<p>Findings/Outcomes: n/a</p>	
<p>Report Citations: Lightfoot, M.A., & Ramsberger, P.F. (2000). <i>Matching Recruits to Jobs: The Enlisted Personnel Allocation System (EPAS)</i> (ARI Special Report 41). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences.</p>	

DO# 0012	Title: Data Collection Support for TRADOC-99-CEP-0101, Manned and Unmanned Aerial Platform Operations on the Digitized Battlefield (Air Maneuver Recon Teams)
Program Area QR _X_ AOS ____ MT ____	DO-COR: Dr. William Howse DO-ACOR: Project Director: Dr. Deirdre J. Knapp (with Mr. John Woods of Carmel Applied Technologies, Incorporated)
Status: Completed (August 5, 1999 – February 28, 2000)	
DO Summary	
<p>Background: The Air Maneuver Battle Lab (AMBL) is conducting TRADOC-99-CEP-0101, Manned and Unmanned Aerial Platform Operations on the Digitized Battlefield. It is the third in a series of investigations on this subject under the Training and Doctrine Command (TRADOC) Concept Experimentation Program. This effort is commonly referred to as MUM-III. The ARI Rotary Wing Aviation Research Unit (ARI-RWARU) provided support for MUM-I (TRADOC-CEP-97-0101) and MUM-II (TRADOC-CEP-98-0104), and is providing support for MUM-III. Experimentation is being conducted by means of operation of interactive virtual simulations of manned and unmanned rotary wing aircraft in a Distributed Interactive Simulation (DIS) synthetic environment. Major simulation systems anticipated for use in MUM-III include the Advanced Tactical Combat Model (ATCOM), the Comanche Portable Cockpit (CPC), and the Rapid Prototyping Mission Simulator (RPMS). The effort explores the potential increases in operational effectiveness that can be gained through cooperative teaming of dissimilar systems to accomplish reconnaissance missions.</p> <p>Although most support for this effort is provided by ARI personnel, additional manpower was required to operate and monitor the automated data collection systems during the execution of simulation exercises and to perform data reduction functions during and after simulation exercises. It was imperative that data reduction be accurately performed during and at the close of each simulated mission and immediately following the data collection phase of the project.</p>	
Project Objectives: The objective of this delivery order was to ensure correct and complete collection of data from a real-time virtual simulation network and to perform data reduction processes as rapidly as possible.	
Key Deliverables: Key deliverables were a summary data archive and Measures of Performance (MOPs)	
Findings/Outcomes: n/a	
Report Citations: n/a	

DO# 0013	Title: Automated Data Collection System Modification and Development
Program Area QR _X_ AOS ____ MT ____	DO-COR: Dr. William Howse DO-ACOR: Project Director: Dr. Deirdre J. Knapp (with Dr. David Skipper of Bevilacqua Research Corporation)
Status: Completed (August 5, 1999 – February 28, 2000)	
DO Summary	
Background: The U.S. Army Research Institute Rotary Wing Aviation Research Unit (ARI/RWARU) at Ft. Rucker Alabama has been tasked to support Manned and Unmanned Platform Operations on the Digitized Battlefield (MUM) III exercises at the Aviation Battle laboratory. This support includes the collection and analysis of human factors data related to soldier performance during the exercises. ARI plans to use the Data Collection and Analysis Tool (DCAT) automated data collection software to help perform this task. The Automated Measurement and Monitoring System (AEMoS) software has been used in the past, however, and several of the capabilities of AEMoS must be integrated with the new DCAT software to allow comprehensive data collection and analysis capability.	
Project Objectives: The objective of this effort was to combine features of the AEMoS and DCAT data collection systems for use in support of the MUM-III exercises.	
Key Deliverables: Key deliverables were the software source and executable code.	
Findings/Outcomes: n/a	
Report Citations: n/a	

DO# 0014	Title: Automation of Army's Basic Skills Program
Program Area	DO-COR: Ms. Lynn Steed (PERSCOM)
QR _____	DO-ACOR: Ms. Dee Flynn
AOS _____	Project Director: Dr. Laura Ford (HumRRO)
MT <input checked="" type="checkbox"/>	
Status: Ongoing (September 28, 1999 – January 31, 2002)	
DO Summary	
<p>Background: For soldiers in today's Army, skill in such basic subjects as reading and mathematics are as important as ever. The Army has paper-based, instructor-facilitated basic skills training programs known as Functional Academic Skills Training (FAST), but the programs are neither standardized nor automated. As a result, the training that is provided is not of consistent quality, and no programs are provided for soldiers who are away from their home stations because of deployments. Furthermore, there is no management information system (MIS) to provide reliable feedback on how the programs are being used.</p> <p>Consequently, the leadership of the Army has directed that the Army's basic skills program be automated, standardized, and deployed. The approach will be to automate the program by integrating commercial-off-the-shelf (COTS) software with Army-unique, "green" content from the current FAST curriculum.</p>	
<p>Project Objectives: The overarching objective for this project is to recommend an effective and efficient computer-based instruction (CBI) package for basic skills and a suitable information management system. To achieve this objective we will:</p> <ul style="list-style-type: none"> • Identify up to three basic skills COTS software packages that meet program specifications and conduct a controlled evaluation or pilot test. • Explore the possibility of incorporating Army-specific content into COTS basic skills packages. • Purchase and install requisite hardware and software at various Army locations for the pilot tests. • Recommend the most effective COTS package for Army basic skills training, based on pilot test results. • Recommend the most effective information management system for the Army basic skills program, based on pilot test results. • Evaluate the current, basic skills measurement instruments using archival data. 	
<p>Key Deliverables: The key deliverables for this effort will be (a) a report on the criteria used to choose three different COTS for a formal evaluation, (b) a report on the Army-specific content that should be incorporated into the COTS basic skills program, (c) computer workstations and software for conduct of COTS evaluation, and (d) a final report on pilot test results.</p>	
Findings/Outcomes:	
Report Citations:	

DO# 0015	Title: NCO Characteristics for the 21st Century: Assessment and Validation
Program Area QR _____ AOS _____ MT <input checked="" type="checkbox"/>	DO-COR: Dr. Tonia Heffner DO-ACOR: Project Director: Dr. Deirdre J. Knapp
Status: Ongoing (September 30, 1999 – September 29, 2002)	
DO Summary	
<p>Background: The noncommissioned officer (NCO) corps must ensure that the U.S. Army remains trained and ready today and adapts to meet the challenges of the 21st century (GEN Reimer, Chief of Staff of the Army, 1996). These challenges include more complex technology, an increased diversity of missions, a downsized Army, and organizational and social changes. The battlefield of the future requires soldiers who can effectively operate in digitized environments and meet an increased diversity of missions.</p> <p>This effort addresses NCO promotion, a critical component of an effective personnel management system for the future NCO corps. The current promotion system does not fully assess an individual's potential to meet current job demands, much less those that will be required as we move further into the 21st century.</p> <p>This is the third phase of a three-phase effort undertaken by the U.S. Army Research Institute for the Behavioral and Social Sciences (ARI). The first phase developed a plan for execution of Phase II. The second phase involved the identification of a set of critical 21st century NCO knowledges, skills, and aptitudes (KSAs) for two time periods (2000-2010 and 2010-2025), based on a projected set of future job demands. In the third phase, predictor measures of these critical KSAs will be identified and validated against performance measures relevant to future NCO performance. Indicators linked to these measures of future success will provide the knowledge base and foundation for an improved NCO performance system.</p>	
<p>Project Objectives: The purpose of this effort is to lay the knowledge base for a promotion system geared to the needs of the 21st century. More specifically, the objectives are to (a) develop and/or identify measures of the KSAs needed to perform effectively the NCO job in two separate time periods (2000-2010, 2010-2025), and for multiple NCO levels; (b) develop performance measures that will serve as criteria for the KSA measures identified or developed; and (c) validate the KSA measures against the performance measures.</p>	
<p>Key Deliverables: Key project deliverables include KSA and criterion measures, including a report describing their development. There will be a final report that reports the methodology and findings associated with the validation of the KSA measures.</p>	
<p>Findings/Outcomes: Predictor (KSA) and criterion measures were developed and field tested at three Army installations. The predictor measures include a semi-structured interview, an activity/accomplishment checklist, and a written situational judgment test. Supervisor ratings are the primary criterion measure – including ratings of current performance and ratings of expected performance under future Army conditions. Validation data are being collected at seven Army installations during the period April through August 2001.</p>	
Report Citations:	

DO# 0016	Title: Year 2 Contract Administration
Program Area QR _____ AOS _____ MT _____	DO-COR: Dr. Judith Brooks DO-ACOR: Project Director: Dr. Deirdre Knapp
Status: Completed (October 5, 1999-November 4, 2000)	
DO Summary	
<p>Background: Providing information on manpower and personnel issues to Army decision-and policy-makers is often a complex, dynamic, multi-stage, iterative process. The accuracy and timeliness of information provided to decision-makers are of paramount importance in the quality of decisions and policies. Over the next decade, the U.S. Army will experience an increasing requirement to bring individuals into the Army who are trainable in a wide variety of skill areas. To meet and maintain its high quality manpower needs of the new millenium, the Army will have to develop and implement programs that allow it to locate, assess, assign, and use human resources more efficiently and effectively than it ever has before. As new Army policies are being developed to enhance the Army's ability to man the force, the Army needs programs of research and studies that will provide a quick response mechanism to gather and analyze data on the expected or actual short-term effectiveness of those policies.</p> <p>Scientific and technical support services are being used that lead to the development and implementation of programs of research and studies on the expected or actual effectiveness of Manpower, Personnel, and Training (MPT) programs. These efforts are part of ARI's MPT program to man the force by conducting research and studies to improve the Army's ability to recruit, identify, assess, classify, assign, lead, train, and maintain the personnel required for the Army.</p>	
<p>Project Objectives: The objectives of this delivery order are to administer the Contract for Manpower and Personnel Research and Studies II (COMPRS-II) for ARI under firm fixed-priced contracts by performing three inter-related tasks: (a) managing the COMPRS program in accordance with established operating procedures; (b) receiving and processing individual Statements of Tasks from ARI; and (c) managing, reporting progress on, and documenting completion of delivery orders.</p>	
<p>Key Deliverables: The following Delivery Orders were issued during Year 2:</p> <ul style="list-style-type: none"> • DO 0014 Automation of Army's Basic Skills Program • DO 0015 NCO Characteristics for the 21st Century: Assessment and Validation • DO 0016 Year 2 Contract Administration • DO 0017 Impact of ACES on Soldier Retention and Performance: A Research Plan • DO 0018 Army Recruiting Market Segmentation Survey • DO 0019 Support for Evaluation of Basic Research Proposals • DO 0020 First Term Soldier Attrition and Management • DO 0021 MOS Consolidation for the Future Battlefield • DO 0022 Pilot Test of Spanish Language Entrance Screening Test: Phase I • DO 0023 Update of ARI's Officer Personnel Research Data Bases for 1999 and 2000 	
Findings/Outcomes:	
<p>Report Citations: Human Resources Research Organization. (1999). <i>COMPRS-II Year 2 – Standard Operating Procedures (SOP)</i>. HumRRO contract report.</p> <p>Human Resources Research Organization (2000). <i>Contract for Manpower and Personnel Research and Studies II (COMPRS-II) Annual Report – Year Two</i>. HumRRO contract report.</p>	

DO# 0017	Title: Impact of the Army Continuing Education System (ACES) on Soldier Retention and Performance: A Research Plan
Program Area QR _X_ AOS ____ MT ____	DO-COR: Dr. Mark Young DO-ACOR: Dr. Trueman Tremble Project Director: Dr. Paul J. Sticha
Status: Completed (January 12, 2000 – October 11, 2000)	
DO Summary	
<p>Background: The Army established the Army Continuing Education System (ACES) to promote lifelong learning opportunities for its members with the hope that these educational activities will support combat readiness and quality of life, and will enhance the competitive edge of the force. ACES includes several programs to meet the educational needs of soldiers and to help soldiers to apply the skills learned in the Army to obtain academic credentials needed for their later civilian life. These programs include (a) The American Council of Education Military Evaluations Program, (b) the Army Personnel Testing Program, (c) the Army Tuition Assistance Program, (d) the Functional Academic Skills Training Program, (e) the High School Completion Program, (f) the Servicemembers Opportunity Colleges Army Degree Program, and (g) the Army/American Council on Education Registry Transcript System. Soldier participation in ACES programs is coordinated by education counselors located at installation Army Education Centers.</p> <p>The Education Division of the U.S. Army Total Personnel Command (PERSCOM) requested that the U.S. Army Research Institute (ARI) initiate a preliminary study to examine the relationship between in-service civilian education under the ACES program, and soldier retention and performance. ARI has agreed to initiate such a study. PERSCOM's Education Division, the sponsor of this effort, anticipates using the results of this research as a basis for documenting the value of the ACES program for (a) attracting and retaining soldiers and (b) supporting the Army's training, education, and leader development objectives.</p>	
<p>Project Objectives: The project objectives were as follows:</p> <ol style="list-style-type: none"> 1. Develop a detailed research plan for evaluating those aspects of the ACES program for which an empirical evaluation is most relevant, viable, and cost effective. 2. Develop a plan for creating the database needed for conducting the data analyses for the program evaluation 	
<p>Key Deliverables: Key project deliverables are:</p> <ol style="list-style-type: none"> 1. Review of previous research conducted in the military and civilian sectors since 1980. 2. Written comprehensive evaluation research plan. 3. Written database development plan. 4. Final report. 	
<p>Findings/Outcomes: The research literature provides limited coverage of continuing education programs. Results indicate that those who participate in continuing education tend to be better qualified and more highly motivated soldiers (or employees) than those who do not. A positive effect of participation on performance is reflected in personal opinions, promotion rates, and actual performance ratings. Regarding retention, the research suggests that participation in continuing education increases the likelihood of reenlistment. The effect remains at a reduced magnitude when other factors are controlled statistically. The generality of the findings of past research is limited by the number of evaluation studies, the focus on a small number of continuing education programs, the inconsistent correction for selection bias, and the lack of an overall conceptual model to guide analyses.</p> <p>The evaluation plan addresses five ACES programs: (a) the Army Tuition Assistance (TA) Program, (b) the Servicemembers Opportunity Colleges Army Degree (SOCAD) Program (c) the Functional Academic Skills Training (FAST) program, (d) Military Occupational Specialty (MOS) Improvement Courses, and (e) Non-commissioned Officer (NCO) Leader Development Courses. The methodological approach addresses several potential evaluation problems, including non-random assignment, censored data, missing data, measurement error, and unobserved heterogeneity. The database development plan specifies variables from administrative databases and surveys that measure participation in ACES programs, assess retention and performance outcomes, and identify other characteristics that should be used as controls. The plan also identifies data-building procedures that will result in an analytically relevant evaluation database.</p>	
<p>Report Citations: Sticha, P.J., DiFazio, A.S., Dall, D.A., Handy, K., & Heggstad, E.D. (2000). <i>Impact of the Army Continuing Education System (ACES) on soldier retention and performance: Final report</i> (FR-WATSD-00-49). Alexandria, VA: Human Resources Research Organization.</p>	

DO# 0018	Title: Army Recruiting Market Segmentation Survey
Program Area QR _____ AOS <u> X </u> MT _____	DO-COR: Dr. Morris Peterson DO-ACOR: Project Director: Mr. John Helmick (Westat)
Status: Completed (February 25, 2000 – June 30, 2000)	
DO Summary	
Background: The Army needs redesigned marketing and recruiting campaigns. To inform and guide those campaigns, new research was needed on the broad set of factors that affect youth attitudes and willingness to enter the Army. Rand researchers developed surveys for youth and their parents designed to address these research needs. The surveys needed to be administered within a very short timeframe to provide data to the Army in a timely fashion.	
Project Objectives: The objectives of this delivery order were to administer computer-assisted telephone interviewing (CATI) surveys to a sample of 5,000 youth and 2,500 parents. A second sample of similar size was surveyed under a related delivery order. Westat designed the sampling plan and purchased the phone numbers for the survey samples for both delivery orders.	
Key Deliverables: Key deliverables included a project management plan, periodic raw data files, and a final letter report.	
Findings/Outcomes: The required data were collected in a timely fashion, providing the input necessary to support the Army's marketing and recruiting campaign efforts.	
Report Citations: n/a	

DO# 0019	Title: Support for Evaluation of Basic Research Proposals
Program Area QR <input checked="" type="checkbox"/> X AOS <input type="checkbox"/> MT <input type="checkbox"/>	DO-COR: Dr. Michael Drillings DO-ACOR: Project Director: Dr. Deirdre Knapp, with Dr. George Lawton
Status: Completed (March 20, 2000 – May 19, 2000)	
DO Summary	
<p>Background: The Research and Advanced Concepts Office (RACO) of the U.S. Army Research Institute (ARI) has as a yearly requirement to evaluate basic research proposals. Evaluation requires careful reading and complete understanding of a wide variety of proposals; evaluating those proposals; and preparing a formal evaluation form for each one containing scores, detailed evaluations in various categories, and recommendations. Most of this work is done by in-house ARI scientists, however each proposal must be reviewed by multiple personnel with appropriate technical backgrounds. The reduction in ARI's work force has resulted in a greatly increased workload. Therefore, RACO required external support to accomplish the year 2000 evaluations in the time allowed.</p>	
<p>Project Objectives: The objective was to evaluate basic research proposals falling predominantly in the areas of training, leadership, and personnel selection.</p>	
<p>Key Deliverables: Reviews of basic research proposals.</p>	
<p>Findings/Outcomes: n/a</p>	
<p>Report Citations: n/a</p>	

DO# 0020	Title: First-Term Soldier Attrition and Management
Program Area QR _____ AOS _____ MT <input checked="" type="checkbox"/>	DO-COR: Dr. Trueman Tremble DO-ACOR: Project Director: Dr. Bill Strickland
Status: Ongoing (May 26, 2000 – May 25, 2002)	
DO Summary	
<p>Background: In 1996 the Office of the Assistant Secretary of the Army Manpower and Reserve Affairs (ASA M&RA) asked the Army Research Institute (ARI) to draft a broad-based plan for carrying out a comprehensive, integrated examination of first-term enlisted attrition. ARI's plan provided a general outline for what has become a 5- to 6-year program for investigating attrition across the first-term of the enlisted life cycle. ARI seeks to produce a comprehensive understanding of the causes of attrition over the course of the first term of enlistment. The plan calls for a longitudinal examination of the personal (e.g., expectations, background), organizational (e.g., culture and climate), and extra-organizational (e.g., attitudes of significant others, opportunities for civilian employment) variables that potentially combine to influence an individual's "fit" with and success in an organization, in this case, the U.S. Army. Work under earlier delivery orders (COMPRS #79 and COMPRS II #06 and #09) refined the plan and began data collection on the FY1999 Active Army accession cohort while its members were in the Training Base. This delivery order continues those data collection and analysis tasks into the first unit of assignment for these soldiers.</p>	
<p>Project Objectives: The objective of this delivery order is to continue progress on the longitudinal study of attrition during the first term of service for FY1999 accessions.</p>	
<p>Key Deliverables: Key project deliverables consist of:</p> <ul style="list-style-type: none"> • Surveys for use in FY2000 and FY2001 to track the FY1999 cohort. • An Exit Survey for use with FY1999 cohort soldiers who leave the Army before the end of their first term. • Two briefings per year for ARI's Attrition Advisory Panel. • Two briefings per year for ARI's sponsors. • Two technical reports documenting progress and results over the course of FY2000 and FY2001. 	
<p>Findings/Outcomes: HumRRO designed and distributed surveys to the 1999 accession cohort in the spring of 2001. We received back completed surveys from over 19,000 cohort members, scanned, checked, and merged those responses into the First Term database. We also merged quarterly EMF updates with that database.</p>	
<p>Report Citations: Sipes, D.E., Strickland, W.J., & Laurence, J.H. (2001). <i>Factors influencing the continuance propensity of IET graduates</i> (HumRRO Draft Final Report). Alexandria, VA: Human Resources Research Organization.</p>	

DO# 0021	Title: MOS Consolidation for the Future Battlefield
Program Area QR <u> X </u> AOS <u> </u> MT <u> </u>	DO-COR: Dr. Elizabeth Brady DO-ACOR: Project Director: Mr. Allan Akman
Status: Completed (June 13, 2000 – May 8, 2001)	
DO Summary	
<p>Background: The Army has been routinely faced with changing tasks, jobs, and occupational structure in response to changes in doctrine, leadership, training, and mission. Currently, the Army is faced with yet another attempt to restructure its jobs to meet the challenges of the future battlefield in the 21st Century. With advances in technology, changes in the number and range missions, and future world challenges, the Army, too, must change their approach in training soldiers who are of capable of meeting these challenges. A study of the enlisted occupational structure by the Army Development System (ADS) XXI Task Force concluded that Military Occupational Specialty (MOS) requirements tend to be too narrow. Consequently it is expected that soldiers of the future will need to be multi-skilled, and their jobs be redefined to encompass these changes.</p>	
<p>Project Objectives: The primary objective of this effort was to assess and document the feasibility of a potential MOS consolidation by using a front-end analysis (FEA) procedure on Army military occupational specialties (MOS) that represent the future battlefield. The FEA addressed the expected training and personnel (e.g., course length, transition training, ASVAB, physical demands, recruitment) for the MOS under study. The FEA used the Task Knowledge Commonality Analysis Method (TKCAM).</p> <p>A secondary objective was to lay the foundation for future MOS consolidations based on this primary objective. To fully meet the challenges of the future Army, time and resources will be needed to assess all jobs within the Army. If the U.S. Army expects to be at the forefront of the future battlefield, changes to occupational structure need to be planned for now so they can be implemented in time to guarantee ultimate success in the future.</p>	
Key Deliverables: Final report (Brigade Combat Team 8 MOS TKCAM Summary Final Report) and briefing.	
Findings/Outcomes:	
Report Citations:	

DO# 0022	Title: Pilot Test of Spanish Language Entrance Screening Test: Phase I
Program Area QR <u> X </u> AOS <u> </u> MT <u> </u>	DO-COR: Dr. Naomi Verdugo DO-ACOR: Project Director: Dr. Deirdre Knapp
Status: Completed (July 25, 2000 – May 4, 2001)	
DO Summary	
<p>Background: Considering the rapid growth of the Hispanic population and the Census Bureau's projections for continued growth in the decades to come, a Spanish language entrance screening test can potentially expand the Army's recruiting market. Such a test would allow the Army to access highly able Spanish speakers and then provide English language training to them before they join their unit. The Army plans to offer the Spanish entrance screening test in at least nine recruiting battalions with heavily Hispanic populations. The basic plan is to enlist applicants on a provisional basis based on their performance on a Spanish language screening test and the Armed Forces Qualification Test (AFQT). After accession they will be sent for English as a Second Language (ESL) training and retake the Armed Services Vocational Aptitude Battery (ASVAB). If they fail to pass the ESL test with a score of 70 or better or do not score in Category I-IIIB on the AFQT, they will be discharged from duty.</p> <p>The effort to prepare for the implementation of the Spanish language entrance test pilot program and its subsequent evaluation will be divided into two phases. The first phase is the subject of the present delivery order. Its purpose is to evaluate existing commercial off-the-shelf Spanish language tests for similarity to the AFQT and to develop an implementation plan and evaluation plan. At least 1 year into the implementation of the pilot test, the contractor will begin the second phase – an evaluation of the pilot test.</p>	
<p>Project Objectives: The goals of this delivery order are to support efforts to field a commercial off-the-shelf or other existing test to screen Spanish-speaking enlistment prospects for trainability. This test will be administered in Spanish. In addition to the contractor reviewing existing tests and comparing distributions of scores on the selected test as compared to the AFQT, the contractor will develop a detailed implementation plan and a detailed evaluation plan for the 24-month pilot test of this option.</p>	
<p>Key Deliverables: The key deliverables are a pilot test recommendations report and detailed pilot implementation plans.</p>	
<p>Findings/Outcomes: Two Spanish language tests – the Spanish Wonderlic and the Prueba de Aptitud Academica (PAA) will be evaluated in the pilot "Foreign Language Recruiting Initiative" project. Starting in October 2001, USMEPCOM will administer the Spanish Wonderlic to qualified applicants. PAA scores for those who have taken this examination in high school (an estimated 90% of the Puerto Rican applicants) will be obtained from the College Board. In addition to the pilot test, portions of the program will be evaluated using archival data and new data collected prior to the pilot effort. Specifically, Spanish Wonderlic data have been collected by the ESL schools in San Antonio and Puerto Rico. We also hope to collect English Wonderlic calibration data from a sample of new recruits in the fall of 2001.</p>	
<p>Report Citations: Medsker, G.J., Ramos, R.A., Knapp, D.J., McCloy, R.A. & Handy, K. (2001). <i>U.S. Army Foreign Language Recruiting Initiative (FLRI): Pilot Test Recommendations Report</i>. Alexandria, VA: Human Resources Research Organization.</p>	

DO# 0023	Title: Update of ARI's Officer Personnel Research Data Bases
Program Area QR <u> X </u> AOS <u> </u> MT <u> </u>	DO-COR: Dr. Peter Greenston DO-ACOR: Project Director: Dr. Deirdre Knapp/Ms. Winnie Young
Status: Ongoing (August 3, 2000 – August 2, 2001)	
DO Summary	
<p>Background: Since the 1970s, the U.S. Army Research Institute (ARI) has maintained a set of databases that contain historical and current data on the U.S. Army officer personnel. These databases have provided a valuable resource for research and analyses in the area of policy, manpower, and personnel issues that are important to the U.S. Army. Because of the significance of these databases and the need to keep information current, regular updates must be performed. Currently, the databases are being updated every other year and the last update of 1997/98 cycle was completed in September 1999. The purpose of this project is to provide for the next cycle of 1999/2000 update as required by the Selection and Assignment Research Unit (SARU) of ARI.</p>	
<p>Project Objectives: The objectives of this effort are to provide updates for three main data bases in the Officer Personnel Research Data Bases: the Officer Administrative Data Base (OADB), the Officer Longitudinal Research Data Base (OLRDB), and the Officer Standardized Educational Testing Data Base (OSETDB).</p>	
<p>Key Deliverables: Deliverables will include the updated data bases on CD-ROM and a final report.</p>	
Findings/Outcomes:	
Report Citations:	

DO# 0024	Title: Evaluation of the Buddy-Team Assignment Program
Program Area QR <u> X </u> AOS <u> </u> MT <u> </u>	DO-COR: Dr. Trueman Tremble DO-ACOR: Project Director: Dr. Peter Ramsberger
Status: Ongoing (September 29, 2000-January 29, 2002)	
DO Summary	
Background: The Buddy-Team Assignment Program (BTAP) was initiated to reduce attrition among initial term soldiers at their first duty station following One Station Unit Training (OSUT). The program involves assigning two soldiers who have been designated as a buddy team in OSUT to the same company at their first duty station. The hope is that this will smooth the transition to the operational environment, increase overall satisfaction, and thereby reduce attrition.	
Project Objectives: The objectives of this effort are to collect data that will address: (a) whether the BTAP is being implemented as originally planned, (b) what impact having a buddy has on soldiers as they make the transition from training to their operational units (e.g., reduced levels of stress, increased confidence), and (c) whether such effects yield the desired result of reduced attrition.	
Key Deliverables: Deliverables will include a database incorporating survey data as well as relevant administrative records, and a final report that details the methodology and findings as well as providing recommendations for program continuance/improvement.	
Findings/Outcomes: Two surveys have been developed. The end-of-training survey was administered to all 11M (Fighting Vehicle Infantrymen) soldiers at Fort Benning from approximately 10 April through 5 July 2001. A field survey of buddy team and control soldiers has been initiated, with data collection to continue through August 2001.	
Report Citations:	

DO# 0025	Title: Addressing Operational Issues in Support of the Institutionalization of the Assessment of Individual Motivation (AIM)
Program Area QR <u> X </u> AOS <u> </u> MT <u> </u>	DO-COR: Dr. Mark Young DO-ACOR: Project Director: Dr. Deirdre Knapp
Status: Ongoing (September 30, 2000-December 31, 2001)	
DO Summary	
<p>Background: In 1996, the U.S. Army Research Institute for the Behavioral and Social Sciences (ARI) developed a new faking-resistant measure of motivational attributes designed to predict enlisted attrition and duty performance. This measure is called the Assessment of Individual Motivation (AIM). ARI carried out an AIM Pre-Implementation Research Program (1998-1999) to assess whether AIM would be viable for screening enlisted Army applicants. This program (a) validated AIM against initial entry training attrition, (b) evaluated AIM's potential adverse impact when used for enlistment screening, and (c) assessed AIM's resistance to faking. As of February 2000, the Army has implemented AIM as a new market-expansion screening tool under the "GED Plus" (General Educational Development) program. A contract effort is now required to address several operational issues pertaining to AIM's ongoing use and viability for other market segments.</p> <p>Past evaluations of AIM have been conducted exclusively in a research context. Under this proposed effort, it will be particularly important to assess how well AIM's validity holds up in an actual operational (as opposed to a research) context. This assessment will be done using AIM data collected under the GED Plus program. In order to address this, and other relevant operational and policy issues, it will be necessary to develop and update databases for use in AIM's refinement and evaluation.</p>	
<p>Project Objectives: The objective of the proposed contract effort is to refine AIM and support its continued operational use under the GED Plus program. Specifically, this effort will (a) update databases (research and operational) needed for AIM's assessment and refinement, (b) determine AIM's validity as an attrition predictor using operational data, (c) evaluate and equate new alternate AIM forms developed under a previous contract, (d) examine the effects of recruit characteristics on first-term attrition, and (e) manage the coordination and integration of multiple AIM evaluation/refinement efforts being conducted both under this contract and by independent consultants working directly for ARI.</p>	
<p>Key Deliverables: Deliverables will include data analysis plans, databases, briefing materials, and two technical reports. One report will include all the relevant project details. The second report will be purged of sensitive information regarding the operational AIM. The first report will not be for public release, but the second one will.</p>	
<p>Findings/Outcomes: Two in-progress review meetings have been conducted to review analysis plans and analysis results. Investigators are now documenting their research and the first project report is under construction.</p>	
Report Citations:	

DO# 0026	Title: Year 3 Contract Administration
Program Area QR _____ AOS _____ MT _____	DO-COR: Dr. Ron Tiggie DO-ACOR: Project Director: Dr. Deirdre Knapp
Status: Ongoing (October 10, 1999-October 16, 2001)	
DO Summary	
<p>Background: Providing information on manpower and personnel issues to Army decision-and policy-makers is often a complex, dynamic, multi-stage, iterative process. The accuracy and timeliness of information provided to decision makers are of paramount importance in the quality of decisions and policies. Over the next decade, the U.S. Army will experience an increasing requirement to bring individuals into the Army who are trainable in a wide variety of skill areas. To meet and maintain its high quality manpower needs of the new millennium, the Army will have to develop and implement programs that allow it to locate, assess, assign, and use human resources more efficiently and effectively than it ever has before. As new Army policies are being developed to enhance the Army's ability to man the force, the Army needs programs of research and studies that will provide a quick response mechanism to gather and analyze data on the expected or actual short-term effectiveness of those policies.</p> <p>Scientific and technical support services are being used that lead to the development and implementation of programs of research and studies on the expected or actual effectiveness of Manpower, Personnel, and Training (MPT) programs. These efforts are part of ARI's MPT program to man the force by conducting research and studies to improve the Army's ability to recruit, identify, assess, classify, assign, lead, train, and maintain the personnel required for the Army.</p>	
<p>Project Objectives: The objectives of this delivery order are to administer the Contract for Manpower and Personnel Research and Studies II (COMPRS-II) for ARI under firm fixed-priced contracts by managing three inter-related tasks: (a) managing the COMPRS program in accordance with established operating procedures; (b) receiving and processing individual Statements of Tasks from ARI; and (c) managing, reporting progress on, and documenting completion of delivery orders.</p>	
<p>Key Deliverables: The following Delivery Orders were issued during Year 3:</p> <p>DO 0024 Evaluation of the Buddy-Team Assignment Program</p> <p>DO 0025 Addressing Operational Issues in Support of the Institutionalization of AIM</p> <p>DO 0027 Improving Selective Reenlistment Bonus (SRB) Allocation Procedures in the Army</p> <p>DO 0028: TCKAM User's Manual Update</p> <p>DO 0029: A Social Sciences Analysis of the Balkan Conflict</p> <p>DO 0030: Adoption of New Army Aptitude Area Composites</p> <p>DO 0031: Impact of the Army Continuing Education System (ACES) on Soldier Retention and Performance: Database Development</p> <p>DO 0032: Special Report on Distance Learning</p> <p>DO 0033: Impact of the Army Continuing Education System (ACES) on Soldier Retention and Performance: Database Analyses</p> <p>DO 0034: Personnel and Training Decisions Which Could be Supported with Research, Analysis, or Data: A Case Study of MOS Minimum Enlistment Standards</p>	
Findings/Outcomes:	
<p>Report Citations: Human Resources Research Organization. (2000). <i>COMPRS-II Year 3 – Standard Operating Procedures (SOP)</i>. Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences.</p>	

DO# 0027	Title: Improving Selective Reenlistment Bonus (SRB) Allocation Procedures in the Army
Program Area QR <u> X </u> AOS <u> </u> MT <u> </u>	DO-COR: Dr. Peter Greenston DO-ACOR: Project Director: Dr. Pat Mackin (SAG Corporation), with the Lewin Group
Status: Ongoing (November 22, 2000-December 21, 2001)	
DO Summary	
<p>Background: What are the factors that influence a soldier's decision to reenlist for another term or to leave the Army? Army managers must have good information about the effects of pays such as the Selective Reenlistment Bonus (SRB) in order to manage the enlisted force.</p> <p>Existing empirical estimates fail to take into account the most recently available data for the post-drawdown period. Moreover, the models currently used for SRB management are not based on a structural economic model of occupational choice. When non-structural models become obsolete (i.e., cease to fit the data well), it is difficult to ascertain the source of errors. Structural models, on the other hand, should provide a more robust predictor of reenlistment behavior. Finally, the effects of new features to the SRB program, such as a location-specific bonus differential, have never been estimated.</p>	
<p>Project Objectives: The objective of this study is to develop empirical models that quantify the impact of monetary incentives on reenlistment behavior. The models shall be at a sufficient level of detail to allow them to be applied to manage the Army's SRB program. Additionally, the study will incorporate the results of the empirical analysis in a simple, PC-based analytical tool for use by SRB program managers.</p>	
<p>Key Deliverables: Deliverables will include a PC-based SRB allocation tool, briefing, and final report.</p>	
<p>Findings/Outcomes:</p>	
<p>Report Citations:</p>	

DO# 0028	Title: Task Knowledge Commonality Analysis Method (TKCAM) User's Manual Update
Program Area QR _X_ AOS ____ MT ____	DO-COR: Mr. Bill Badey DO-ACOR: Project Director: Dr. Deirdre J. Knapp (with Mr. Allan Akman, Akman Associates)
Status: Completed (January 29, 2001 – March 28, 2001)	
DO Summary	
<p>Background: Headquarters Training and Doctrine Command (TRADOC) elements and schools are preparing to conduct numerous enlisted Military Occupational Specialty (MOS) mergers in order to comply with Army Development System (ADS) XXI initiatives that will soon be approved by the US Army Chief of Staff. With this, Army Regulation (AR) 611-1 requires documentation of occupational restructures as well as updates to job descriptions contained in various Army Regulations and Pamphlets. Task Knowledge Commonality Analysis Method (TKCAM), through countless tests and practical applications is recognized as a tool that facilitates development of AR 611-1 analysis requirements and imparts a macro view of likely MOS retraining requirements, thus allowing training developers to realign training necessary to sustain successful job performance of the merged MOS. The current TKCAM User's Manual alludes to but does not precisely reference the use of TRADOC Regulation (TR) 350-70 training analysis products (i.e., task knowledge's, a derivative of a task training development and/or evaluation process). Consequently in order for TKCAM User's to properly attain and apply task knowledge(s) as part of a TKCAM application an examination and accurate reference in TKCAM to TR 350-70 must be completed.</p>	
<p>Project Objectives: The objective of this effort was to update the TKCAM User's Manual to include information as it relates to the use of task analysis results.</p>	
<p>Key Deliverables: The key deliverable was an updated User's Manual</p>	
<p>Findings/Outcomes: n/a</p>	
<p>Report Citations: n/a</p>	

DO# 0029	Title: A Social Sciences Analysis of the Balkan Conflict
Program Area QR <u> X </u> AOS <u> </u> MT <u> </u>	DO-COR: Dr. Ruth Phelps DO-ACOR: Project Director: Dr. Monte Smith (L3 Communications)
Status: Ongoing (February 6, 2001-June 6, 2001)	
DO Summary	
<p>Background: The U.S. Army has been deployed to the Balkans since 1992 in both NATO and UN operations and the fragile current peace seems dependent on the continued presence of outside forces. Soldiers assigned to the region, however, have reported difficulty in understanding the local population and question how their presence will contribute to a lasting peace. In order to assist the Army in understanding the political, socio-cultural and historical complexity of the region, the U.S. Army Research Institute produced an extensive report covering a wide range of topics including the geography of the region, ethnic groups, languages, and a summary of military operations since 1992. This document is entitled "An Old Mosaic in New Mortar: Tracings of the Balkan Cultural and Historical Landscape."</p>	
<p>Project Objectives: The objective of this project is to develop an interactive compact disk (CD) that can be used to prepare Army personnel for deployment to the Balkans and serve as a reference tool for social science analysts. This product will be based on the above-referenced document entitled: "An Old Mosaic in New Mortar: Tracing the Balkan Cultural and Historical Landscape."</p>	
<p>Key Deliverables: The primary deliverable will be an interactive CD.</p>	
Findings/Outcomes:	
Report Citations:	

DO# 0030	Title: Adoption of New Army Aptitude Area (AA) Composites
Program Area QR <u> X </u> AOS <u> </u> MT <u> </u>	DO-COR: Dr. Peter Greenston DO-ACOR: Project Director: Dr. Mary Ann Lightfoot
Status: Ongoing (February 15, 2001-October 14, 2001)	
DO Summary	
Background: ARI and George Washington University researchers have proposed a set of 17 Aptitude Area (AA) composites to replace the nine composites the Army has been using. The composite scores are various combinations of two or more subtests of the Armed Services Vocational Aptitude Battery (ASVAB).	
Project Objectives: The purpose of this project is to complete the development work on the proposed new AA composites. HumRRO will evaluate the composites and the cut scores that could be used with them.	
Key Deliverables: The primary deliverable will be a written final report.	
Findings/Outcomes:	
Report Citations:	

DO# 0031	Title: Impact of the Army Continuing Education System (ACES) on Soldier Retention and Performance: Database Development
Program Area QR <u> X </u> AOS <u> </u> MT <u> </u>	DO-COR: Dr. Mark Young DO-ACOR: Dr. Trueman Tremble Project Director: Dr. Paul J. Sticha
Status: Ongoing (April 13, 2001 – January 12, 2002)	
DO Summary	
<p>Background: In 1998, the U.S. Total Army Personnel Command (PERSCOM) Education Division requested that the U.S. Army Research Institute (ARI) initiate a preliminary study to begin examining the relationship between in-service civilian education under the Army Continuing Education System (ACES) and soldier retention and performance. PERSCOM's Education Division, the sponsor of this effort, anticipates that the results of this research will provide data to document the value of the ACES program for (a) attracting and retaining soldiers and (b) supporting the Army's training, education, and leader development objectives. In support of these objectives, ARI initiated an FY 2000 contract effort titled "Impact of the Army Continuing Education System (ACES) on Soldier Retention and Performance: A Research Plan." The goal of this effort was to develop a technically sound research plan for a future evaluation of ACES. The approach developed in this research plan relies upon the use of ACES participation data obtained from the Education Management Information System (EDMIS).</p> <p>The anticipated assessment will evaluate the impact of ACES programs using two different databases to be developed under this effort. The exploratory analyses of these data for the evaluation of ACES programs is to be conducted under a follow-up delivery order (DO 33). Data from a limited sample of EDMIS sites will be used to evaluate the effects of selected ACES programs on attrition, early reclassification, and reenlistment. Criterion and control variables for these analyses will be obtained from automated personnel records. In addition, data being collected for another research effort, the NCO21 project (see DO 15), will be used as a vehicle for examining the effects of selected ACES programs on soldier performance and promotion. ACES-related questionnaire items have recently been developed by ARI, with assistance from PERSCOM, for use in the NCO21 project.</p> <p>The administrative database will allow the future examination of relationships between participation in selected ACES programs and attrition, early reclassification, and reenlistment among soldiers who were assigned to installations where EDMIS was operational as of 1996. In addition, the NCO21 database will be used to examine relationships between individual participation in ACES-sponsored continuing education programs and soldiers' subsequent performance and promotion. This database will support analyses involving Military Occupational Specialty (MOS) Improvement Courses, Non-commissioned Officer (NCO) Leadership Development Courses, and programs provided to assist soldiers in obtaining an advanced degree or credential (i.e., Tuition Assistance, Servicemembers Opportunity Colleges Army Degree (SOCAD)).</p>	
Project Objective: The project objective is to develop the databases required to conduct the preliminary ACES evaluation to be executed under a later contract effort.	
Key Deliverables: Key project deliverables are: <ol style="list-style-type: none"> 1. Administrative database and documentation. 2. Updated NCO21 database and documentation 3. Final report. 	
Findings/Outcomes:	
Report Citations:	

DO# 0032	Title: Special Report on Distance Learning
Program Area QR <u>X</u> AOS <u> </u> MT <u> </u>	DO-COR: Dr. Robert Wisher DO-ACOR: Project Director: Dr. Peter Ramsberger
Status: Ongoing (April 25 2001 – July 25 2001)	
DO Summary	
Background: The U.S. Army is transforming many of its courses from a resident mode of instruction to a distance learning mode. How well this works in a military training setting has been debated by researchers. The U.S. Army Research Institute has been actively engaged in research on the topic, and has numerous technical reports on the merits and shortcomings of this technology. Several of these publications have been written to an audience of training developers, instructional designers, and training researchers rather than to an audience that needs only a general grasp of the underlying theories of learning and the technical details of development and delivery.	
Project Objectives: The objectives of this effort are to recompose a body of research documentation into a plain language report replete with photographs and figures that conveys the essential findings and future opportunities for distance learning in the Army.	
Key Deliverables: Deliverables include an outline of the report, a draft, a subsequent draft that includes visuals, and the final report.	
Findings/Outcomes:	
Report Citations:	

DO# 0033	Title: Impact of the Army Continuing Education System (ACES) on Soldier Retention and Performance: Data Analysis
Program Area QR _X_ AOS ____ MT ____	DO-COR: Dr. Mark Young DO-ACOR: Dr. Trueman Tremble Project Director: Dr. Paul J. Sticha
Status: Pending (September 4, 2001 – September 3, 2002)	
DO Summary	
<p>Background: In 1998, the U.S. Total Army Personnel Command (PERSCOM) Education Division requested that the U.S. Army Research Institute (ARI) initiate a preliminary study to begin examining the relationship between in-service civilian education under the Army Continuing Education System (ACES) and soldier retention and performance. PERSCOM's Education Division, the sponsor of this effort, anticipates that the results of this research will provide data to document the value of the ACES program for (a) attracting and retaining soldiers and (b) supporting the Army's training, education, and leader development objectives. In support of these objectives, ARI initiated an FY 2000 contract effort titled "Impact of the Army Continuing Education System (ACES) on Soldier Retention and Performance: A Research Plan." The goal of this effort was to develop a technically sound research plan for a future evaluation of ACES. The approach developed in this research plan relies upon the use of ACES participation data obtained from the Education Management Information System (EDMIS).</p> <p>The assessment effort included here is intended to provide a limited, exploratory evaluation of the impact of ACES programs using two different databases. These databases will have been developed or updated under a separate contract. Data from a limited sample of EDMIS sites will be used to evaluate the effects of selected ACES programs on attrition, early reclassification, and reenlistment. Criterion and control variables for these analyses will be obtained from automated personnel records. In addition, data being collected for another research effort (see DO 15) will be used as a vehicle for examining the effects of selected ACES programs on soldier performance and promotion. ACES-related questionnaire items have recently been developed by ARI, with assistance from PERSCOM, for use in the NCO21 project.</p>	
Project Objectives: The project objective is to conduct exploratory data analyses for evaluating the effects of participation in selected ACES programs on soldier retention and performance.	
Key Deliverables: The key project deliverable is a final report describing evaluation results.	
Findings/Outcomes:	
Report Citations:	

DO# 0034	Title: Personnel and Training Decisions Which Could be Supported with Research, Analysis, or Data: A Case Study of MOS Minimum Enlistment Standards
Program Area QR <u> X </u> AOS <u> </u> MT <u> </u>	DO-COR: Dr. Peter Greenston DO-ACOR: Project Director: Dr. Mary Ann Lightfoot
Status: Ongoing (June 20, 2001-May 25, 2002)	
DO Summary	
<p>Background: Army personnel managers frequently need to make tradeoffs between soldier numbers, quality, and training, and other factors when making personnel management and training decisions. Often, data pertaining to such tradeoffs exist but are not integrated into the decision process because they are not readily accessible. There is a need to establish better methods for accessing and integrating research and study findings into personnel management and training decisions. One issue is how soldier quality is to be distributed across military occupational specialty (MOS) and the implications of changing MOS minimum enlistment standards.</p>	
<p>Project Objectives: The objective of this study is to investigate the trade-offs between lowering minimum enlistment training standards and training completion, and to develop methods that ARI researchers can use to assess the appropriateness of cut scores.</p>	
<p>Key Deliverables: The primary deliverable will be a written methodology report with results on at least three MOS.</p>	
Findings/Outcomes:	
Report Citations:	

Appendix A

ARI COMPRS-II Program Descriptions

Quick Reaction (QR) Program

Applicable Areas. The QR program is intended to give ARI a quick-response capability to perform short-term research or studies and analysis dealing with manpower and personnel issues for which the necessary in-house capability is not available. The QR Program may only be used for the procurement of non-personal services to perform the tasks specified in the DO, subject to the limitations set forth below.

Conditions. Because this program is intended to resolve manpower and personnel issues that can be studied in a short time, the following conditions will normally apply:

- Each of the QR Program DOs shall be completed within the period of time specified in the DO, with the maximum allowable completion normally being within a 12-month period from the date of the DO.
- Each task of the DO shall be completed by HumRRO or its subcontractor within the total time allocated and a final report prepared and delivered.
- Unless otherwise stated in the DO, the tasks to be performed by the Contractor shall include a meeting with ARI at Alexandria, Virginia or at an ARI Field Unit at the start of, and at the completion of, each of the QR Program DOs.

Attitude and Opinion Survey (AOS) Program

Applicable Areas. The AOS program is intended to give ARI the ability to conduct surveys to provide information for accession and force management decision-making. This information can only be obtained through surveys of the target populations and may require updating due to changing population dynamics and attitudes in the various population segments.

Conditions. Because this program is intended to provide information quickly to resolve manpower and personnel issues, the following conditions shall normally apply:

- Each of the AOS efforts shall be completed within the period of time specified in the DO, with the maximum allowable completion normally being within a 12-month period of the date of the DO or an 18-month period if Office of Management and Budget (OMB) approval is required. Each AOS survey shall be performed using standard random sampling procedures or other appropriate sampling techniques.
- The tasks written by the Government in each AOS Program SOT shall include a statement of the target group for the survey. A target group may be defined as, for example, all males, age 16-21 years old, in high school or graduated, and having positive

propensity to enlist in any military service. The Contractor shall prepare as part of its response to the SOT, the necessary screening and sampling methodologies to assure that the target group requirements are met.

- If specified in the SOT and subsequent DO, the Contractor shall prepare a survey instrument. The Government may, at its discretion, construct a proposed survey instrument and submit it to the Contractor for review and recommended changes. The approved survey instrument shall be administered by the Contractor to the target population, or a sample thereof. All reproduction, survey administration, analysis, and report generation costs shall be included in the Contractor's RFDO for an AOS survey.

- The ability to conduct surveys under the AOS program may depend on ARI obtaining OMB approval to collect the information from the public. If OMB approval is required, and if such approval is not obtained, the survey shall not be conducted. The Contractor will be notified by the Government of the status of OMB approval. Surveys involving military personnel do not require OMB approval. ARI will make the determination of approval authority prior to an SOT being issued and will clearly state in the SOT if survey administration is contingent upon any other approval authority.

- When the final survey instrument is received by the Government, it may be necessary for the DO COR to submit the survey instrument to OMB for approval. The approval process may require from four to six months. Part of the OMB submission is a detailed description of the sampling plan, including burden hours, sampling methodology, non-response analysis, etc. The Contractor shall prepare the necessary documentation in accordance with the SOT and DO requirements and submit it to the DO COR who will submit it through agency channels.

- Each DO task shall be completed by the Contractor within the time allocated and a final report delivered. The final report shall contain copies of any appropriate verbatim responses of survey participants. Unless otherwise stated in the DO, the tasks to be performed by the Contractor shall include a meeting with ARI in Alexandria, Virginia or other ARI Field Unit locations at the start of, and at the completion of, each AOS DO.

- At all times the contractor will protect the confidentiality of the survey responses.

- If OMB approval is not received, the Contractor will be paid only for those tasks in the DO which are completed, and which do not require an approved survey instrument. Each AOS DO will usually contain at least two phases as follows:

Phase I: Preparation. The tasks under Phase I will be the review or development of survey instruments, sampling methodology, preparation of approval packet (if required in the DO), and other items necessary for preparation of the survey administration.

Phase II: Survey Administration, Analyses, and Reporting. Upon receipt of survey approval, Phase II will involve the tasks necessary to conduct the survey, compile and analyze the data, prepare reports, and conduct in-person presentation of results (if required in the DO). Phase II shall always be contingent upon receipt of proper approval. If such approval for the survey is not obtained, Phase II will not be authorized and no payment for any tasks under Phase II will be made to the Contractor.

Medium-Term (MT) Program

Applicable Areas. The MT Program is intended to give ARI the ability to conduct a limited number of research or studies and analysis efforts whose duration would not normally exceed 24 months after HumRRO receives a DO. The MT program may only be used for the procurement of non-personal services to perform the tasks specified in the DO, subject to the limitations set forth below.

Conditions of MT Program. This program is intended to resolve problems associated with manpower and personnel issues which require a somewhat longer period of performance than the QR program. The following conditions shall normally apply:

- Each of the MT efforts shall be completed within the period of time specified in the DO, with the maximum period normally being 24 months from the date of the DO.
- Each task of the DO shall be completed by the Contractor within the total time allocated and a final report delivered. Unless otherwise stated in the DO, the tasks to be performed by the Contractor shall include a meeting with ARI, in Alexandria, Virginia or at ARI Field Units, at the start of, and at the completion of, each MT Program DO.