DESIGNING AN INCENTIVE SYSTEM TO ENHANCE ARMY RECRUITER PRODUCTIVITY

John R. Barrios-Choplin, Research Assistant Professor
Graduate School of Business and Public Policy
Sponsor: Vice Chief of Staff of the Army

OBJECTIVE: This study examined the U.S. Army recruiter incentive program. There were two purposes: Determine which current incentives most motivate recruiters; and determine which new incentives would motivate recruiters.

SUMMARY: Many of the current incentives did not have a motivating effect on recruiters. The most effective current incentives were gold stars and gold badges. The incentives that recruiters identified as being potentially the most motivating were not being offered, or were currently limited. They included time off, family support, and career enhancing rewards. Recommendations were offered to the recruiting command to help them address these issues.

PRESENTATION:

Barrios-Choplin, B., "The Influence of Incentives on Recruiter Motivation," Military Operations Research Society Mini-Symposium on Recruiting and Retention, Alexandria, VA , September 1999.

THESES DIRECTED:

Luby, C., "U.S. Army Recruiter Incentives: Comparison, Evaluation, and Possible Alternatives," Masters Thesis, Naval Postgraduate School, March 1999.

Starkey, B., "U.S. Army Incentive Program: Incentives that Motivate Recruiters," Masters Thesis, Naval Postgraduate School, September 1999.

Coronado, C., "An Analysis of the Effectiveness of the U.S. Army Recruiter Incentive Program to Motivate Recruiters: A Survey of Enlisted Recruiters," Masters Thesis, Naval Postgraduate School, September 1999.

DoD KEY TECHNOLOGY AREAS: Manpower, Personnel, and Training

KEYWORDS: Recruiting, Incentives, Rewards, Awards

DESIGNING A RECRUITER INCENTIVE SYSTEM TO ENHANCE NAVY RECRUITING PRODUCTIVITY

John R. Barrios-Choplin, Research Assistant Professor
Graduate School of Business and Public Policy
Sponsor: Chief of Naval Operations (N13)

OBJECTIVE: To examine the motivational effect of current and future recruiter incentive programs in the Navy.

SUMMARY: A survey of 26% of Navy recruiters was taken over the Internet. Twenty close-ended and six open-ended questions explored their feelings towards the motivational value of the current awards program, as well as possible future initiatives.

The highest motivator was a positive command climate. All awards were somewhat motivating, but intrinsic and intangible awards were more so. Differences existed among categories of recruiters, with lower grade, volunteer status, and career force status recruiters responding more favorably to awards. The most popular future awards dealt with cash incentives.

THESIS DIRECTED:

Emerson, E., "An Evaluation of Factors Affecting Recruiter Motivation," Masters Thesis, Naval Postgraduate School, March 2001.

DoD KEY TECHNOLOGY AREAS: Manpower, Personnel, and Training

KEYWORDS: Recruiting, Incentives, Awards

STUDY OF SOCIOECONOMIC STATUS AND PERSONNEL PERFORMANCE IN THE MILITARY

Mark J. Eitelberg, Professor
Graduate School of Business and Public Policy
Sponsor: Defense Manpower Data Center

OBJECTIVE: The primary objective of this study was to analyze the relationship between a service member's socioeconomic status and his or her performance in the military. The study used the results of the Department of Defense Survey of Recruit Socioeconomic Backgrounds (or "SES Survey"), which has been administered annually since 1989.

SUMMARY: A special database was created for this study. The database merges results from the SES Survey with the Department of Defense Military Entrance Processing Command Cohort files and various performance-related data provided by the separate Services. The SES Survey sample includes approximately 106,000 recruits (from entry years 1989 through 1995). Initial data analysis compared the demographic composition of survey respondents, by year of entry, with the corresponding base population. This analysis indicated that the sample populations were reasonably representative of all recruits, with the exception of their gender composition. Data analysis focused on developing statistical models to examine the relationship between socioeconomic status and selected indicators of performance. The socioeconomic status variable in the statistical models was based on two indices contained in the SES Survey database. Quantitative analyses additionally explored the use of alternative socioeconomic measures developed from information contained in the survey database. Four students in the Manpower Systems Analysis (MSA) Curriculum, conducted thesis research directly related to the project. Two Master's theses, incorporating analyses of all four Military Services, were completed in March 1998 and document the principal findings of the project. This was a multi-year study, as described in previous annual summaries of sponsored research. The databases created for project will be further examined in student projects within the MSA Curriculum.

DoD KEY TECHNOLOGY AREAS: Manpower, Personnel, and Training

KEYWORDS: Recruit Backgrounds, All-Volunteer Force, Equal Opportunity, Population Representation, Performance Measures, First-Term Attrition

STUDY OF RECRUIT ATTRITION FROM THE DELAYED ENTRY PROGRAM

Mark J. Eitelberg, Professor
Graduate School of Business and Public Policy
Sponsor: Office of the Assistant Secretary of Defense (Force Management Policy)

OBJECTIVE: The primary objective of this study was to identify factors associated with the attrition of recruits from the Delayed Entry Program (DEP); and to identify and evaluate possible approaches that would reduce this attrition.

SUMMARY: A study was designed and undertaken to determine trends in DEP attrition over time, the characteristics of DEP losses, and the reasons for DEP attrition. The initial focus of the study was on dropouts from the DEP who later entered active duty—including their background characteristics, the

reasons for their attrition from the DEP, and the nature of their behavior and performance while on active duty. A special database for the study was created with the assistance of the Defense Manpower Data Center in Monterey. This database was also used by students in the Manpower Systems Analysis (MSA) Curriculum for a course project, and by two MSA students who studied DEP attrition in related theses. Dr. Eli S. Flyer, one of the nation's leading authorities on military personnel attrition, was a principal consultant to NPS on the research project.

PUBLICATION:

Flyer, Eli S. and McCormick, David C., "Recruit Attrition from the Delayed Entry Program (DEP) and Reentry to Active Duty," Technical Report, Washington, D.C.: Office of the Assistant Secretary of Defense (Force Management Policy), February 2000.

DoD KEY TECHNOLOGY AREAS: Manpower, Personnel, and Training

KEYWORDS: Delayed Entry Program (DEP), Recruit Attrition, Selection and Classification, Enlistment Screening, Military Manpower Policy

DEVELOPMENT OF AN INTERNET-BASED ONLINE RECRUITING STATION

Mark J. Eitelberg, Professor
Graduate School of Business and Public Policy
Sponsors: Office of the Deputy Assistant Secretary of Defense (Military Personnel Policy), Navy Recruiting Command and Naval Postgraduate School

OBJECTIVE: The goal of this project is to develop a comprehensive Web site that provides an interactive, multimedia-rich, online community environment for learning about, exploring, and applying for Navy jobs.

SUMMARY: Research indicates that military recruiting efforts can be improved through greater use of the Internet. The Naval Postgraduate School (NPS) has experimented with a "mock-up" of a new approach to recruiting called the Online Recruiting Station (ORS). The results of initial studies have been quite promising. The site will include three main components: 1) a Self-Discovery module that will incorporate an Interest-Finder (or "interest inventory"), a Work Values Checklist, and a "Personality Profiler"; 2) an E-Business module (enlistment forms and pre-qualification assessment, in interactive form); and 3) an Online Community environment, including a chat room, instant messaging, and other features. All components will be presented in a multimedia format, with state-of-the-art technology. An online game will serve as the central feature of ORS. The game will have elements that allow for assessment of player (or potential applicant) skills; and characters within the game will advance through scenarios by participating in the three components of Self-Discovery, E-Business (pre-enlistment forms), and Community or team tasks. Additionally, other potential attractions will be offered through the site: viewing selected events (e.g., flight operations on an aircraft carrier; "battle stations" at boot camp; etc.); and selected commands will staff the chat rooms during specified periods of time (allowing young visitors to "talk" with sailors about their jobs). Initially, the sponsor planned to develop ORS as an advanced, proof-of-concept prototype; this would be followed, in turn, by a pilot or "beta" for testing and evaluation, and by a production system for full deployment as the Navy's recruiting Web site. The ORS project was designed as a multi-year, inter-disciplinary effort. The availability of funding to develop and launch a complete version of ORS is uncertain. By the latter part of the reporting year, however, plans were well underway to include a portion of the Self-Discovery module within a new Navy recruiting Web site, called "Life Accelerator" (www.navy.com).

PUBLICATION:

Eitelberg, M.J., Kamel, M., Crawford, A, Carney, D, and Roberts, B., "The Online Recruiting Station: Vision, Planning, and Preliminary Requirements," Naval Postgraduate School Technical Report, August 2000.

THESIS DIRECTED:

Dodge, N.R., "The Use of Internet Technology in Navy Recruiting: The Online Recruiting Station (ORS)," Masters Thesis, Naval Postgraduate School, March 1999.

DoD KEY TECHNOLOGY AREAS: Manpower, Personnel, and Training

KEYWORDS: Recruiting, Enlistment Screening, Internet Applications, Military Manpower

STUDIES OF NAVY RECRUITING AND DATABASE DEVELOPMENT

Mark J. Eitelberg, Professor
Graduate School of Business and Public Policy
Sponsor: Navy Recruiting Command

OBJECTIVE: This was a multiphase project that included four research tasks: (1) develop a plan for integrating the Win-STEAM/NPS Station Location Model; (2) analyze recruit attrition at the Navy's Recruit Training Center; (3) sustain and enhance the TRAINTRACK Information System; and (4) analyze the characteristics of successful and unsuccessful Navy recruiters.

SUMMARY: Task 1 was a follow-on effort to convert the Navy's STEAM model to an MS-Windows operating environment and an expansion of DoD-sponsored research to develop a "multi-service recruiter station location optimization model" previously conducted by NPS. Both of these modeling efforts addressed recruiter station location and manning from slightly different perspectives. CNRC has begun efforts to integrate the best aspects of both of these approaches into one model. The CNRC "STEAM Team" and NPS are experimenting with both models using the Navy Recruiting District (NRD) San Diego/San Diego Metro area to obtain results that can be compared and analyzed. Task 2 was the first of a series of analyses addressing current attrition problems at the Navy's Recruit Training Center (RTC). This task took a broad look at RTC systems, including recruit in processing as well as the Navy recruit's entire "boot camp" experience. Task 3 enhanced TRAINTRACK, an information system developed originally by the Navy Personnel Research and Development Center (NPRDC). CNRC regularly accesses this information system to provide quick answers to questions posed by Navy leaders. NPS utilized Navy analysts at SPAWAR to perform the task. (The Navy analysts created, updated, and maintained the TRAINTRACK database while employed at NPRDC.) Task 4 combined information from several existing databases to determine the characteristics of "successful" and "unsuccessful" Navy recruiters. The integrated database is longitudinal, incorporating information from Defense Manpower Data Center files, TRAINTRACK, CNRC Inspector General files, as well as from other Navy sources. Additionally, student research explored several other areas of interest to Navy recruiting and manpower officials.

THESES DIRECTED:

Bicknell, J.W., "Study of Naval Officers' Attitudes Toward Homosexuals in the Military," Masters Thesis, Naval Postgraduate School, March 2000.

Culler, K., "The Decision to Allow Military Women into Combat Positions: A Study in Policy and Politics," Masters Thesis, Naval Postgraduate School, June 2000.

Maligat, L.G., "Study of the US Navy's Philippines Enlistment Program, 1981-1991," Masters Thesis, Naval Postgraduate School, June 2000.

Plantz, R.N., "An Analysis of the Effects of Personal Background Characteristics and Market Demographics on Recruiter Productivity," Masters Thesis, Naval Postgraduate School, March 2000.

DoD KEY TECHNOLOGY AREAS: Manpower, Personnel, and Training

KEYWORDS: Recruiting, Recruiter Performance, Personnel Attrition, Training Attrition, Training Performance, Manpower/Personnel/Training (MPT) Databases

STUDY AND ANALYSIS OF THE INSIDER THREAT

Mark J. Eitelberg, Professor
Janice H. Laurence, Associate Research Professor
Graduate School of Business and Public Policy
Sponsor: Central Intelligence Agency

OBJECTIVE: To provide a documented description of the background, characteristics, and behaviors of insiders who pose a threat to national security, particularly in the area of information technology. Environmental aspects will also be examined, along with potential interactions between individual and environmental factors. Insider-threat models will be developed. Recommendations will be offered to reduce insider-threat vulnerability.

SUMMARY: Threats to national security come not only from outside, but also from within the guarded area. Today, widespread use and access to electronic information technology presents vulnerable targets of opportunity for compromise of sensitive data. To better safeguard such data and detect and deter compromising insiders, the intelligence community is launching a large-scale effort to develop a security system and procedures that will render sensitive and critical information less vulnerable to insider threats. Research will consist of the following tasks: review literature for content and methodology relevant to insider threat issues and concerns; conduct interviews and/or workshops with subject matter experts within the intelligence community; develop and implement standardized protocols for use with insiders (those who have posed threats and those who have not); coordinate activities with researchers and decision-makers within the intelligence community; and summarize findings in briefing and report formats.

DoD KEY TECHNOLOGY AREAS: Command, Control and Communications, Computing and Software, Human Systems Interface, Manpower, Personnel, and Training

KEYWORDS: Personnel Security, Insider Threat, Background Investigations, Security Vulnerability

PRODUCTIVITY ENHANCING CONCEPTS

Ken J. Euske, Professor
Graduate School of Business and Public Policy
Sponsor: Naval Air Weapons Center-Aircraft Division

OBJECTIVE: The objective of this project is to provide research support to the Naval Air Weapons Center, Aircraft Division in identifying means to enhance productivity.

SUMMARY: The work executed on this project focuses on productivity enhancement in direct and support activities the Naval Air Weapons Center, Aircraft Division.

THESES DIRECTED:

Gray, S., "Factors That Affect Success in Implementing Activity-Based Cost Management in Government Organization: A Comprehensive Case Study Analysis," Masters Thesis, Naval Postgraduate School, June 2000.

Louzek, R.E., "Evaluating Naval Air Warfare Center Aircraft Division (NAWCAD Financial Management Practices in Preparation for Implementing ERP," Masters Thesis, Naval Postgraduate School, June 2000.

Power, W.C., "Application of Corporate Outsourcing Methods to the Department of Defense," Masters Thesis, Naval Postgraduate School, June 2000.

DoD TECHNOLOGY AREAS: Other (Business Practices)

KEY WORDS: Productivity

TECHNICAL SUPPORT TO THE EXECUTIVE STEERING GROUP OF THE COMMERCIAL BUSINESS PRACTICES PILOT

Ken J. Euske, Professor
Shu S. Liao, Professor
Douglas Moses, Associate Professor
John Mutty, Senior Lecturer
Graduate School of Business and Public Policy
Sponsor: Naval Air Systems Command

OBJECTIVE: The objective of the project is to assess the planning and implementation process of DON's Commercial Business Practices project and provide recommendations to the Executive Steering Group.

SUMMARY: DON's Commercial Business Practices project has evolved from the concept stage to implementation in six different functional areas: (1) program management, (2) logistics, (3) supply chain, maintenance management, (4) regional maintenance (5) facilities, and (6) financial. Six pilot sites were selected, each focusing on a specific functional area. The installation of an Enterprise Resource Planning (ERP) system will be the centerpiece of each site, with financial data serving as the linkage of these ERP systems. Two of the six pilot sites are in the system acquisition stage, with software developer/system integrator teams competing for the task.

DoD KEY TECHNOLOGY AREAS: Human Systems Interface

KEYWORDS: Commercial Business Practice, Enterprise Resource Planning Systems, Information Management.

NAVY AIRLIFT

William R. Gates, Associate Professor 00000
Graduate School of Business and Public Policy
Alan Washburn, Professor
Department of Operations Research
Sponsor: Chief of Naval Operations (N87)

OBJECTIVE: The Navy operates a fleet of operational support aircraft (OSA) that have the function of moving high priority passengers and cargo in wartime. The fleet is aging, and must gradually be replaced with more modern aircraft. The objective is first to measure the wartime demand for OSA transport in the event of a major war, and then to design a fleet that satisfies that demand at minimal cost.

SUMMARY: This study will be completed in FY2001.

THESIS DIRECTED:

Law, J., "Assessing the Performance and Cost of Logistics Airfleet Options," Masters Thesis, Naval Postgraduate School, December 2000.

DoD KEY TECHNOLOGY AREAS: Modeling and Simulation

KEYWORDS: OSA, Aircraft Scheduling

DISTRIBUTION PROBLEMS IN SEA BASED LOGISTICS

Kevin R. Gue, Assistant Professor
Graduate School of Business and Public Policy
Sponsor: Office of Naval Research

OBJECTIVE: To develop methodologies for positioning and distributing items in spatially dynamic and uncertain distribution environments, with particular application to sea-based logistics.

DoD KEY TECHNOLOGY AREAS: Manufacturing Science and Technology (MS&T)

KEYWORDS: Logistics, Inventory, Distribution, Transportation, Sea-Based Logistics

WAVE OPTIMIZATION FOR RAPID RESPONSE IN A DISTRIBUTION CENTER

Kevin R. Gue, Assistant Professor
Graduate School of Business and Public Policy
Sponsor: Defense Distribution Center

OBJECTIVE: To develop methodologies for determining the optimal number of picking waves in a warehouse to achieve the best response time to customer requests at minimum cost.

DoD KEY TECHNOLOGY AREAS: Manufacturing Science and Technology (MS&T)

KEYWORDS: Logistics, Warehousing, Distribution, Picking Waves, Optimization

SEA BASED WAREHOUSING

Kevin R. Gue, Assistant Professor
Graduate School of Business and Public Policy
Sponsor: Office of Naval Research

OBJECTIVE: To develop throughput and storage system models for crossdocks and transshipment points, with particular application to sea base design in Sea Based Logistics.

SUMMARY: A key component in the new Naval doctrine Sea Based Logistics is the sea base---a collection of one or more ships that act as a floating distribution center. Designers of the sea base will have to answer some fundamental but difficult material handling questions, such as: What throughput will the system sustain? How much storage space is required? and, How should we assign material to different ships? We are building models that give insight into these issues. Our research extends our previous work in sea-based logistics and in the commercial logistics technique called crossdocking. Our results could have important implications for designers of the future sea base.

PUBLICATIONS:

Bartholdi, J.J. III and Gue, K.R., "Reducing Labor Costs in an LTL Crossdocking Terminal," *Operations Research 48:6,* 2000.

Bartholdi, J.J., III and Gue, K.R., "The Best Shape for a Crossdock," submitted to *Transportation Science,* 2001.

Bartholdi, J.J., III, Gue, K.R., and Kang, K., "Staging Freight in a Crossdock," submitted to *Proceedings of the International Conference on Industrial Engineering and Production Management*, 2001.

PRESENTATION:

Gue, K.R., "The Best Shape for a Crossdock," INFORMS National Conference, San Antonio, TX, 1 November 2000.

DoD KEY TECHNOLOGY AREAS: Other (Logistics and Transportation)

KEYWORDS: Distribution, Logistics, Warehousing, Crossdocking, Simulation

NAVY PRACTICAL COMPTROLLERSHIP COURSE (PCC)
Commander T. A. Hleba, USN, Lecturer
Graduate School of Business and Public Policy
Sponsor: Navy Financial Management Center

OBJECTIVE: To educate civilian and military personnel in DoD financial management fundamentals within the Department of Defense and the Department of the Navy.

SUMMARY: Research and instruction were conducted in the following areas: (1) Introduction to Financial Management; (2) DoD and DoN Financial Management Organizations; (3) Planning, Programming and Budgeting System (PPBS); (4) Appropriations and Appropriation Law; (5) Budget Formulation and Execution; (6) Funding Sources and Mechanisms; (7) Unit Cost; (8) Working Capital Funds (9) Accounting in DoD; (10) Property Accounting in DoD; (11) Support Agreements and Reimbursable Funding; (13) Management Controls and the Audit Function; (14) Overview of Contracting; (15) and the Prompt Payment Act.

DoD KEY TECHNOLOGY AREAS: Other (Financial Management)

KEYWORDS: Financial Management, Resource Management, PPBS, Fiscal, Budget, Budget Formulation, Budget Execution

ANALYSIS OF ACCOUNTING AND FINANCIAL MANAGEMENT INITIATIVES IN SPECWARCOM
Lawrence Jones, Professor
Graduate School of Business and Public Policy
Sponsor: Naval Special Warfare Command

OBJECTIVE: The purpose of this research is to provide analytical assistance to the Office of the Comptroller, SPECWARCOM in responding to the necessity for reviewing and assessing command accounting and financial management initiatives to improve the accuracy and utility of accounting and financial data for budget, POM and other uses.

DoD KEY TECHNOLOGY AREAS: Other (Business Practices)

KEYWORDS: Financial Management, Accounting

WAGNER CHAIR PROFESSOR OF PUBLIC MANAGEMENT
Lawrence Jones, Professor
Graduate School of Business and Public Policy
Sponsor: Space and Naval Warfare Systems Command

OBJECTIVE: The purpose of this funding is to provide support for the MOU establishing the Wagner Professor of Public Management Chair in the Department of Systems Management. The appointee to the chair is Professor Lawrence R. Jones. This appointment was made by the Provost in March 1998, effective 1 October 1998 for a term of five years. The duties of the chair as delineated in the MOU are, to conduct research in Public Management.

DoD KEY TECHNOLOGY AREAS: Other (Public Management)

KEYWORDS: Public Management, Wagner Chair Professor

ANALYSIS OF FLIGHT HOUR PROGRAM MANAGEMENT
Lawrence Jones, Professor
Jerry McCaffery, Professor
Graduate School of Business and Public Policy
Sponsor: Commander, Naval Air Pacific

OBJECTIVE: The purpose of this research is to provide analytical assistance to the Office of the Comptroller, AIRPAC in the comptroller function and in analysis of budget execution and other initiatives for improving Command Management and Management Control, achieving cost-reduction and avoidance in the Flight Hour Program (FHP) and accommodating budget reduction in the period of FY99, FY00 and beyond. In addition, the project includes analysis of improvements in Management Systems and Systems Support to provide better data to enable management of the command in conformance with sound business management principles and practices.

DoD KEY TECHNOLOGY AREAS: Other (Business Practices)

KEYWORDS: Command Management, Management Control, Flight Hour Program, Cost Reduction, Cost Avoidance

ANALYSIS AND EVALUATION OF THE KOREAN FLAG SHIPPING PROGRAM USING MODELING AND SIMULATION
Keebom Kang, Associate Professor
Graduate School of Business and Public Policy
Sponsor: Military Sealift Command and Naval Postgraduate School

OBJECTIVE: To study the effectiveness of the Korean Flag Shipping (KFS) program in support of sealift requirements for military cargo including critical munitions and petroleum products from CONUS (Continental United States) and Pacific locations to Korean Peninsula during a period of wartime mobilization.

SUMMARY: A simulation model has been developed to evaluate the current and future capabilities, and the characteristics of lift assests and infrastructure related to the Korean Flag Shipping (KFS) Program. A port congestion analysis and a cost analysis were conducted. The results will assist decision makers to determine the need for change in the current program and to identify future requirements.

THESIS DIRECTED:

Mahoney, P., "Analysis of Port Congestion Upon Sealift Operations Using Simulation," Masters Thesis, Naval Postgraduate School, December 2000.

DoD KEY TECHNOLOGY AREAS: Modeling and Simulation

KEY WORDS: Readiness, Sealift

INVESTIGATION OF DOD INVENTORY MANAGEMENT

Keebom Kang, Associate Professor
Graduate School of Business and Public Policy
Sponsor: Deputy Under Secretary of Defense for Logistics

OBJECTIVE: Improving DoD readiness via logistics cycle time and inventory reduction.

SUMMARY: The simulation model that was developed in the previous year was applied to a case study and showed the usefulness of the model. Inventory mangers want short production runs to minimize pipeline inventory, while depot mangers want long production line to minimize repair costs. However, inventory stock consolidation and logistics process re-engineering would benefit both inventory and depot managers, and eventually improves readiness.

PUBLICATION:

Rodrigues, M. B., Karpowicz M., and Kang, K., "A Readiness Analysis for the Argentine Air Force and the Brazilian Navy A-4 Fleet via Consolidated Logistics Support," *Proceedings of the 2000 Winter Simulation Conference*, pp. 1068-1074, Orlando, FL, 10-13 December 2000.

DoD KEY TECHNOLOGY AREAS: Modeling and Simulation, Other (Logistics)

KEYWORDS: Readiness, Logistics, Inventory Management, Cultural Change

A BENEFIT-COST ANALYSIS OF THE NAVY'S FULLY FUNDED GRADUATE EDUCATION PROGRAM

Stephen L. Mehay, Professor
Graduate School of Business and Public Policy
William R. Bowman, U.S. Naval Academy
Sponsor: Naval Postgraduate School

OBJECTIVE: Navy spends nearly $500 million annually on various graduate education programs. However, to date, a comprehensive economic analysis of these programs has not been undertaken. In the absence of such an analysis, Navy lacks a coherent theoretical or empirical framework for evaluating these programs as a whole, for evaluating specific elements of the programs, for making tradeoffs among competing graduate education programs or between graduate education and other non-education Navy programs. Navy needs a consistent framework for guiding decision makers in making such tradeoffs and decisions. To implement the framework, the Navy and the Marine Corps need reliable, scientifically verifiable, measures of the costs and benefits of its graduate education programs.

SUMMARY: The purpose of this effort is to develop the economic theory of human capital as it relates specifically to intra-organizational investment decisions. This theoretical framework will be used to generate testable hypotheses and to identify the specific data elements needed to test such hypotheses. The first step is to develop measures of program impact that can be used to evaluate the effectiveness of graduate education programs. The measures of effectiveness will also serve as the base for assessing the value of these programs to the organization and converting program impacts to monetary values. Monetizing program impacts is a necessary step in calculating the benefits of graduate education programs. Cost analyses also will be conducted so the monetary benefits can be weighed against the costs and the both net present value of the program and the internal rate of return can be calculated. Such analyses will be done for both Navy and Marine Corps officers.

DoD KEY TECHNOLOGY AREAS: Manpower, Personnel, and Training

KEYWORDS: Promotion, Performance, Retention, Officer, Graduate Education

GED CALIBRATION STUDY

Stephen L. Mehay, Professor
Graduate School of Business and Public Policy
Sponsor: Defense Activity for Non-Traditional Educational Support

OBJECTIVE: The Military Services are looking increasingly to applicants for enlistment with a GED diploma to meet their recruitment goals, and in one major project, NPS is working closely with Navy Recruiting Command to obtain access to state-level GED files for recruitment purposes. To facilitate this effort, information is needed on the relationship between GED test scores and the Armed Forces Qualification Test (AFQT). A calibration study between the two scores would provide information useful in selective recruitment using GED scores as a surrogate for the AFQT.

SUMMARY: The purpose of this study is to provide a calibration between GED test scores and scores on the Armed Forces Qualification Test. If successful, the study will allow the Services to increase the recruitment and selection of GED certificate holders and thus to broaden the recruitment base and reduce first term attrition

DoD KEY TECHNOLOGY AREAS: Manpower, Personnel, and Training

KEYWORDS: AFQT, GED, Recruitment, Selection, Attrition

FEDERAL FINANCIAL REPORTING AND ANALYSIS

Douglas Moses, Associate Professor
Graduate School of Business and Public Policy
Sponsor: Unfunded

OBJECTIVE: The objective of this line of research is to describe and critique current Financial Reporting practices of Federal Government entities and develop methodologies for conducting Financial Statement Analysis appropriate for federal agencies.

SUMMARY: Recent years have seen significant changes within the federal government, which impact financial reporting. There has been a general shift toward more "business-like" management practices. There have been initiatives, such as the CFO Act and the Federal Accounting Standards Advisory Board, which have resulted in changes in both the requirement for, and the content of, the financial reporting of federal government activities. This research attempts to construct and validate a framework for conducting financial analysis of federal entities relying on the information available in federal financial reports. The research develops financial ratios designed to communicate the financial condition of federal entities and examines their meaning and properties.

THESES DIRECTED:

Kenney, S., "Financial Ratio Analysis of Audited Federal Financial Statements," Masters Thesis, Naval Postgraduate School, June 2000.

Burks, M., "The Price and Progress of Compliance with Federal Financial Management Reporting Requirements in Department of the Navy Property, Plant and Equipment Non-Financial Feeder Systems," Masters Thesis, Naval Postgraduate School, December 2000.

DoD KEY TECHNOLOGY AREAS: Other (Financial Accounting/Reporting)

KEYWORDS: Financial Accounting, Financial Reporting, Financial Ratio Analysis

EXTERNAL ACQUISITION RESEARCH PROGRAM

Mark Nissen, Assistant Professor
Graduate School of Business and Public Policy
Sponsor: Defense Acquisition University

OBJECTIVE: To conceive, launch, catalyze and manage an external acquisition research program for the Defense Acquisition University (DAU).

SUMMARY: The DAU is required by law to ensure acquisition research is accomplished. After one years' work to plan and initiate an acquisition research program, the External Acquisition Research Program was officially launched in FY99, and FY00 brought growth and maturation. This project involved two activities: 1) research program management, and 2) conduct of my own research.

Toward the first activity, we now have roughly twenty of the top researchers in the world participating. And through my role as Program Manager, I brought $1,000,000 in funding for FY00 and continued support in FY01. I have also included a provision for NPS faculty to participate in the research program (e.g., through teaming) and supported NPS faculty colleagues directly through DAU research funding.

Toward the second activity, I continue to pursue my own stream of research into the study and application of knowledge systems in change management, electronic business and knowledge flow.

PUBLICATIONS:

Nissen, M.E., "Agent-Based Supply Chain Disintermediation vs. Re-intermediation: Economic and Technological Perspectives," *International Journal of Intelligent Systems in Accounting, Finance & Management* 9, 2000.

Nissen, M.E., "An Intelligent Tool for Process Redesign: Manufacturing Supply Chain Applications," *International Journal of Flexible Manufacturing Systems* 12:4, Special Issue on Business Process Design, Modeling and Analysis, October 2000.

Nissen, M.E. and Espino. J., "Knowledge Process and System Design for the Coast Guard," *Knowledge and Process Management Journal* 7:3, Special Issue, Into the 'E' Era, 2000.

Nissen, M.E., Kamel, M.N., and Sengupta, K.C., "Analysis and Design of Knowledge Systems and Processes," *Information Resources Management Journal* 13:1, January-March 2000.

Nissen, M.E., *Contracting Process Innovation*, National Contract Management Association: Vienna, VA, 2000.

Nissen, M.E., Kamel, M.N., and Sengupta, K.C., "Integrated Analysis and Design of Knowledge Systems and Processes," in: Y. Malhotra (Ed.), *Knowledge Management and Virtual Organizations*, Hershey: Idea, 2000.

Nissen, M.E., Kamel, M.N., and Sengupta, K.C., "A Framework for Integrating Knowledge Process and System Design," *Information Strategy: The Executive's Journal* 16:4, Summer 2000.

Matthews, D. and Nissen, M.E., "Software Acquisition Lessons Learned through Student Thesis Research," *Army AL&T*, May-June 2000.

PRESENTATIONS:

Nissen, M.E., "Intelligent Agent Intermediation of Patient/Physician Relationships," presented at the International Conference on Information Systems, held in Brisbane, Australia, Workshop on Information Technology and Systems, December 2000.

Nissen, M.E., "A Supply Chain Experiment: Human and Software Agents," presented at the University of Arizona Information Systems Research Seminar, November 2000.

Nissen, M.E., "Agent Supply Chain Dis/Re-intermediation," presented at the IFIP Working Group 7.6 Workshop on Virtual Environments for Advanced Modeling, Monterey, CA, August 2000.

Nissen, M.E., and Snider, K.F., "U.S. Defense Acquisition Research Program," invited presentation, First PMI Research Conference, Paris, France, June 2000.

Nissen, M.E., "Future of Project Management Research," panel discussion, First PMI Research Conference, Paris, France, June 2000.

Nissen, M.E., "The Future Acquisition Environment," invited presentation, Federal Acquisition Institute, Washington, D.C., May 2000.

Nissen, M.E., "Toward Integrating Knowledge Management, Processes and Systems: A Position Paper," presented at the American Association for Artificial Intelligence 2000 Spring Symposium, Palo Alto, CA, Workshop on Bringing Knowledge to Business Processes, March 2000.

Nissen, M.E., "Supply Chain Process and Agent Design for ECommerce," presented at the Hawaii International Conference on System Sciences, Maui, HI, January 2000.

Nissen, M.E., "Experimental Assessment of a Process Workflow Redesign Agent," presented at the Hawaii International Conference on System Sciences, Maui, HI, January 2000.

THESES DIRECTED:

Augustitus, M., "Toward Joint Medical Logistics 2010 and Beyond: Process Innovation and Redesign of Class VIII Supply Chain at a Medical Logistics Company," Masters Thesis, Naval Postgraduate School, December 2000.

Espino, J., "Knowledge Management Innovation of the Coast Guard Counternarcotics Deployment Process," Masters Thesis, Naval Postgraduate School, September 2000.

Goodrich, M., "The Implementation of a Knowledge Management System to the Acquisition Organization at a Major Systems Command, Masters Thesis, Naval Postgraduate School, December 2000.

Mayer, K., "Innovation of the Naval Postgraduate School's Student Thesis Research Process through Knowledge Management," Masters Thesis, Naval Postgraduate School, September 2000.

Norton, E., "Innovating Outpatient Prescription Dispensing in Navy Military Treatment Facilities to Improve Cost Performance," Masters Thesis, Naval Postgraduate School, September 2000.

Oxendine, E., "Managing Knowledge in the Battle Group Theater Transition Process (BGTTP)," Masters Thesis, Naval Postgraduate School, September 2000.

Roll, B., "Online Reverse Auctions: A Pricing Tool for Government Contracting," Masters Thesis, Naval Postgraduate School, December 2000.

Schroeder, J., "Innovation of the Naval Postgraduate School's Student Thesis Research Process through Knowledge Management," Masters Thesis, Naval Postgraduate School, September 2000.

Spence, W., "Knowledge Management of the Special Warfare Automated Planning System (SWAMPS): How to Provide Timely, Relevant and Accurate Knowledge to the Operator During the Mission Planning Process," Masters Thesis, Naval Postgraduate School, September 2000.

Stevenson, S., "Toward Joint Medical Logistics 2010 and Beyond: Process Innovation and Redesign of Class VIII Supply Chain at a Medical Logistics Company," Masters Thesis, Naval Postgraduate School, December 2000.

Walker, A., "Knowledge Portal Support to the Naval Postgraduate School's Advanced Distributed Learning Program for the Information Systems Operations Curriculum," Masters Thesis, Naval Postgraduate School, December 2000.

OTHER:

Nissen, M.E., "Agent-Based Supply Chain Integration," *Journal of Information Technology Management* Special Issue on E-Commerce in Procurement and the Supply Chain (forthcoming 2001).

Nissen, M.E., "Measurement-Driven Enterprise Systems Engineering," *Journal of Engineering Valuation and Cost Analysis* Special Issue on Enterprise Engineering (forthcoming 2001).

Nissen, M.E., "Beyond Electronic Disintermediation through Multi-Agent Systems," *Journal of Logistics Information Management* (forthcoming 2001).

Nissen, M.E., "An Experiment to Assess the Performance of a Redesign Knowledge System," *Journal of Management Information Systems* (forthcoming 2001).

Nissen, M.E., and Sengupta, K.C., "An Experimental Approach to Understanding Human and Software Agent Performance Along the Supply Chain," in review.

DoD KEY TECHNOLOGY AREAS: Computing and Software, Manpower, Personnel, and Training, Modeling and Simulation, Other (Acquisition Policy)

KEYWORDS: Acquisition, Agents, Information Systems, Knowledge Management, Process Innovation, Research

WEB-BASED LABOR MARKET DESIGN THROUGH INTELLIGENT AGENTS

Mark Nissen, Assistant Professor
Graduate School of Business and Public Policy
Sponsor: Navy Personnel Research Studies and Technologies Office

OBJECTIVE: To design Web-based labor markets for matching sailors with jobs via software agents.

SUMMARY: Associate Professor Bill Gates and I broke new ground in terms of both two-sided matching algorithms and multi-agent systems, and we effectively integrated these disciplinary works to create effective market-design goals, approaches and proof-of-concept systems. This effort has since expanded to include experimental-economics and other work through collaboration with researchers from the University of Mississippi, and we had one journal article and one book chapter accepted for publication in 2000.

PUBLICATIONS:

Gates, W.R. and Nissen, M.E., "Designing Agent-based Electronic Employment Markets," *Electronic Commerce Research Journal*, Special Issue on Theory and Application of Electronic Market Design, forthcoming 2001.

Gates, W.R. and Nissen, M.E., "Agent- and Web-based Employment Marketspaces in the U.S. Department of Defense," in: A. Gronlund, ed., *Electronic Government: Design, Applications and Management* Idea Group Publishing, forthcoming Summer 2001.

PRESENTATION:

Gates, W.R. and Nissen, M.E., "Agent-Based Market Design for Navy Enlisted Personnel," presented at the Navy Manpower Research and Analysis Conference, Washington, D.C., October 2000.

DoD KEY TECHNOLOGY AREAS: Computing and Software, Manpower, Personnel, and Training

KEYWORDS: Agents, Economics, Information Systems, Labor Markets, Personnel, Process Innovation, Research

PMI 2000 PAPER AND PRESENTATION
Mark Nissen, Assistant Professor
Graduate School of Business and Public Policy
Sponsor: Project Management Institute

OBJECTIVE: To prepare and present a conference paper on the DoD Acquisition Research Program.

SUMMARY: The Project Management Institute funded me to prepare and present a conference paper on the DoD Acquisition Research Program.

PUBLICATION:

Nissen, M.E., "U.S. Defense Acquisition Research Program," *Proceedings First PMI Research Conference*, Paris, France, June 2000.

PRESENTATION:

Nissen, M.E., and Snider, K.F., "U.S. Defense Acquisition Research Program," invited presentation, First PMI Research Conference, Paris, France, June 2000.

DoD KEY TECHNOLOGY AREAS: Other (Acquisition)

KEYWORDS: Acquisition, Research

PRACTIX ARTICLE
Mark Nissen, Assistant Professor
Graduate School of Business and Public Policy
Sponsor: National Association of Purchasing Management

OBJECTIVE: To prepare an article on intelligent supply chain agents.

SUMMARY: The National Association of Purchasing Management funded me to prepare an article on intelligent supply chain agents.

PUBLICATION:

Nissen, M.E., "Procurement Revolution with Intelligent Agent Technology," *PRACTIX: Best Practices in Purchasing and Supply Chain Management* 3:2, December 1999.

DoD KEY TECHNOLOGY AREAS: Other (Acquisition)

KEYWORDS: Acquisition, Research

INTELLIGENT AGENTS AND WEB-BASED MARKETS FOR DETAILING NAVAL PERSONNEL

Mark E. Nissen, Assistant Professor
William R. Gates, Associate Professor
Graduate School of Business and Public Policy
Sponsor: Naval Personnel Research Studies and Technology and Naval Postgraduate School

OBJECTIVE: Analyze the technological and operational feasibility of establishing a web-based market, using intelligent agents, to match naval enlisted personnel to specific navy billets.

SUMMARY: This research analyzes the technological and operational feasibility of establishing a web-based market, using intelligent agents, to match naval enlisted personnel to specific navy billets. DoN currently matches sailors to billets using a labor-intensive detailing process. With evolving information technology, the assignment process could be accomplished using intelligent agents and web-based markets. Game theory results for two-sided matching games can identify operational rules for managing the assignment process. This system will be part of a general DoN Sailor Career Management System that manages cradle to grave career paths to facilitate both recruiting and retention by enhancing the quality of life within DoN.

PESENTATION:

Gates, W.R. and Nissen, M.E., "Designing Agent-Based Electronic Employment Markets for U.S. Navy Enlisted Personnel," Navy Manpower Research and Analysis Conference, Center for Naval Analysis, Alexandria, VA, 30 October 2000.

THESES DIRECTED:

Martel, M., "Stakeholder and Process Analysis of the Navy's Enlisted Detailing Process," Masters Thesis, Naval Postgraduate School, December 2000.

Schlegel, R., "An Activity Base Costing Analysis of the Navy's Enlisted Detailing Process (Deck, Supply and Administrative Rating Area)," Masters Thesis, Naval Postgraduate School, December 2000.

OTHER:

Nissen, M.E. and Gates, W.R., "Designing Agent-Based Electronic Employment Markets for U.S. Navy Enlisted Personnel," in *Electronic Government: Design, Applications, and Management*, Åke Grönlund, ed., Idea Group Publishing, forthcoming Summer 2001.

Gates, W.R. and Nissen, M.E., "Designing Agent-Based Electronic Employment Markets," *Electronic Commerce Research Journal: Special Issue on Theory and Application of Electronic Market Design*, forthcoming 2001.

DoD KEY TECHNOLOGY AREAS: Manpower, Personnel and Training, Computing and Software, Modeling and Simulation

KEYWORDS: Intelligent Agents, Web-Based Markets, Two-Sided Matching Games

STRATEGIC PLANNING FOR DEFENSE RESOURCE MANAGEMENT INSTITUTE

Nancy Roberts, Professor
Graduate School of Business and Public Policy
Sponsor: Defense Resource Management Institute

OBJECTIVE: To conduct strategic planning exercises for DRMI

SUMMARY: DRMI is in a period of transition. It has requested help in its strategic planning exercises. The Bryson model of strategic planning will be utilized to guide its planning efforts. The two-year-long intervention includes strategic planning, implementation, and evaluation support.

PUBLICATIONS:

Roberts, N.C. and Menker, J., "Strategic Management in the Federal Government," in Jack Rabin, Gerald J. Miller, and W. Bartley Hildreth, eds., *Handbook of Strategic Managemen*, 2nd editon New York: Marcel Dekker, 2000, pp. 561-593.

Roberts, N.C., "Organizational Configurations: Four Approaches to Public Management," in J. L. Brudney, L. O'Toole, and H.G. Rainey, eds., *Advancing Public Management*, Washington, D.C.: Georgetown University Press, 2000, pp. 217-234.

Roberts, N.C., "Synoptic Model of Strategic Planning and the Results Act: Lacking a Good Fit with the Political Context," *Public Productivity and Management Review*, 2000, 23(3), pp. 297-311.

THESES DIRECTED:

Mezosi, J., "Management of Organizational Change: The Case of Hungarian Automation and Radar Department," Masters Thesis, Naval Postgraduate School, June 2000.

Muhirwa, R. "Rwandese Patriotic Army Logistics Unit (G-4) Assessment and Recommendations," Masters Thesis, Naval Postgraduate School, June 2000.

Nystrom, D., "Creating 360 Degree Leadership in the 21st Century Navy: 30 Something in Action," Masters Thesis, Naval Postgraduate School, March 2001.

Stinson, B. P., "Project Management as Public Entrepreneurship," Masters Thesis, Naval Postgraduate School, March 2001.

DoD KEY TECHNOLOGY AREAS: Other (Strategic Planning)

KEYWORDS: Strategic Planning, Strategic Management, Performance Evaluation and Measurement, Government Performance Results Act, Evaluation, Management

FINANCIAL REPORTING AND ANALYSIS RESEARCH FOR THE DEPARTMENT OF DEFENSE SECURITY RESEARCH CENTER

Joseph G. San Miguel, Professor
Graduate School of Business and Public Policy
Sponsor: Security Research Center, Department of Defense

OBJECTIVE: The objective of this continuing research is to provide financial reporting and analysis expertise to the national security research projects of the Security Research Center of the Department of Defense. Specifically, various financial measures such as personal net worth and net income can be used as determinants of potential security risk from federal employees. In addition there are financial implications for security policies and programs of the Defense Investigative Service, the National Security Agency, the Central Intelligence Agency, and the U.S. Customs.

SUMMARY: Numerous initiatives are underway to evaluate the quality of financial and non-financial information for purposes of deterring or detecting security threats. Prior investigation and research has established that financial incentives and payments are generally the primary motives for acts of spying by U.S. citizens. The well-known spy cases involving Aldrich Ames and John Walker are examples. This project considers the use the financial information for use as predictors of potential security risks and the need for security investigations. Financial information includes unexplained increases or decreases in an individual's net worth. The various sources of net worth such as earned income, inheritance, or sale of personal assets as well as the uses of net worth for investments and asset acquisitions, are variables that must be considered. Due to the sensitivity of the subject, the reports prepared for the sponsor and the other federal agencies are classified.

PUBLICATIONS:

San Miguel, J.G., "Analysis of the National Security Agency's Financial Disclosures," Classified Report, Department of Defense, Security Research Center, 28 August 2000.

San Miguel, J.G., "Financial Analysis and Review of the CIA's Financial Disclosures," 6 July 2000.

DoD KEY TECHNOLOGY AREAS: Other (National Security)

KEYWORDS: National Security, Financial Analysis, Cost Analysis, Cost Estimation

THE STRATEGIC IMPACT OF ENTERPRISE RESOURCE PLANNING SYSTEMS

Joseph G. San Miguel, Professor
Graduate School of Business and Public Policy
Sponsor: Financial Executive Research Foundation

OBJECTIVE: In recent years, business enterprises have made significant investments in information technology called enterprise resource planning systems to improve their strategic positioning, responsiveness to the customer, and market direction. This research examines a number of companies that have implemented enterprise resource planning systems to better understand the roles and responsibilities of financial managers and the resulting strategic information and performance measurement systems.

SUMMARY: For survival and growth in the global marketplace a firm must effectively allocate its strategic resources, which include human, physical, and financial assets, across business operations and processes. Its strategy must be supported by management systems that assist the planning and control of operations and processes. Today information technology supports these information systems. In recent years enterprise resource planning (ERP) systems have been used as a means to comprehensively link firm–wide operations and processes. The majority of the thousand largest firms in the U.S. have either implemented or in the process of implementing enterprise resource planning systems. Because of the millions of investment dollars involved, executive management is keenly aware of ERP and its promised benefits. Today, ERP vendors and IT consultants are also targeting middle–level firms with annual sales

less that $1 billion. The question is how effective are these significant investments in assisting executive management in achieving corporate objectives.

PUBLICATIONS:

San Miguel, J.G., "Abrams Company," in Robert N. Anthony and V. Govindarajan, eds., *Management Control Systems*, Irwin/McGraw-Hill, 2000.

San Miguel, J.G., "Grand Jean Company," in Robert N. Anthony and V. Govindarajan, eds., *Management Control Systems*, Irwin/McGraw-Hill, 2000.

San Miguel, J.G., "Emerson Electric Company," in Robert N. Anthony and V. Govindarajan, eds., *Management Control Systems*, Irwin/McGraw-Hill, 2000.

San Miguel, J.G. and J.K. Shank, "ERP as a Strategic Management Tool: Six Evolutionary Stages," *Handbook of Cost Management*, Warren, Gorham, Lamont, 2001.

OTHER:

San Miguel, J.G., "Enterprise Resource Planning (ERP) Bibliography," Financial Executives International Research Foundation Web Site, www.fei.org.

THESES DIRECTED:

Hansbrough, J., "An Activity-Based Cost Analysis of Recruit Training Operations at Marine Corps Recruit Depot, San Diego," Masters Thesis, Naval Postgraduate School, June 2000.

Fryzlewicz, J., "Analysis of Measures of Performance and Continuous Improvement at the Naval Dental Center Pearl Harbor," Masters Thesis, Naval Postgraduate School, December 2000.

DoD KEY TECHNOLOGY AREAS: Other (Cost Management, Information Technology)

KEYWORDS: Financial Analysis, Cost Analysis, Cost Estimation, Strategy

ACQUISITION CENTER FOR RESEARCH AND LESSONS LEARNED

Keith F. Snider, Assistant Professor
Graduate School of Business and Public Policy
Sponsor: U. S. Army TRADOC Analysis Center–Monterey and Naval Postgraduate School

OBJECTIVES: To develop, implement, and operate an Internet-based lessons learned system to: focus research resources on important acquisition issues; provide a means to make research results accessible to the acquisition community; and serve as an integrating mechanism for acquisition research needs of warfighters, policymakers, and practitioners

SUMMARY: This is a continuing project from CY1999. It represents a joint effort by the investigator and TRADOC Analysis Center-Monterey analysts for the Office of the Assistant Secretary of the Army (Acquisition, Logistics and Technology). Significant 2000 accomplishments included development of system design requirements (e.g., collection methods, validation and review processes), as well as development, completion, and initial testing of a system prototype. Results of initial prototype tests led to potentially significant design changes, most notably in the area of integration with existing lessons learned and knowledge management systems. The project also included a series of four acquisition lessons-learned articles that were published in *Army AL&T* magazine during 2000; these were intended to heighten awareness among acquisition professionals as to the capabilities of the implemented system. The investigator edited this series, which included articles written by four other NPS faculty members.

PUBLICATIONS:

Snider, K.F., "Acquisition CENTRALL: Getting the Word Out on Lessons Learned," *Army AL&T*, May-June, pp. 21-22, 2000.

Matthews, D.F. and Nissen, M.E., "Software Acquisition Lessons Learned Through Student Thesis Research," *Army AL&T*, May-June, pp. 23-24, 2000.

Hoivik, T.H., "Recurring Lessons in Weapon T&E Programs," *Army AL&*T, September-October, pp. 35-36, 2000.

Boudreau, M.W., "Transitioning from Fielding to Steady-State Sustainment," *Army AL&T*, January-February, pp. 31-32, 2001.

PRESENTATION:

Snider, K.F., "Lessons Learned Systems as Resources for Enhancing Acquisition Education, Training, and Research," Defense Acquisition University "Beyond 2000" Conference, College Park, MD, 14-17 November 2000.

DoD KEY TECHNOLOGY AREAS: Other (Acquisition)

KEYWORDS: Acquisition Lessons Learned

MARINE CORPS RETENTION STUDY

George Thomas, Professor
Alice Crawford, Senior Lecturer
Susan Hocevar, Assistant Professor
Graduate School of Business and Public Policy
Daniel Dolk, Professor
Information Systems Academic Group
Sponsor: Headquarters, United States Marines Corps

OBJECTIVE: To implement Marine Corps electronic retention and exit surveys and analyze first year results. The surveys are intended to provide a data analytic basis for managing officer and enlisted retention. This is a continuing project.

SUMMARY: NPS developed retention and exit surveys for use in an Internet format. Headquarters Marine Corps (HQMC) posted the surveys to their web site. A sample of Retention and Exit surveys data was collected and analyzed. Additionally, a process for longitudinal archiving in a data warehouse was developed, and a decision support system (DSS) was developed for generating prespecified reports, ad hoc queries, and data extraction files for other applications.

PUBLICATIONS:

Hocevar, S., "A Preliminary Analysis of the 1999 Marine Corps Web-Based Exit Survey," NPS Technical Report, NPS-SM-00-008.

Kocher, K. and Thomas, G. W., "A Preliminary Analysis of 1999 USMC Web-Based Retention Survey," NPS Technical Report, NPS–SM-00-005.

DoD KEY TECHNOLOGY AREAS: Manpower, Personnel, and Training, Modeling and Simulation

KEYWORDS: Web-Based Survey, Officer Retention, Enlisted Retention, Retention Survey, Decision Support Systems

CHIEF OF NAVAL PERSONNEL (N1) MSA CURRICULUM SUPPORT

George Thomas, Professor
Graduate School of Business and Public Policy
Sponsor: Naval Personnel Command

OBJECTIVE: Two-fold: 1) Provide curriculum support for the manpower systems analysis curriculum and, 2) Provide research support for specific projects supporting the chief of Naval personnel.

DoD KEY TECHNOLOGY AREAS: Manpower, Personnel, and Training

KEYWORDS: Manpower, Personnel, Statistical Models