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Navy Reserve Officers Problem Articulation Study

Rodney S. Myers, M.S.

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14. ABSTRACT
The objective of this study was to identify the purpose of a Navy Reserves inventory model and identify the most feasible approach for model development. This report was prepared by Navy Personnel Research, Studies, and Technology (NPRST) Division's Institute for Personnel Planning and Policy Analysis (PERS-11) as part of the Problem Articulation Study sponsored by the Commander Navy Reserve Forces Command (CNRFC).

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Foreword

This report was prepared as part of the Problem Articulation Study (Project Number 0000) sponsored by the Commander Navy Reserve Forces Command (CNRFC). Navy Personnel Research, Studies, and Technology (NPRST) Division's Institute for Personnel Planning and Policy Analysis (PERS-11) performed work described in this report during fourth quarter fiscal year (FY) 2005, and first quarter FY 2006.

The objective of this study was to identify the purpose of a Navy Reserves inventory model and identify the most feasible approach for model development.

Special thanks to Mr. Dave Bonar (Space and Warfare Systems Center (SPAWAR), New Orleans), and Ms. Freda Hudspeth (PERS-11) for their constructive input during this study.

DAVID L. ALDERTON, Ph. D.
Director

Executive Summary

Three problems were identified; (1) separate data sources used for counting Reserve inventory and transactions, (2) reporting agencies use inconsistent processing rules for counting monthly transactions, and (3) lack of a formal inventory tool (model).

Conclusions and recommendations discussed in this report were derived from several months of data analysis, process discussions with workforce and data analysts, and NPRST subject matter experts. The active duty Navy has experienced huge benefits through use of their workforce planning and analysis models. NPRST's hope is CNRFC will find the recommendations from this study useful in developing a Reserve Forces inventory model.

It was determined that the Reserve Components Common Personnel Data System (RCCPDS) should be the official data source. RCCPDS is a monthly record of Reserve Officer and Enlisted "master" onboard inventory and "transactions." It is maintained by the Defense Manpower Data Center (DMDC), and receives its input from SPAWAR-New Orleans. As a result of this effort, NPRST currently maintains RCCPDS as a Reserve personnel historical data repository. A detailed discussion of Reserve data sources, and monthly processing rules are discussed in the Data Source section of this report.

Recommend CNRFC fund the development of a Navy Reserve inventory-planning module as part of the active duty Within-year Officer Loss Forecasting model (WOLF). The findings of this study support the WOLF model as an applicable platform to implement a Reserve inventory-planning module. It is also an opportunity to make efficient use of Navy resources by hosting Reserve and active duty inventory planning models within a single platform. Ultimate web-hosting of the WOLF model, and the establishment of an Officer analysis cell will increase the likelihood of use and positive impact of a formal planning model.

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Introduction

According to Global Security's Navy Reserve page, "The mission of the U.S. Naval Reserve Force is to provide mission-capable units and individuals to the Navy-Marine Corps Team throughout the full range of operations from peace to war. In today's environment this new mandate takes on added meaning and responsibilities as the Naval Reserve Force is called on to play an increasingly active role in the day-to-day planning and operational requirements of the active Navy. The Naval Reserve represents 20 percent of the Navy's total assets and is a significant force multiplier the fleet must have to meet its growing global commitments.

Operations *Desert Shield* and *Desert Storm* (1990-91) gave dramatic evidence that the Naval Reserve Force is a thoroughly effective and vital part of the general operational capabilities of the Navy in an emergency scenario. Over 20,000 Naval Reservists were recalled for active duty running the gamut from medical personnel to fleet intelligence support. These "civilian" Sailors responded and accomplished their jobs beyond all expectations.

The Naval Reserve Force consists of the Ready Reserve, the Standby Reserve and the Retired Reserve numbering over 690,000 men and women. The Ready Reserve is made up of Selected Reserve (SELRES) personnel and Individual Ready Reserve (IRR) personnel. The Selected Reserve is the Navy's primary source of immediate mobilization manpower and represents those Reservists who are paid, either as weekend drillers, or who serve in fulltime support (FTS) on active duty status in the training and administration of the Naval Reserve Force program. Other reserve categories include the Standby Reserve and the Retired Reserve.

The Naval Reserve Force is commanded by a two-star Rear Admiral, Commander Naval Reserve Force, with headquarters in New Orleans, LA. The commander is supported by two flag officers who manage the Naval Surface Reserve Force, and the Naval Air Reserve Force, respectively. The New Orleans location has been reorganized as the Navy Reserve Forces Command with more direct support to active Navy and less distinction between surface and air forces. This is in line with Navy Reserve goal to have the right sailor with the right skills in the right place at the right time in support of the active duty force. The Commander Naval Reserve Force also functions as the Director of Naval Reserve on the staff of the Chief of Naval Operations in Washington, DC, and as Chief of Naval Reserve in matters before Congress.

Following the Assistant Secretary of Defense for Reserve Affairs Roles and Missions Study, the Naval Reserve has been restructured to support daily peacetime missions of the United States Navy, while still maintaining critical capabilities to mobilize and assist the Navy to fight and win wars. This restructuring has resulted in the Naval Reserve accepting new missions and hardware while supporting traditional mobilization and augmentation requirements.

The congressionally mandated Roles and Missions Study, titled The Future Naval Reserve, recommended 14 new responsibilities for the Naval Reserve. Further, recognizing the benefits and potential of this process, the Naval Reserve has implemented 14 additional initiatives to maximize support and further integration.

In the 2005 Base Realignment and Closure (BRAC) Recommendations, DoD recommended closing Naval Support Activity New Orleans, LA. It recommended relocating the Navy Reserve Command to Naval Support Activity Norfolk, VA, except for the installation management function, which would consolidate with Navy Region Southwest at Naval Station San Diego, CA; Navy Region Northwest at Submarine Base Bangor, WA; and Navy Region Midwest at Naval Station Great Lakes, IL. The relocation of the Navy Reserve Command (comprised of Navy Reserve Forces Command, Navy Reserve Forces, and Naval Reserve Air Forces) to Naval Support Activity Norfolk would enhance internal active and reserve component interoperability. By locating the reserve headquarters elements on the same base with Fleet Forces Command, the Navy's active component headquarters, this recommendation would significantly increase interaction between the two components, produce a reduction in force size by eliminating duplicative staff, and allow for further decreases in staffing size for common support functions. The consolidation of the Navy Reserve Command installation management functions with other Navy Regional organizations would be part of the Department of the Navy efforts to streamline regional management structure and to institute consistent business practices."[1] Commander Navy Reserve Forces website is located at http://navyreserve.navy.mil/Public/Staff/WelcomeAboard/default.htm

Data Source

Active and Reserve transactions are generated via the Navy's Standard Integrated Personnel System (NSIPS). NSIPS is the sole input source for all personnel transactions. Reserve transactions are input from the Navy Reserve Center (NRC) and the Personnel Services Detachment (PSD). Master records are created from gain transactions where there is no existing record or information is not pulled from active duty system records. Drilling reservist transactions are output to the Reserve Headquarters System (RHS) from NSIPS. RHS is a departmental (Reserves) data repository. The Inactive Manpower and Personnel Management Information System (IMAPMIS) receives drilling reservist transactions via RHS. The Defense and Accounting System (DFAS) receives Reserve eligibility information from RHS. Non-drilling reservist transactions are input to IMAPMIS from the Navy Education and Training Center (NETC), Bureau of Naval Personnel (BUPERS), and the Navy Reserve Personnel Command (NPRC). Non-drilling reservists include Inactive Ready Reserves (IRR), standby, and retirees. IMAPMIS inputs daily eligibility transactions to daily Reserve Components Common Personnel Data System (RCCPDS), monthly strength to monthly RCCPDS, and to the Navy Enlisted Officer Participation System (NEOPS) for tracking Reserve retirement points, which are input as totals and retirement eligibility status back to IMAPMIS. Figure 1 is a

1 Global Security. (n.d.) Retrieved December 21, 2005, from http://www.globalsecurity.org/military/agency/navy/navresfor.htm.

flow diagram of the Reserve personnel data genealogy, and Figure 2 details the associated commands (see appendix A).

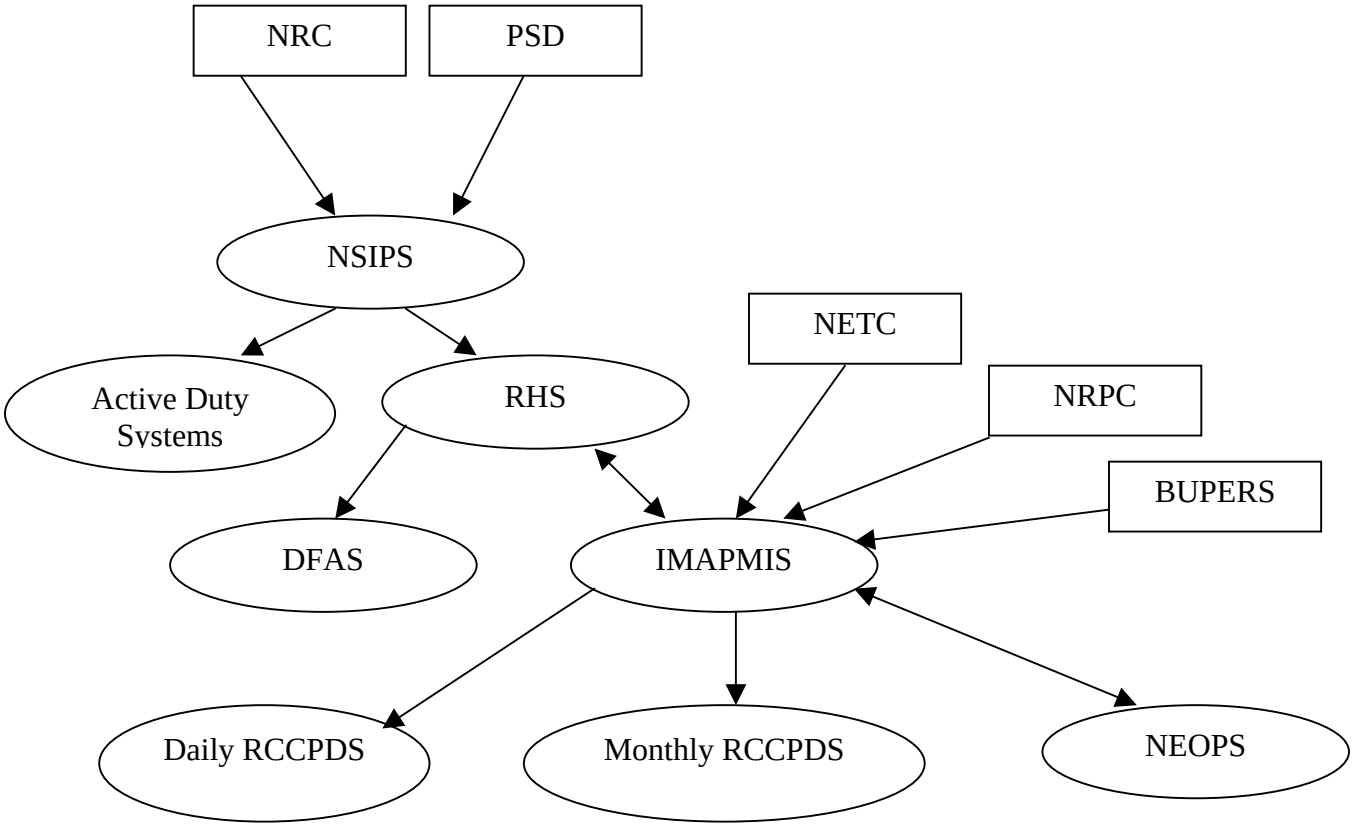

Figure 1. Data flow diagram.

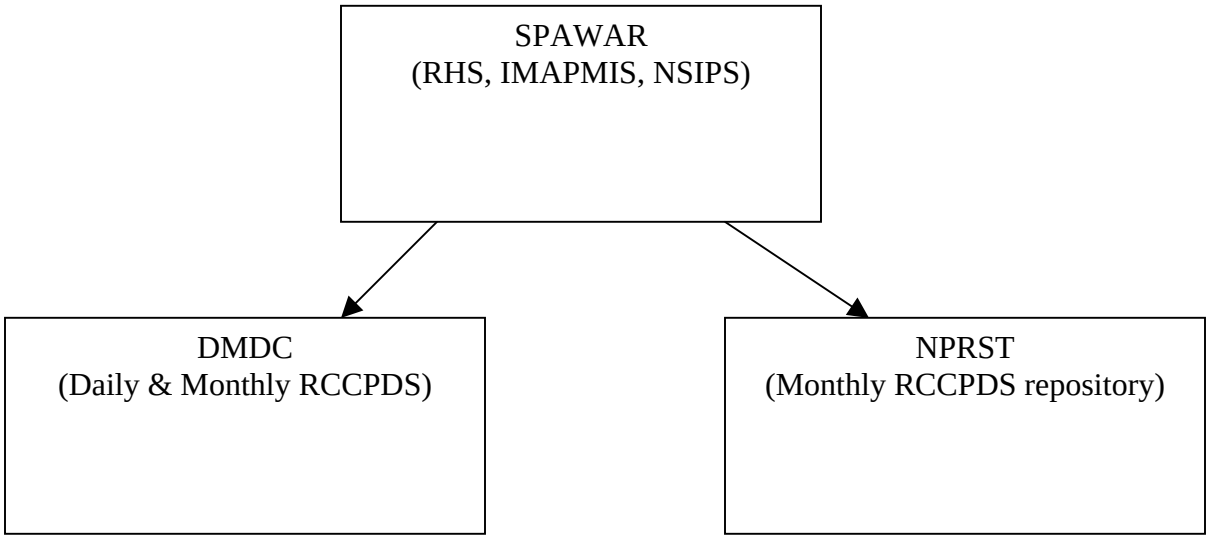

Figure 2. Associated commands.

Monthly master and associated transaction files are generated for Officer and Enlisted Reservists. Daily eligibility transactions are created for each Reserve member as they occur. Member eligibility losses are reported weekly; member eligibility gains reported daily. The master file contains individual personnel records (duplicates are programmed not to occur) for each individual Reserve force member at the end of each monthly accounting period. Title 10 USC provides that the accounting period for each monthly census ends at 2400 of the last calendar day of each month with reporting to DMDC, of that data, required by the 20th of the following month (per DoDI 7730.54). Only transactions for the preceding month, and each member's status for the end of the preceding month, are forwarded. By DoDD 1207.15, RCCPDS processing for Reserves Component cannot begin processing until the Active Duty, ACCPDS, is completed. All members of a service that are not counted in an Active Duty monthly end strength billet must be counted in predefined category definitions in the Reserve Component. Transaction files are the accumulation of transactions recorded for any member during the month. Multiple transactions per individual are possible. Neither file is cumulative. There is a single record layout for the master and transaction files for Enlisted and Officers. Specific fields are used to distinguish Officer from Enlisted (see sample RCCPDS file layout, Appendix B).

Monthly Selected Reserve (SELRES) inventories are counted by querying the master file(s) for all members who are designated as SELRES and assigned to SELRES pay billets.[2] NPRST has successfully matched the monthly inventory counts generated by SPAWAR and Defense Manpower Data Center (DMDC). Monthly transaction counts were verified with SPAWAR as an exact match. NPRST was unable to match monthly transaction counts with DMDC, due to DMDC's monthly processing rules.[3]

See Appendix C for valid data field values. Table 1 contains monthly SELRES totals FY2004 through 2005.

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2 SELRES are determined to be (1) Selected Reserve – Trained in Units, (2) Selected Reserve – Trained Individuals (non-unit), (3) Selected Reserve – Training Pipeline, and (4) excluding those members who are Active Guard and Reserve. Corresponding to Reserve Category Code: S, T, or U, and Reserve Subcategory Code: not equal to G.

3 Upon receiving monthly data files from SPAWAR, DMDC verifies the transaction file by comparing the previous master file with the current master file. For non-verifiable gain and loss records, DMDC either eliminates reported transactions or generates new transactions. This additional processing alters the monthly transactions counts. Although SPAWAR performs the same process to generate the monthly transaction file, it is performed earlier and thus differs in the actual number counted.

Table 1
SELRES Inventory Verification

	FY05	FY04
Oct	15703	16496
Nov	15409	16383*
Dec	15324	16362*
Jan	15279	16362
Feb	15211	16313
Mar	15190	16247
Apr	15163	16242
May	15168	16252
Jun	15118	16253
Jul	15186	16313
Aug	15234	15214
Sep	15214	16382

* An IT error occurred during November 2003, which affected strength accounting and was corrected in December 2003 with the counts showing correct again in January 2004. These numbers are consistent with NPRST's RCCPDS data repository.

Forecast Validation

This section represents an accuracy evaluation of existing forecasting methods. The forecast values were taken from the strength plan produced during the latter months of the previous fiscal year (i.e., fiscal year 2004 forecast taken from a plan generated in late fiscal year 2003). CNRFC strength and community management analysts forecast future gains, losses, and total inventory as follows: an annual gain/loss rate is computed from historical data and applied to the beginning year SELRES inventory to derive annual gain/loss forecasts. Annual gain and loss forecasts are spread across calendar months by means of a ratio derived from historical trend analysis. Actual gains and losses per month as a portion of total transactions per month are used to determine the ratio, which is applied to the annual gain and loss forecasts to predict gains and losses by month. Inventory forecasts by month are determined by applying the monthly forecast of gains and losses to previous month's ending inventory (current month's begin inventory). The head CNRFC strength planner used similar methods more recently. The forecast numbers included in this report were generated by the aforementioned 3-step method.

The two most recent fiscal years were evaluated (fiscal year 2004 and 2005). Tables 2 through 7 represent the forecast error (denoted error) between the reported forecast value and actual values observed from RCCPDS data files, Master/Transaction. Tables 2 and 3 represent overall strength, and tables 4 through 7 represent monthly transactions. Error is defined as: *Error = Forecast – Actual*. Absolute value was not used in order to maintain the signed value (e.g. exact error). Query rules are shown in Appendix D.

Table 2
Fiscal Year 2004—Officer reserve inventory forecast validation

FY04	Forecast	Actual	Error
Oct	16557	16496	61
Nov	16403	16383*	20
Dec	16279	16362*	-83
Jan	16149	16362	-213
Feb	16128	16313	-185
Mar	16033	16247	-214
Apr	16125	16242	-117
May	16253	16252	1
Jun	16252	16253	-1
Jul	16402	16313	89
Aug	16443	16355	89
Sep	16501	16382	119

* An IT error occurred during November 2003, which affected strength accounting and was corrected in December 2003 with the counts showing correct again in January 2004. These numbers are consistent with NPRST's RCCPDS data repository.

Table 3
Fiscal Year 2005—Officer reserve inventory forecast validation

FY05	Forecast	Actual	Error
Oct	16060	15703	357
Nov	15925	15409	516
Dec	15833	15324	509
Jan	15827	15279	548
Feb	15655	15211	444
Mar	15643	15190	453
Apr	15646	15163	483
May	15684	15168	516
Jun	15730	15118	612
Jul	15802	15186	616
Aug	15791	15234	557
Sep	15557	15214	343

Table 4
Fiscal Year 2004—Officer reserve gains forecast validation

FY04	Forecast	Actual	Error
Oct	192	296	-104
Nov	194	188*	6
Dec	100	238*	-138
Jan	147	238	-91
Feb	156	175	-19
Mar	82	214	-132
Apr	230	224	6
May	262	120	142
Jun	83	160	-77
Jul	262	227	35
Aug	121	177	-56
Sep	259	141	118

* An IT error occurred during November 2003, which affected strength accounting and was corrected in December 2003 with the counts showing correct again in January 2004. These numbers are consistent with NPRST's RCCPDS data repository.

Table 5
Fiscal Year 2005—Officer reserve gains forecast validation

FY04	Forecast	Actual	Error
Oct	162	276	-114
Nov	114	186	-72
Dec	109	193	-84
Jan	144	193	-49
Feb	98	133	-35
Mar	183	129	54
Apr	105	189	-84
May	147	139	8
Jun	170	137	33
Jul	163	225	-62
Aug	94	165	-71
Sep	145	184	-39

Table 6
Fiscal Year 2004—Officer reserve losses forecast validation

FY04	Forecast	Actual	Error
Oct	567	816	-249
Nov	348	246*	102
Dec	225	278*	-53
Jan	278	278	0
Feb	177	232	-55
Mar	177	300	-123
Apr	138	237	-99
May	134	124	10
Jun	85	197	-112
Jul	112	194	-82
Aug	79	199	-120
Sep	201	165	36

* An IT error occurred during November 2003, which affected strength accounting and was corrected in December 2003 with the counts showing correct again in January 2004. These numbers are consistent with NPRST's RCCPDS data repository.

Table 7
Fiscal Year 2005—Officer reserve gains losses validation

FY04	Forecast	Actual	Error
Oct	484	1008	-524
Nov	249	508	-259
Dec	201	312	-111
Jan	150	312	-162
Feb	269	212	57
Mar	195	177	18
Apr	101	221	-120
May	108	156	-48
Jun	124	204	-80
Jul	90	200	-110
Aug	105	170	-65
Sep	379	240	139

Monthly transaction processing rules used to generate actual counts for tables 4 through 7 were obtained from DMDC (see appendix D). Although NPRST transaction counts match SPAWAR transaction counts exactly, caution must be taken to ensure SELRES categories are accurate. For example, one would expect to use the same category rules to compute inventory, gains, and losses. This is not the case based on DMDC's gain and loss processing rules. DMDC processing rules include additional Reserve categories not included in the inventory accounting rules. Further discussions between SPAWAR and CNRFC representatives are necessary to ensure SELRES categories are represented accurately based on Department of Defense accounting rules, and if needed, business-processing rules should be updated or manual-counting procedures changed. This does not inhibit the conclusions and recommendations of this study, but is noted for completeness.

Although desired prediction error is zero, the errors observed in this report do not point out a severe prediction problem. Some improvements can be realized by using consistent (1) data sources, (2) mathematical methods, (3) data processing rules, and (4) an inventory planning tool (model).

Given slight monthly changes in Reserve Officer inventory, total gains and losses, two methods of prediction are recommended. The first method is an extrapolation of monthly rates of change from previous fiscal years against the starting inventory of subject prediction fiscal year. This is very similar to the current method used by the CNRFC force analysts. Recommend having available multiple fiscal years, whereby analysts can choose rates of change based on their perception of the closeness to current/future environment. Additionally, the business-forecasting recommendation is to use the most recent time period (previous year) observed value as the forecast for the prediction value. Business forecasters recommend this method as a baseline. Again, this should be made available to Reserve force analysts to choose based on their perception of the current/future environment. Further improvements to forecasting accuracy should always be pursued.

The active duty prototype Officer inventory projection model, WOLF, is a mathematical model that uses an extrapolation forecasting technique that successfully combines probabilities of near-term voluntary and involuntary separations, (e.g., resignations, retirements, and statutory) with rates derived from historical data to generate a forecast of future separations. WOLF forecasts lateral transfers between individual communities based on historical rates, new accessions relative to Officer programmed authorizations (OPA), and promotions relative to flow-point and opportunity guidance. Inventory is equated by the basic strength equation:

$$\textit{End Inventory} = \textit{Begin Inventory} - \textit{Separations} + \textit{Accessions}$$

WOLF provides visual displays of projected monthly officer strength separations, community lateral accessions and separations, paygrade promotions, inventory, and inventory versus OPA by paygrade and years of commissioned service for the execution and budget year. It also provides a 4-year annual projection for outyears (i.e., 2008–2011). The outyear display provides an additional view of summary statistics (i.e., promotion in/out, accession gains, etc.).

WOLF has a validation feature that compares forecast results with actual results for previous time periods. Results can be viewed as tabular, graphics, or exported to Microsoft Excel for further utilization.

WOLF is designed for use at the strength planning and community level. The model is currently being implemented as a web-based tool for greater accessibility. WOLF functionality meets the needs of the Reserve component.

Conclusions and Recommendations

Recommend developing a Reserve inventory-planning module as part of the active duty WOLF inventory projection model. Inventory, gain, and loss dimensions are included in the active duty processing and will be easy to generate for the Reserves. Additionally, recommended prediction techniques will be simple to implement, because of similarity to active duty components.

In second quarter fiscal year 2006, the WOLF model developers will begin converting its active duty modules from a stand-alone tool to a web-based tool for use across the web. This is an ideal opportunity to make efficient use of Navy resources by converting the active duty and developing the reserve components simultaneously.

Recommend RCCPDS data generated by SPAWAR-New Orleans continue to be used as the official data source. As part of this study, RCCPDS historical data through fiscal year 1986 has been preprocessed and stored at NPRST, Millington, TN. The same data has been provided for use in the existing Reserve data warehouse. CNRFC force analysts should immediately begin using this data as their authoritative source. Additionally, recommend standardizing data between Navy and DMDC to ensure future data analysis is consistent.

Appendix A:
Data Source List

Data System	Organization
RCCPDS	NPRST
RCCPDS	SPAWAR
RCCPDS	DMDC
IMAPMIS	SPAWAR
RHS	SPAWAR
CNRFC Data Warehouse	N6
IEMF/IOMF	SPAWAR

Appendix B:
Sample RCCPDS File Layout[4]

4 DODI 7730.54, *Reserve Components Common Personnel Data System*. http://www.dtic.mil/whs/directives/corres/ins1.html. Retrieved on August 20, 2005.

Field Name	Position	Length
Res Component Military Service (DOD Std: Uniformed Service Organization Code)	1	1
Reserve Component-Service Component	2	1
RCC (Reserve Component Category) Designators	3	1
RCC Training and/or Retirement Category (TRC) Designators	4	1
Military Technician, Active Guard and Reserve, or Full-Time National Guard Statute Identifier	5	1
Key Employees	6	1
IRR Drilling Status Indicator	7	1
Filler	8	9
Social Security Number (SSN) (DoD Std: Person Social Security Identifier)	17	9
Verification Status of SSN	26	1
Last Name (DoD Std: Person Surname Text)	27	26
First Name (DOD Std: Person Forename Text)	53	20
Middle Name (DoD Std: Person Middle Name Text)	73	20
Senior, Junior, I, II, etc (DoD Std: Person Cadency Name Text)	93	4
Date of Birth (DOD Std: Person Birth Date)	97	8
Sex (DoD Std: Sex Category Code)	105	1
Marital Status (DoD Std: Person Marital Status Code)	106	1
Race and/or Population Group (DoD Std: Race Code)	107	1
Ethnic Group Code	108	1
Filler	109	1
Faith Group Code	110	2
US Citizenship Status Code (DoD Std: Person Organization Person Role Code)	112	1
Filler	113	1
US Citizenship Origin Code (DoD Std: Citizen Citizenship Origin Code)	114	1
Disputed Record Indicator	115	1
Education Designator Code	116	1
Filler	117	3
Home Mailing Address Person USPS Postal Address Primary Text	120	35
Person USPS Postal Address Secondary Text	155	35
City (DoD Std: United States Postal Region City Place Name)	190	20
Postal State Abbreviation (DOD Std: United States Postal Region State Code)	210	2
Country (DOD Std: Country Code)	212	2
United States Postal Region Zip Identifier (DOD Std)	214	5
United States Postal Region Subdivision Zip Add On Identifier (DOD Std)	219	4
Date Home Mailing Address Last Reported	223	8
Mailing Address Status Indicator	231	1
SSN of Military Spouse of a Service Member	232	9
Dependents, Number of	241	2
Filler	243	12
Filler	255	13
Date of Initial Entry into Uniformed Service (DIEUS)	268	8
Date of Initial Entry into Reserve Forces (DIERF)	276	8
Uniformed Service Member Pay Entry Base Calendar Date	284	8
Means of Initial Entry into Military Service for Enlisted Members	292	1
Source of Initial Commission for a Commissioned Officer	293	1
Source of Initial Appointment for a Warrant Officer	294	1
Date of Initial Appointment for a Commissioned Officer	295	8

Field Name	Position	Length
Date of Initial Appointment for a Warrant Officer	303	8
Date of Initial Appointment for a Commissioned Warrant Officer	311	8
Prior Service Status Indicator (Regular)	319	1
Prior Service Status Indicator (Selected Reserve)	320	1
Length (Years) of Current Selected Reserve Agreement and/or Service Commitment	321	1
Active Duty Start Date	322	8
Active Duty Stop Date	330	8
Date of Expiration of Enlistment in the Ready Reserve	338	8
Effective Date of Current Enlistment, Reenlistment, or Extension of Enlistment Agreement	346	8
Date of Expiration of Selected Reserve Obligation	354	8
Date of Rank	362	8
Pay Grade, Uniformed Services Code (DoD Std: Pay Plan Code)	370	2
Pay Plan Grade (DOD Std: Pay Plan Grade Ordinal Identifier)	372	2
Filler	374	1
Total Days Active Federal Military Service	375	5
Date of Expiration of Statutory Military Service Obligation (MSO)	380	8
Military Aeronautical Rating	388	1
Career Management Field (CMF), Enlisted	389	2
Service Occupation Code (Primary)	391	8
Service Occupation Code (Secondary)	399	8
Basic Branch or Specialty (Officer Only)	407	2
Basic Professional Military Education Level Code	409	1
Joint Professional Military Education Level	410	1
Joint Professional Military Education Level Completion Date	411	8
Command Status of Commissioned Officer	419	1
Armed Forces Qualification Test (AFQT) Percentile Score (Enlisted Only)	420	2
Date Assigned Standby Reserve	422	8
Date Assigned Retired Reserve	430	8
Expiration Date of the Voluntary Separation Incentive (VSI), SSB, ISP	438	8
Officer Mandatory Removal Date	446	8
Separation Incentive Benefit Pay Indicator (Active to Reserve)	454	1
Separation Incentive Benefits and/or Pay Indicator (Reserve Transition Assistance Program)	455	1
Reserve Component Accumulated Total Creditable Retirement Points Earned Last Retirement Year	456	3
Reserve Component Total Number of Accumulated Paid Points Earned This Year	459	3
Reserve Component Accumulated Creditable Points Earned During Career Toward Retirement	462	5
Notification of Eligibility for Military Retirement Pay Indicator	467	1
Number of Years Creditable for Reserve Retirement	468	2
Filler	470	25
Assigned Military Unit Designator (Unit Identification Code (UIC))	495	8
Assigned Unit Location Postal State Abbreviation (DOD Std: United States Postal Region State Code)	503	2
Country (DOD Std: Country Code)	505	2
United States Postal Region Zip Identifier	507	5
United States Postal Region Subdivision Zip Add On Identifier	512	4
Duty Military Unit Designator (Unit Identification Code (UIC))	516	8
Service Occupation Code (Duty)	524	8

Field Name	Position	Length
Military Flying Status Indicator	532	1
Future Years Defense Plan (FYDP) Program Structure (Program Element Code (PEC))	533	8
Filler	541	2
Filler	543	25
Date of Award of Current Security Clearance	568	8
Authorized Security Clearance Access	576	1
Formal Inquiry Category Code	577	2
Filler	579	24
Defense Language Aptitude Battery Test Score	603	3
Language 1 Identifier	606	2
Filler	608	1
Speaking Proficiency Level 1	609	2
Listening Proficiency Level 1	611	2
Reading Proficiency Level 1	613	2
Language Proficiency Source 1	615	1
Date of Last Proficiency Test of Language 1	616	8
Language 2 Identifier	624	3
Language 2 Speaking Proficiency Code	627	2
Language 2 Listening Proficiency Code	629	2
Language 2 Reading Proficiency Code	631	2
Language 2 Skill Source Code	633	1
Language 2 Proficiency Evaluation Calendar Date	634	8
Language 3 Identifier	642	3
Language 3 Speaking Proficiency Code	645	2
Language 3 Listening Proficiency Code	647	2
Language 3 Reading Proficiency Code	649	2
Language 3 Skill Source Code	651	1
Language 3 Proficiency Evaluation Calendar Date	652	8
Language 4 Identifier	660	3
Language 4 Speaking Proficiency Code	663	2
Language 4 Listening Proficiency Code	665	2
Language 4 Reading Proficiency Code	667	2
Language 4 Skill Source Code	669	1
Language 4 Proficiency Evaluation Calendar Date	670	8
Language 5 Identifier	678	3
Language 5 Speaking Proficiency Code	681	2
Language 5 Listening Proficiency Code	683	2
Language 5 Reading Proficiency Code	685	2
Language 5 Skill Source Code	687	1
Language 5 Proficiency Evaluation Calendar Date	688	8
Filler	696	6
Career Status Bonus Program Status Code	702	1
Career Status Bonus Program Category Code	703	1
Career Status Bonus Program Category Calendar Date	704	8
Career Status Bonus Program Type Code	712	1
Career Status Bonus Program Participation Calendar Date	713	8
MGIB-AD Enrollment Basis Code	721	1

Field Name	Position	Length
MGIB-AD Enrollment Action Date	722	8
MGIB-AD Enrollment Action Code	730	1
MGIB-AD Kicker Incentive Rate Code	731	2
MGIB-AD Initial Obligation Years Code	733	1
Original Veterans Educational Benefit Program Entitlement Code	734	1
MGIB-SR Basic Benefit Obligated Service Begin Date	735	8
Months of Reserve Component MGIB-SR Obligated Service Remaining	743	2
MGIB-SR Basic Benefit Eligibility Status Code	745	2
MGIB-SR Basic Benefit Eligibility Status Effective Date	747	8
Filler	755	1
MGIB-SR kicker Incentive Obligated Service Begin Date	756	8
MGIB-SR Kicker Incentive Basis Code	764	1
MGIB-SR kicker Incentive Rate Code	765	2
MGIB-SR Kicker Incentive Eligibility Status Code	767	2
MGIB-SR Kicker Incentive Eligibility Status Effective Date	769	8
Filler	777	25
Reserve Component Incentive Program Eligibility Effective Date	802	8
Reserve Component Incentive Program Type	810	1
Reserve Component Incentive Program Educational Type	811	1
Reserve Component Incentive Program Eligibility Termination Date	812	8
Filler	820	10
Transaction Codes	830	2
Transaction Effective Date	832	8
Separation Program Designator (S PD) Codes	840	3
Filler	843	1
Character of Service	844	1
Reenlistment Eligibility Code	845	2
Reason for Loss and/or Transfer from Selected Reserve	847	2
Transition Indicator Involuntary Separation	849	1
Filler	850	7
Country of Original Citizenship	857	2
Place of Birth- State	859	2
Place of Birth - Country	861	2
Filler	863	37
NCS Program Incentive Code	900	1
NCS Selected Reserve Service Waiver Indicator Code	901	1
NCS Selected Reserve 24-Month Enlistment End Date	902	8
Filler	910	91

Appendix C:
Data Field Values[5]

[5] *Reserve Military Personnel Edit (700 byte)* as of December 20, 2004 [data file]. Retrieved on August 20, 2005.

Table C-1
Reserve Category Code

Value	Description
I	Inactive National Guard
P	Individual Ready Reserve Members in a training program
R	Individual Ready Reserve – Trained Members
S	Selected Reserve – Training in Units
T	Selected Reserve – Trained Individuals (non-unit)
U	Selected Reserve – Training Pipeline
V	Retired Reserve
Y	Standby (Active and Inactive)

Table C-2
Reserve Subcategory Code

Value	Description
1	20 YOS & Age 60 or Older - drawing pay
2	20 YOS but not yet receiving retired pay
3	Disabled with 20+ YOS or greater than 30% Disabled
4	20+ Years of Active Duty Service
5	Drawing ret pay for other than age, svc rqrmts or disability
6	Not eligible, but on Honorary List
A	Drilling Unit Member
B	Individual Mobilization Augmentees (IMA)
D	Standby members on Active Status List
E	Individual Ready Reserve (IRR) - Trained Members
F	On Initial Active Duty For Training (IADT)
G	Active Guard Reserve
H	Untrained Members of the IRR in the DEP
I	Inactive National Guard (ING)
J	IRR - Officers Training Program
K	IRR - Health Professional Scholarship Program
L	Standby with 20+ YOS & less than 30% Disabled
M	IRR - Subject to Involuntary Activation
N	Standby members on Inactive Status List
O	Ready Reserve members, not in the Selres, as contracted ROTC
P	Person awaiting IADT
Q	Awaiting Second Part of IADT
S	AGR Currently on or awaiting IADT
T	Simultaneous Membership Program (SMP)
U	Awaiting IADT - Not Authorized IDT or to Receive Pay
V	FT members performing AD on FTNGD for >180, but exempt from
X	SEL RES - Other Training Programs

Table C-3
Reserve Personnel Transaction Type Code

Value	Description
E1	Change to MGIB data
E2	Reserved
E3	Change to DEERS act duty data
E4	Reserved
G0	Reenl gain: Mbrs w/BIS GT 24 hrs-LT 91 days. Prev loss.
G1	NPS: Civ w/o prev A/R svrse, no Mil Srvce Oblig (MSO) crdt.
G3	From civil life (prior service).
G4	Direct from active duty (AD) to the Reserve components.
G5	Gain frm another rsrve cmpnnt (i.e. USNR to USAFR, etc.).
G7	Other gain.
G8	Gain from enlisted to officer status or v/versa in files.
GX	Generated Gain
L0	Other losses which can't be classified into the above codes.
L1	Discharged to civil life w/cmpltion to srvce/statry oblgs.
L2	Extd act duty w/chg frm Res. apptns to Act cmpnnt apptns.
L3	Loss to another Rsrve cmpnnt (i.e. USNR to USMCR etc.).
L7	Death
L8	Enl "loss" to offcr "gain" stat, or v/versa in either file.
LX	Generated Loss
M1	Immediate reenlistment
M2	Extension of current enlistment contract or agreement.
N1	Guard to Selected Reserve in same service
N2	Guard (other than AGR) to Reserve IRR
N3	Guard (o/than AGR) to Rsrve-Standby for reason o/than rtrmnt
N4	Guard (other than AGR) to Reserve for the purpose of rtrmnt
N5	Guard AGR to Reserve IRR
N6	Guard AGR to Reserve-Standby for reason o/than retirement
N7	Guard AGR to Reserve for the purpose of retirement
P0	Retired (V2) transferred to retired status other than V2
P1	Selected Reserve transferred to retired status other than V2
P2	AGR transferred to retired status other than V2
P3	IRR transferred to retired status other than V2
P4	Standby transferred to retired status other than V2
S1	Change to service member's SSN
S2	Change to service member's name
T1	Retired (V2) to Selected (other than AGR)
T2	Retired (V2) to IRR
T3	Retired (V2) to Standby

Table C-3
Reserve Personnel Transaction Type Code

Value	Description
TA	Selected Reserve (other than AGR) to AGR
TB	Selected Reserve (other than AGR) to IRR
TC	Selected Reserve (other than AGR) to ING
TD	Selected Reserve (other than AGR) to Standby
TE	Selected Reserve (other than AGR) to Retired (V2)
TF	AGR to Selected (other than AGR)
TG	AGR to IRR
TH	AGR to ING
TJ	AGR to Standby
TK	AGR to Retired (V2)
TL	IRR to AGR
TM	IRR to Selected (other than AGR)
TN	IRR to Standby
TP	IRR to Retired (V2)
TQ	ING to AGR
TR	ING to Selected (other than AGR)
TU	Standby to AGR
TV	Standby to Selected (other than AGR)
TW	Standby to IRR
TY	Standby to Retired (V2)
TZ	Retired (V2) to AGR
ZZ	Not Applicable

Appendix D:
Query Rules

Sample Monthly Loss Transactions - Query

This query references the Reserve Officer monthly transaction file (RCCPDS) for March 2004. It selects the Reserve Category and Transaction Codes, based on multiple conditions to determine loss transactions. The query was developed as a Microsoft Access SQL command and would need to be revised for other database systems.

```
SELECT
        [Officer Transaction March 2004].[RCC Reserve Component Category Designators],
        [Officer Transaction March 2004].[Transaction Codes]

FROM
        [Officer Transaction March 2004]

WHERE
        ((([Officer Transaction March 2004].[RCC Reserve Component Category Designators])="p")
        AND (([Officer Transaction March 2004].[Transaction Codes]) Like "n*"
        Or ([Officer Transaction March 2004].[Transaction Codes])="tc"
        Or ([Officer Transaction March 2004].[Transaction Codes])="tb"
        Or ([Officer Transaction March 2004].[Transaction Codes])="td"
        Or ([Officer Transaction March 2004].[Transaction Codes])="te"
        Or ([Officer Transaction March 2004].[Transaction Codes])="tg"
        Or ([Officer Transaction March 2004].[Transaction Codes])="th"
        Or ([Officer Transaction March 2004].[Transaction Codes])="tj"
        Or ([Officer Transaction March 2004].[Transaction Codes])="tk"
        Or ([Officer Transaction March 2004].[Transaction Codes])="p1"
        Or ([Officer Transaction March 2004].[Transaction Codes])="p2"))

        OR ((([Officer Transaction March 2004].[RCC Reserve Component Category Designators])="r")
        AND (([Officer Transaction March 2004].[Transaction Codes])="tc"
        Or ([Officer Transaction March 2004].[Transaction Codes])="tb"
        Or ([Officer Transaction March 2004].[Transaction Codes])="td"
        Or ([Officer Transaction March 2004].[Transaction Codes])="te"
        Or ([Officer Transaction March 2004].[Transaction Codes])="tg"
        Or ([Officer Transaction March 2004].[Transaction Codes])="th"
        Or ([Officer Transaction March 2004].[Transaction Codes])="tj"
        Or ([Officer Transaction March 2004].[Transaction Codes])="tk"
        Or ([Officer Transaction March 2004].[Transaction Codes]) Like "n*"
        Or ([Officer Transaction March 2004].[Transaction Codes])="p1"
        Or ([Officer Transaction March 2004].[Transaction Codes])="p2"))

        OR ((([Officer Transaction March 2004].[RCC Reserve Component Category Designators])="s")
        AND (([Officer Transaction March 2004].[Transaction Codes])="tc"
        Or ([Officer Transaction March 2004].[Transaction Codes])="tb"
        Or ([Officer Transaction March 2004].[Transaction Codes])="td"
        Or ([Officer Transaction March 2004].[Transaction Codes])="te"
        Or ([Officer Transaction March 2004].[Transaction Codes])="tg"
        Or ([Officer Transaction March 2004].[Transaction Codes])="th"
        Or ([Officer Transaction March 2004].[Transaction Codes])="tj"
        Or ([Officer Transaction March 2004].[Transaction Codes])="tk"
        Or ([Officer Transaction March 2004].[Transaction Codes]) Like "n*"
        Or ([Officer Transaction March 2004].[Transaction Codes])="l0"
        Or ([Officer Transaction March 2004].[Transaction Codes])="l1"
```

```
 Or ([Officer Transaction March 2004].[Transaction Codes])="l2"
Or ([Officer Transaction March 2004].[Transaction Codes])="l3"
Or ([Officer Transaction March 2004].[Transaction Codes])="l7"
Or ([Officer Transaction March 2004].[Transaction Codes])="l8"
Or ([Officer Transaction March 2004].[Transaction Codes])="p1"
Or ([Officer Transaction March 2004].[Transaction Codes])="p2"))

OR ((([Officer Transaction March 2004].[RCC Reserve Component Category Designators])="t")
AND (([Officer Transaction March 2004].[Transaction Codes])="tc"
Or ([Officer Transaction March 2004].[Transaction Codes])="tb"
Or ([Officer Transaction March 2004].[Transaction Codes])="td"
Or ([Officer Transaction March 2004].[Transaction Codes])="te"
Or ([Officer Transaction March 2004].[Transaction Codes])="tg"
Or ([Officer Transaction March 2004].[Transaction Codes])="th"
Or ([Officer Transaction March 2004].[Transaction Codes])="tj"
Or ([Officer Transaction March 2004].[Transaction Codes])="tk"
Or ([Officer Transaction March 2004].[Transaction Codes]) Like "n*"
Or ([Officer Transaction March 2004].[Transaction Codes])="l0"
Or ([Officer Transaction March 2004].[Transaction Codes])="l1"
Or ([Officer Transaction March 2004].[Transaction Codes])="l2"
Or ([Officer Transaction March 2004].[Transaction Codes])="l3"
Or ([Officer Transaction March 2004].[Transaction Codes])="l7"
Or ([Officer Transaction March 2004].[Transaction Codes])="l8"
Or ([Officer Transaction March 2004].[Transaction Codes])="p1"
Or ([Officer Transaction March 2004].[Transaction Codes])="p2"))

OR ((([Officer Transaction March 2004].[RCC Reserve Component Category Designators])="u")
AND (([Officer Transaction March 2004].[Transaction Codes])="tc"
Or ([Officer Transaction March 2004].[Transaction Codes])="tb"
Or ([Officer Transaction March 2004].[Transaction Codes])="td"
Or ([Officer Transaction March 2004].[Transaction Codes])="te"
Or ([Officer Transaction March 2004].[Transaction Codes])="tg"
Or ([Officer Transaction March 2004].[Transaction Codes])="th"
Or ([Officer Transaction March 2004].[Transaction Codes])="tj"
Or ([Officer Transaction March 2004].[Transaction Codes])="tk"
Or ([Officer Transaction March 2004].[Transaction Codes]) Like "n*"
Or ([Officer Transaction March 2004].[Transaction Codes])="l0"
Or ([Officer Transaction March 2004].[Transaction Codes])="l1"
Or ([Officer Transaction March 2004].[Transaction Codes])="l2"
Or ([Officer Transaction March 2004].[Transaction Codes])="l3"
Or ([Officer Transaction March 2004].[Transaction Codes])="l7"
Or ([Officer Transaction March 2004].[Transaction Codes])="l8"
Or ([Officer Transaction March 2004].[Transaction Codes])="p1"
Or ([Officer Transaction March 2004].[Transaction Codes])="p2"))

OR ((([Officer Transaction March 2004].[RCC Reserve Component Category Designators])="v")
AND (([Officer Transaction March 2004].[Transaction Codes]) Like "n*"
Or ([Officer Transaction March 2004].[Transaction Codes])="tc"
Or ([Officer Transaction March 2004].[Transaction Codes])="tb"
Or ([Officer Transaction March 2004].[Transaction Codes])="td"
Or ([Officer Transaction March 2004].[Transaction Codes])="te"
Or ([Officer Transaction March 2004].[Transaction Codes])="tg"
Or ([Officer Transaction March 2004].[Transaction Codes])="th"
Or ([Officer Transaction March 2004].[Transaction Codes])="tj"
Or ([Officer Transaction March 2004].[Transaction Codes])="tk"
Or ([Officer Transaction March 2004].[Transaction Codes])="p1"
```

```
Or ([Officer Transaction March 2004].[Transaction Codes])="p2"))

OR ((([Officer Transaction March 2004].[RCC Reserve Component Category Designators])="y")
AND (([Officer Transaction March 2004].[Transaction Codes]) Like "n*"
Or ([Officer Transaction March 2004].[Transaction Codes])="tc"
Or ([Officer Transaction March 2004].[Transaction Codes])="tb"
Or ([Officer Transaction March 2004].[Transaction Codes])="td"
Or ([Officer Transaction March 2004].[Transaction Codes])="te"
Or ([Officer Transaction March 2004].[Transaction Codes])="tg"
Or ([Officer Transaction March 2004].[Transaction Codes])="th"
Or ([Officer Transaction March 2004].[Transaction Codes])="tj"
Or ([Officer Transaction March 2004].[Transaction Codes])="tk"
Or ([Officer Transaction March 2004].[Transaction Codes])="p1"
Or ([Officer Transaction March 2004].[Transaction Codes])="p2"));
```

Sample Monthly Gains Transactions – Query

This query references the Reserve Officer monthly transaction file (RCCPDS) for October 2003. It selects the Reserve Category, Reserve Training and Retirement Designators (Sub-category) and Transaction Codes, based on multiple conditions to determine gain transactions. The query was developed as a Microsoft Access SQL command and would need to be revised for other database systems.

```
SELECT
    [Officer Transaction October 2003].[RCC Reserve Component Category Designators],
    [Officer Transaction October 2003].[RCC Training and Retirement Designators],
    [Officer Transaction October 2003].[Transaction Codes]

FROM
    [Officer Transaction October 2003]

WHERE
    ((([Officer Transaction October 2003].[RCC Reserve Component Category
        Designators])="s"
    Or ([Officer Transaction October 2003].[RCC Reserve Component Category
        Designators])="t"
    Or ([Officer Transaction October 2003].[RCC Reserve Component Category
        Designators])="u")
    AND (([Officer Transaction October 2003].[RCC Training and Retirement
        Designators])<>"g")
    AND (([Officer Transaction October 2003].[Transaction Codes]) Like "g*"
    Or ([Officer Transaction October 2003].[Transaction Codes])="t1"
    Or ([Officer Transaction October 2003].[Transaction Codes])="tl"
    Or ([Officer Transaction October 2003].[Transaction Codes])="tm"
    Or ([Officer Transaction October 2003].[Transaction Codes])="tq"
    Or ([Officer Transaction October 2003].[Transaction Codes])="tr"
    Or ([Officer Transaction October 2003].[Transaction Codes])="tu"
    Or ([Officer Transaction October 2003].[Transaction Codes])="tv"
    Or ([Officer Transaction October 2003].[Transaction Codes])="tz"
    Or ([Officer Transaction October 2003].[Transaction Codes])="m1"
    Or ([Officer Transaction October 2003].[Transaction Codes])="m2"));
```

Appendix E:
Acronyms List

Acronym	Description
ACCPDS	Active Component Common Personnel Data System
AGR	Active Guard/Reserve
BUPERS	Bureau of Naval Personnel
CNRFC	Commander Navy Reserve Forces Command
DFAS	Defense Finance and Accounting System
DMDC	Defense Manpower Data Center
FTS	Full-time Support (formally TARS – Temporary Active Reserve status)
GDS	Global Database System
IEMF/IOMF	Inactive Enlisted/Officer Master File
IMAPMIS	Inactive Manpower and Personnel Management Information System
IRR	Individual Ready Reserve
NEOPS	Navy Enlisted Officer Participation System
NETC	Navy Education and Training Center
NPC	Navy Personnel Command
NPRST	Navy Personnel Research Studies and Technology Department
NRF	Naval Reserve Force
NRC	Navy Reserve Center
NRPC	Navy Reserve Personnel Command
PSD	Personnel Services Detachment
RHS	Reserve Headquarters System
RCCPDS	Reserve Components Common Personnel Data System
SPAWAR	Space and Warfare Systems Center
SELRES	Selected Reserve
WOLF	With-in Year Loss Forecasting Model (Officer Inventory Projection Model)

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