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Statistical Methodology Report

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1999 SURVEY OF SPOUSES OF ACTIVE DUTY PERSONNEL: STATISTICAL METHODOLOGY REPORT

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1999 SURVEY OF SPOUSES OF ACTIVE DUTY PERSONNEL: STATISTICAL METHODOLOGY REPORT

Executive Summary

This report describes the sampling design, sample selection, estimation procedures, and the missing data compensation procedures used for the 1999 Survey of Spouses of Active Duty Personnel. Together with the 1999 Survey of Active Duty Personnel, these surveys are referred to as the 1999 Active Duty Surveys (ADS) Forms B and A, respectively. The spouse questionnaire is referred to as Form B or spouse survey while the member questionnaire is referred to as Form A or member survey. The first section of this report presents a general overview of the survey and the sampling design. Subsequent sections provide information on the statistical methods used in weighting and variance estimation. Several types of response rates were calculated and are described in the last section of the report.

The population of inferential interest for Form B included spouses of all active-duty Army, Navy, Marine Corps, Air Force, and Coast Guard members (including Reservists on active duty) below the rank of admiral or general, with at least nine months of active duty at the time of survey mailings. The sample frame included only those married members who were on active duty in May 1999, with eligibility conditional on also being on active duty in November 1999. Note that a member married to another member would be eligible for the spouse survey depending on their spouse's military status, not their own. Samples were not drawn so that member and spouse surveys were sent to a couple.

The purpose of the Form B survey was to collect information on current location, spouse's military assignments, military life, programs and services, employment, family information, economic issues, and background information of both members of the services and their spouses. A sample of married members was selected from the Defense Manpower Data Center's (DMDC's) May 1999 Active Duty Master File (ADMF) and Reserve Components Common Personnel Data System (RCCPDS).

Weighting of the spouse survey involved several stages that took into account the sample design and the response rates that were achieved in the survey. These steps were also used for the member survey and were:

- Calculation of base weights
- Adjustments for unknown eligibility
- Adjustments for nonresponse among eligible sample persons
- Poststratification to counts of persons at the beginning of the data collection period.

The spouse survey was a stratified simple random sample of persons. The first step in weighting was to compute a base weight, which was the inverse of the selection probability for each sampled person. Since the eligibility of some persons could not be determined due to

nonresponse, an adjustment was made to apportion the weights of the unknowns among the other persons in the sample. The third step above adjusted the weights of eligible respondents to account for the eligibles who did not respond. The final step in weighting was to poststratify weights to frame counts made for the beginning of the data collection period. The poststratification step compensates for some changes in the population that occur between the time of sample selection and data collection.

Response rates for the ADS were computed in accordance with the standards defined by the Council of American Survey Research Organizations (CASRO). The response rates for the full sample and for subgroups and how they were computed are described in the last section of this report.

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1999 SURVEY OF SPOUSES OF ACTIVE DUTY PERSONNEL: STATISTICAL METHODOLOGY REPORT

INTRODUCTION

Barbara J. George and Laverne C. Wright
Defense Manpower Data Center

The 1999 Active Duty Surveys (ADS) continues a line of research begun in 1969 with a series of small-scale surveys administered approximately every two years. These surveys were expanded in 1978 to provide policymakers with information about the total population directly involved with active duty military life (Doering, Grissmer, Hawes, and Hutzler, 1981). The Department of Defense (DoD) also conducted large-scale active-duty surveys in 1985 (Hunt et al., 1986) and 1992 (Westat, 1993, 1994a, 1994b). The 1999 ADS are a set of mail surveys sponsored by the Office of the Assistant Secretary of Defense for Force Management Policy (OASD[FMP]) with particular interest in analysis by the Offices of the Deputy Assistant Secretaries of Defense for Military Community and Family Policy (ODASD[MCFP]) and for Military Personnel Policy (ODASD[MPP]).

There are two 1999 ADS instruments: the 1999 Survey of Active Duty Personnel (Form A), and the 1999 Survey of Spouses of Active Duty Personnel (Form B). The first section of this report documents sample construction and allocation for Form B. Subsequent sections provide information on the statistical methods used in weighting and variance estimation for the same form. The Form A survey of members is documented by Wright, George, Flores-Cervantes, Valliant, and Elig (2000).

In formulating policy, the DoD relies on both administrative data and survey data. The administrative data contain personnel-related information collected from individuals, or maintained about them. These data are largely automated and readily available for policy research and formulation purposes (e.g., to determine amounts of military compensation, eligibility for various forms of health and program benefits, and performance assessments) (LaVange et al., 1986).

Survey data can be used to supplement administrative data, as well as to address issues that cannot be studied from the administrative data. Especially when collected periodically, these data can serve as a basis for assessing the response of military personnel to policy changes and for identifying areas for future policy action.

DMDC has performed military personnel surveys of active-duty personnel approximately every seven years since 1978. In 1985, it began fielding a spouse questionnaire in addition to the member form. These earlier surveys allowed policy makers to view trends in high-interest areas. Information from previous surveys illustrate the wide variety of uses found for active-duty survey data. For example, previous surveys have been used to study: the effects of Operation Desert Shield/Desert Storm on the family, how attitudes on the military way of life change over time, the effect of separation and deployment on the family, and how military couples deal with

military life. Information from the earlier surveys was used in congressional reports (on topics such as military members qualifying for food stamps) and data have been used extensively by the Quadrennial Reviews of Military Compensation.

SAMPLING DESIGN FOR THE 1999 SURVEY OF SPOUSES OF ACTIVE DUTY PERSONNEL

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This section of the report describes:

- the inferential requirements for the survey including the population definition, key reporting domains or subpopulations defined within the overall population, and the precision requirements imposed on sample estimates of parameters describing the key domains;
- the construction and stratification of the sampling frame;
- the procedure followed to determine the sample size and allocation; and
- selection of the sample.

A distinction is made between *sample size* and *number of observations*. Sample size refers to the number of persons selected into the sample. Sample sizes are determined to provide a specified number of observations given the anticipated eligibility and response rates for the survey. The sample is the group of persons to whom a questionnaire is to be administered. Number of observations, on the other hand, refers to the number of persons eligible to participate in the survey who returned a questionnaire with key items completed.

A distinction is also made between *strata* and *domains*. Stratification is a feature of the sampling design, used to control the distribution of the sample. Strata partition the inferential population in the mathematical sense. That is, each individual in the population is classified into only one stratum, and the set of all strata includes the entire population. By contrast, a single individual can simultaneously belong to one or more domains. The set of domains, as a consequence, does not partition the population and is itself arbitrary, depending largely on the interests of the investigators analyzing the data. *Key domains* are identified in advance of the survey to provide the basis for determining the sample size and allocation.

Overview of the Sampling Design

A stratified random sampling design was used. Source information for constructing the sampling frame and identifying key domains consisted of a computer accessible file totaling 1,419,269 records. The file contained member information extracted from two DMDC person-level files: the May 1999 ADMF and RCCPDS. Stratum level sample sizes were determined by variance constraints imposed on key parameter estimates of the proportion of persons belonging to specified domains.

Unlike the 1985 and 1992 surveys, samples were not drawn so that a member and spouse survey was sent to a couple. Within each stratum that did not involve active duty members

married to other active duty members, persons were sampled with equal conditional probabilities, and without replacement. For strata that involved active duty members married to other active duty members, the intent was to exclude records such that a person could not be selected for both the Form A and Form B surveys. Instead, in the strata of joint-service couples, the computer program excluded a person from being selected to get a Form B (spouse) survey if their spouse had been selected to get a Form A (member) survey[1]. Otherwise, within the joint-service strata, persons were sampled with equal conditional probabilities, and without replacement.

Inferential Requirements

The inferential requirements for a survey are described in terms of

- a fully operational definition of the population of inferential interest (i.e., the target population),
- key parameters used in developing the design, and
- the precision requirements for the survey, stated in terms of the maximum values of the variances to be associated with the sample estimates of the key parameters.

The population definition identifies all individuals for whom conclusions are to be reached or about whom inferences are to be made based on the survey data. The definition generally includes a spatial and a temporal component.

Key parameters used as the basis for the design may be defined in terms of characteristics of the overall population, characteristics of subpopulations of special interest (key domains), tests of hypotheses (including standardized comparisons), and the relations that exist at population levels among specified observation variables. For this survey, the key parameters were prevalence rates, defined as the proportion of persons belonging to specified domains who would report having the various attitudes and experiences measured on the survey.

The precision requirements were defined in terms of the maximum *confidence interval half-widths* to be associated with a priori estimates of 50% prevalence rates.

Population Definition

The population of inferential interest for the ADS Form B consisted of the spouses of all married active duty in the Army, Navy, Marine Corps, Air Force, and Coast Guard members (including Reservists on active duty) below the rank of admiral or general, with at least nine months of service at the time of survey mailings. Note that a Service member married to another Service member would be eligible for the survey depending on their spouses status, not their own. The sample frame included only members who were on active duty in May 1999. The

[1] The consequent is: 1) for households where neither person had received Form A, either could receive Form B, 2) for households where only one person had received Form A, the same person might have received Form B—the other person was not a candidate, and 3) for households where both persons got Form A, neither was a candidate for Form B.

sample for the ADS spouse survey consisted of 38,901 individuals, of whom 31,817 were ultimately determined to be eligible members of the target population, with eligibility conditional on them being married to the member who also was on active duty in November 1999.

Key Reporting Domains

The factors used to define the key reporting domains are listed in Table 1. An initial set of candidate domains was generated by considering various combinations of, and crosses among, the factors listed in the table. Because the domain sizes interact with the precision requirements imposed on the domain prevalence estimates to determine the overall sample size and allocation, several iterations were required to develop domain definitions consistent with the objectives of the survey and the resources available to carry out the survey.

Precision Requirements

In general, precision requirements are specified as the maximum values of the sampling variances to be associated with parameters estimates for key domains. Both the values of the parameters and the values of the variances are needed to complete the specification. The sampling variances are functions of the sample size, the distribution of the sample, population variances, and design constants. The parameter values used for the design are the prevalences listed in Appendix A in Table A-1. As is the case with the domain sizes, the values of the prevalence rates chosen to provide the basis for the precision requirements influence the size and cost of the survey.

The maximum values of the variances to be associated with the sample estimates of the prevalence rates were, for this survey, specified in the form of confidence interval half-widths. Both the cost implications and the objectives of the survey were considered in specifying these values. On the one hand, the intervals had to be small enough to provide an informative study. On the other hand, they could not be so restrictive as to be unaffordable. Table A-1 lists the half-width intervals together with the domain definitions, domain sizes, and prevalence rates.

Table 1.
Factors Defining Key Reporting Domains

Variable	Categories
Service*	• Army • Navy • Marine Corps • Air Force • Coast Guard
Gender of Member*	• Male • Female • Unknown
Paygrade (Not collapsed)	• E1 • ” • “ • E9 • W1 • ” • “ • W5 • O1 • ” • “ • O6 • Unknown Enlisted • Unknown Warrant Officers • Unknown Commissioned Officers
Paygrade Group 1*	• E1-E3 • E4 • E5-E6 • E7-E9 • W1-W5 • O1-O3 • O4-O6 • Unknown (Unknown Warrant and Commissioned Officers , Unknown Enlisted)
Paygrade Group 2	• Enlisted (E1-E9) • Warrant Officers (W1-W5) • Commissioned Officers (O1-O6) • Unknown (Unknown Warrant and Commissioned Officers, Unknown Enlisted)

Note: Factors defining key reporting domains were based on member’s administrative records.

Table 1. ***(continued)***

Variable	Categories
Paygrade Group 3*	• E1-E3 • E4-E5 • E6-E9 • W1-W5 • O1-O3 • O4-O6 • Unknown (Unknown Warrant and Commissioned Officers , Unknown Enlisted)
Location	• US • US territories • Overseas, afloat at sea, or other locations not listed • Unknown
Regions	• US & US territories • Europe • Asia & Pacific Islands • Other • Unknown
CONUS*	• CONUS (all 48 contiguous states and the District of Columbia) • OCONUS (non contiguous states, territories and countries) • Unknown
Enlisted Occupation Area	• In the range of 0-9
Enlisted Occupation Group	• In the range of 01-95
Officer Occupation Area	• In the range of 1-9
Officer Occupation Group	• In the range of 101-905
Pilot/Navigator (rated)	• Pilot/Nav (rated) • Other
Race/Ethnic Category 1	• (Non-Hispanic) White • (Non-Hispanic) Black • Hispanic • Native American & Alaskan Native • Asian & Pacific Islander • Other • Unknown
Race/Ethnic Category 2	• Non-Hispanic White (non-minority) • Other (minority) • Unknown

Note: Factors defining key reporting domains were based on member's administrative records.

Table 1. ***(continued)***

Variable	Categories
Marriage category for sampling*	• Married to civilian or other non-joint service member • Active joint service member (member married to active duty member or AGR member) • Unknown
Living on or off base (BAQ variable)	• Living on-base (not receiving BAQ) with dependents • Living on-base (not receiving BAQ) without dependents • Living off-base (receiving BAQ) with dependents • Living off-base (receiving BAQ) without dependents • Unknown
Component*	• Active Duty • AGR(National Guard/Reserve)
Single parent	• Single and has a child or children • Other

Note: Factors defining key reporting domains were based on member's administrative records.

* Sampling variables similar to 1992 sample design except that officer/enlisted status used.

Sampling Frame Construction and Stratification

A distinction is made between *dimensions of stratification* and *levels of stratification*. The dimensions are the variables used to stratify the sample/population whereas the levels are the values present within a dimension. The following set of variables were used to define strata for the spouse sample:

- Service of the member: Army, Navy, Marine Corps, Air Force, and Coast Guard
- Marital status of the member: Married non-joint (i.e., the member was married to a non-military spouse) and Joint Service married (i.e., both the member and spouse were in the military)
- Paygrade of the member: Enlisted E1-E3, E4, E5-E6, E7-E9, warrant officers W1-W5, and commissioned officers O1-O3, and O4-O6
- Gender of member: male and female
- Location: Inside the continental US (CONUS) versus outside of the continental US (OCONUS). Outside of the US includes all other countries and United States Territories
- Unknown stratum: All individuals for whom one or more variables of the above stratum variables were missing

Preliminary Stratification

As a starting point, a candidate set of strata was constructed by crossing all of the levels of the stratification variables, yielding 281 potential strata. Note that 6 combinations do not exist because there are no warrant officers in the Air Force.

The next step was to consider the minimum stratum size consistent with a total sample size of 40,000. The figure of 40,000 people was the originally targeted sample size for the spouse survey. If unbiased variances for linear statistics are to be a design requirement, then a minimum of two observations is needed in any stratum. However, if a stratum is too small, then insisting on at least two observations from that stratum introduces an unequal weighting effect that acts to increase variances for no reason other than the stratum is simply too small. Even if only a few strata are too small, the cumulative unequal weighting effects can compromise any variance advantage associated with having stratified in the first place.

This consideration lead to defining "too small" in terms of a proportional allocation of the total sample. A proportional allocation of the sample cannot, by definition, introduce unequal weighting effects. Given a proportional allocation and a minimum requirement of two observations per stratum, the minimum stratum size was computed as,

$$\min\{N_h\} = \frac{2N}{n},$$

where,

N_h = the size of the h - th stratum,
N = the size of the population, and,
n = the total size of the sample.

For N = 823,685 and $n = 40{,}000$, a minimum stratum size of $\min\{N_h\} = 47$ was indicated.

The decisions about which strata to collapse were based on identifying the candidate stratification dimensions with consistent patterns of deficient strata and on a consideration of the relative importance of specific candidate stratification dimensions to the surveys. Specific levels that were collapsed were:

- Within members not married to other members, CONUS and OCONUS locations were collapsed in four cases for the Marine Corps and gender was collapsed in two cases for the Navy. Male and female also had to be collapsed in one case and CONUS and OCONUS in three cases for the Coast Guard.

- Within members married to other members on active duty, CONUS and OCONUS was collapsed in one case for the Army and O1-O3 was collapsed with WO1-WO5 in one case for the Navy. CONUS and OCONUS were collapsed in four cases for the Marine Corps, with gender also collapsed in one case. CONUS and OCONUS were collapsed in nine cases for the Coast Guard, with gender also collapsed in two cases.

Final Strata Definitions

The final strata definitions are listed in Appendix A, Table A-2. A total of 227 strata were constructed. The "unknown" stratum (stratum 227 in Table A-2) contains persons for whom one or more of the stratum dimensions was missing from the source information.

Sample Size and Allocation

After the strata were constructed, domains and their associated precision constraints were defined. Precision requirements were set for selected domains to allow in-depth analysis for the overall active-duty population and some depth of analysis for other domains. More specifically, the survey precision requirements were set for domains that would facilitate analyses. Special attention was given to allow for Service-level analyses.

After the strata were constructed, the total sample size and its allocation to the sampling strata were determined. The DMDC Sampling tool (Kavee & Mason, 1997) was used to allocate the sample so that the precision requirements are met for the different reporting domains. This software is designed to produce optimal sample designs for stratified, equal probability samples for a specified cost model. The cost model used is the same as described by Wheeless, Mason, and Kavee (1997). Within each stratum, units on the frame were sorted in a random order and the first n_h were selected for the sample where n_h was the sample size allocated to the stratum.

WEIGHTING DOCUMENTATION FOR THE 1999 SURVEY OF SPOUSES OF ACTIVE DUTY PERSONNEL

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Assigning Disposition Codes for the 1999 Survey of Spouses of Active Duty Personnel

Each person in the Form B survey was assigned a disposition code indicating whether the person was an eligible respondent (*ER*), an eligible nonrespondent (*ENR*), an ineligible (*IN*), or a person whose status was unknown (*UNK*). These codes were a key input in weighting and in computation of response rates, discussed in later sections. Assigning eligibility codes involved matching the sample against an updated frame created for November 1999, examining survey control codes created as part of data collection, and accounting for information provided by each sample person or a proxy at the time of data collection.

The assignment of disposition codes was a sequential process. Six variables were defined.

- MATCH: whether the member to whom a sample spouse was married was contained in the updated frame file for November 1999
- PROMO: whether the married member had been promoted to paygrade O7 according to the November 1999 frame file
- FMARST: whether the member associated with the sample spouse was shown as married, unmarried, or unknown marital status on the November 1999 frame file
- FLAG_FIN: Survey Control System Disposition code
- SR_E: Self-reported eligibility based on questions Q15 (active duty) and Q64 (marital status)
- QCOMP: Completed questionnaire indicator based on questions Q35 (satisfaction with spouse's job) and Q38 (use of programs and services)

Each sampled spouse's eligibility was determined. For an eligible spouse, the questionnaire was determined to be complete or incomplete. The remainder of the sample was classified as either ineligible or eligibility unknown. The following sections describe in detail the variables that were created to make the eligibility determinations. The flowchart in Figure 1 shows the order in which the variables were applied.

Frame Eligibility

An updated frame file was obtained from DMDC for November 1999 (beginning of the data collection period). This frame was constructed in the same way as the May 1999 frame from which the sample was selected. To be eligible for the survey, a spouse had to have been eligible in both May 1999 and November 1999.

The May sample was matched against the November frame file. Although Form B is a survey of spouses, this is a match of military service members at the two time periods. A member was eligible in May might have become ineligible by November for any of several reasons:

- The member may have left the service.
- The member may have been promoted into an ineligible paygrade.
- The member may have become divorced, widowed, or separated.

The November frame constructed by DMDC included divorced, widowed, and separated service members and officers of grade O7 so that we were able to identify members whose marital and/or pay status had changed since May 1999. Three variables that related to frame eligibility were created for each person in the May sample:

- MATCH
  - 0 if the member was in the May 1999 sample but not in the November 1999 frame
  - 1 if the member was in the May sample and the November frame
- PROMO:
  - 0 if the member was in the May sample and the member's paygrade was not Commissioned Officer, O7 in the updated frame
  - 1 if the member was in the May sample and the member's paygrade was Commissioned Officer, O7 in the updated frame
- FMARST:
  - 1 if the member was shown as married on the November frame
  - 2 if unmarried
  - 3 if marital status was unknown.

Summary counts of the matching results are shown in Table 2. The sample cases in the last three rows of the table were coded as ineligible.

Survey Control System Disposition

The Survey Control System includes a code (FLAG_FIN) with the disposition codes of each mailed survey as determined during data collection. During data collection, returned questionnaires receive codes based on whether they were considered to be eligible respondents,

eligible nonrespondents, ineligibles, or unknowns. Table 3 gives the count and description for each value of FLAG_FIN.

Self-Reported Eligibility

Questions 15 and 64 (variables S9915 and SRMARST) were used to determine self-reported eligibility. Questions 15 and 64 are:

"15. Is your spouse currently serving on active duty and/or in the Guard/Reserve?"
"64. What is your marital status?"

The spouse had to answer "yes" to question 15 and "now married" to question 64 in order to be eligible. Anyone who returned a survey but did not answer both questions 15 and 64 was coded as unknown eligibility. This procedure is similar to the one used in the Form A survey. Table 4 lists sample counts for the variable SR_E.

Table 2.
Sample Counts based on Matching the November 1999 Frame with the May 1999 Sample

Match	Promo	FMARST	Frequency	Percent
0	0	Missing	2,978	7.7
1	0	1	35,359	90.9
1	0	2	482	1.2
1	0	3	81	0.2
1	1	1	1	0.0

Table 3.
Description of the Survey Control System Disposition Code (FLAG_FIN)

FLAG_FIN	Description	Frequency	Percent
1	Returned survey	18,802	48.3
2	Returned survey (member deceased)	1	0.0
4	Returned survey (divorced/separated/widowed)	9	0.0
5	Blank (member deceased)	5	0.0
7	Blank(member left military)	414	1.1
8	Blank(no reason)	68	0.2
9	Not returned (no reason)	18,425	47.4
10	Not returned (member deceased)	13	0.0
11	Not returned (member permanent ill)	2	0.0
12	Not returned (active)	10	0.0
13	Not returned (other reason)	250	0.6
14	Postal non-delivery PND (member not at address)	253	0.7
15	Postal non-delivery PND (invalid last address)	645	1.7
17	Not at address	4	0.0
	Total	38,901	100.0

Table 4.
Self-Reported Eligibility

Self-Reported Eligibility SR_E	Question 64 (Marital Status)		Question 15 (Active Duty Status)	Frequency	Percent
Eligible	1. Now married	*and*	1. Yes, serving on active duty 2. Yes, member of the Guard/Reserve in a full-time active duty program 3. Yes, other type of Guard/Reserve	16,537	42.5
Ineligible	2. Separated 3. Divorced 4. Widowed	*or*	4. No, not on Active Duty or Guard/Reserve	1,873	4.8
Unknown	Missing or multiple responses	*or*	Missing or multiple responses	889	2.3
Not applicable	Blank	*and*	Blank	19,602	50.4

Completed Questionnaire

A questionnaire was considered complete if the spouse answered at least one item in each of the following questions:

(a) Question 35, "How satisfied are you with each of the following aspects of your spouse's military job?" and

(b) Question 38, "On average during a month, how often do you and/or your family members (child, children, or other legal dependents) use the following on base programs, facilities, or services and civilian off base programs, facilities, or services?

To create the indicator for a completed questionnaire, we created the intermediate variables CQ35 (completed question 35 indicator), and CQ38 (completed question 38 indicator). The variables CQ35 and CQ38 indicate whether or not a spouse answered at least one item of questions 35 and 38. The values of CQ35 are shown in Table 5.

The values of CQ38 are defined similarly. The variable defining whether a questionnaire is complete is QCOMP with values as indicated in Tables 6 and 7.

Table 5.
Question 35 Indicator (CQ35)

CQ35	Description
0	No survey return
1	Spouse answered at least one item in Q35
2	Otherwise

Table 6.
Sample Counts for the Variable Defining Whether or Not a Questionnaire Was Complete (Variable QCOMP)

QCOMP	Condition	Description	Frequency	Percent
0	If CQ35=0 and CQ38=0	No survey return	19,602	50.4
1	If CQ35=1 and CQ35=1	Completed questionnaire	18,419	47.3
2	Otherwise	Incomplete questionnaire	880	2.3

Table 7.
Sample Counts for the Key Questions Used to Determine Whether or Not a Questionnaire Was Complete

QCOMP	CQ35	CQ38	Frequency	Percent
0	0	0	19,602	50.4
1	1	1	18,419	47.3
2	1	2	112	0.3
2	2	1	44	0.1
2	2	2	724	1.9

Disposition Codes

The method of assigning final disposition codes was a sequential process using the variables described in the previous sections. Once the codes were assigned, each combination was checked for inconsistencies.

Table 8 lists the various combinations of MATCH, PROMO, FMARST, FLAG_FIN, SR_E, and QCOMP that occurred in the Form B sample and the number of sample spouses for each. Based on these variables, a new variable denoted as ELIG was created with categories

1. Eligible respondent (*ER*),
2. Eligible nonrespondent (*ENR*),
3. Ineligible (*IN1*) based on self or proxy reports,

4. Ineligible (*IN2*) if member was not on the November 1999 frame or if member was on November frame as unmarried,

5. Ineligible (*IN3*) if member was on the November 1999 frame with paygrade O7, i.e., promoted out of eligibility, or

6. Unknown (*UNK*).

Figure 1 is a flowchart showing the sequence of steps used in assigning ELIG to each sample case. Note, in particular, that whether a member had been promoted out of eligibility for the survey was ascertained at the beginning of the process of assigning disposition codes. This was simpler than in the Form A survey where an updated frame was available only after dispositions had been assigned. This resulted in some complications in weighting for the member survey that were avoided for the spouse survey.

Table 8 lists the counts of cases for each combination of the variables used for determining eligibility. The ELIG variable was derived from the others as specified in the Figure 1 flowchart. Note that a large number—16,021—of cases were coded as having unknown eligibility (UNK) even though all of those cases were on the November frame (MATCH=1), were shown as married on the frame (FMARST=1), and the associated member had not been promoted (PROMO=0). This convention has been used in other DMDC surveys, including the member survey, and is designed to allow for the possibility that the updated frame is out-of-date for some members of the military.

Note that in rows 3 and 4 of Table 8 there are three cases that would have been classified as ineligibles, based on the value of FLAG_FIN, using the rules in Figure 1. However, these persons had QCOMP = 1 and were determined to have been eligible at the time they completed the questionnaire. Based on discussion with DMDC, we reclassified these cases as eligibles.

Figure 1.
Flowchart for the Assignment of Form B Disposition or Eligibility Codes (ELIG)

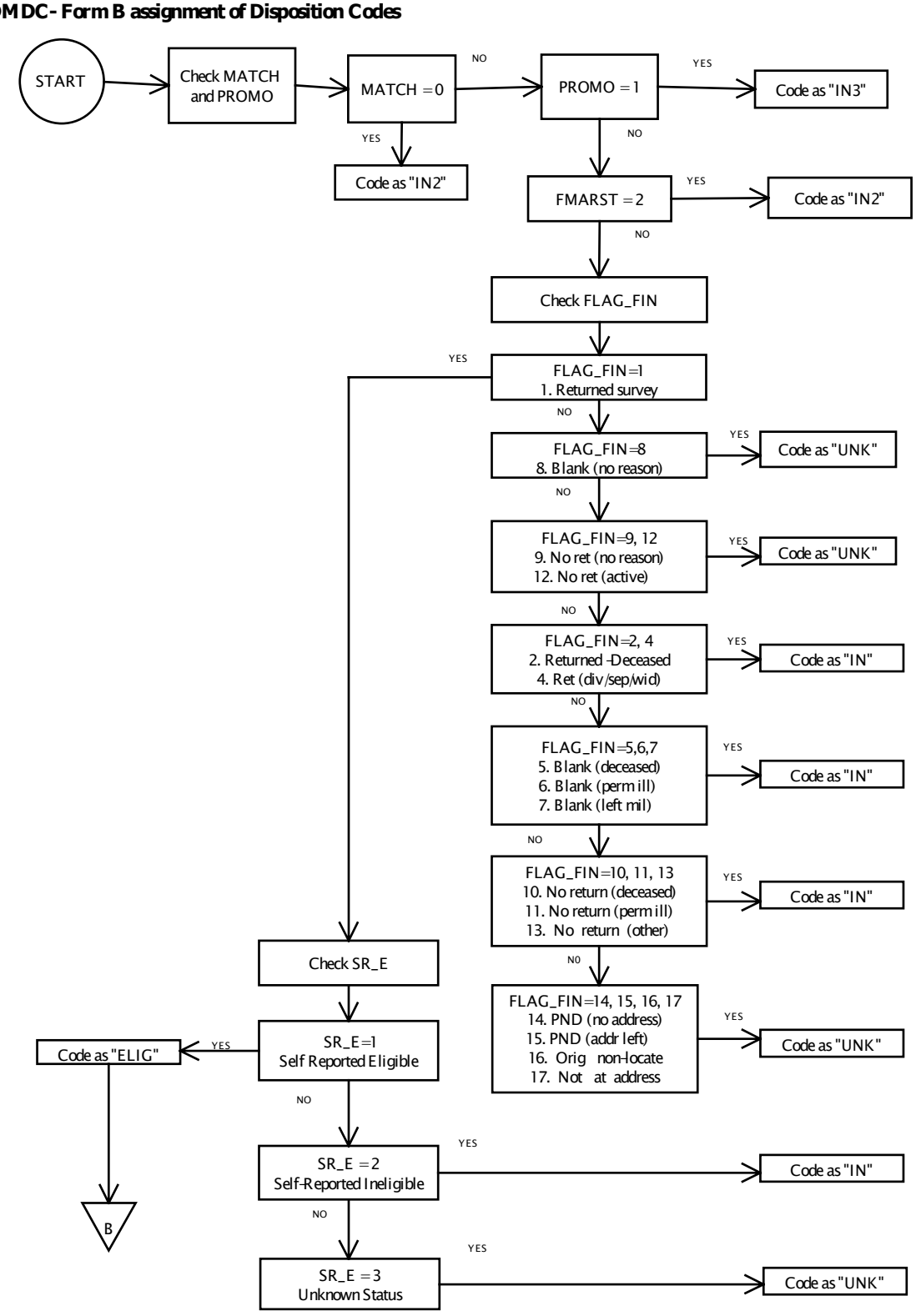
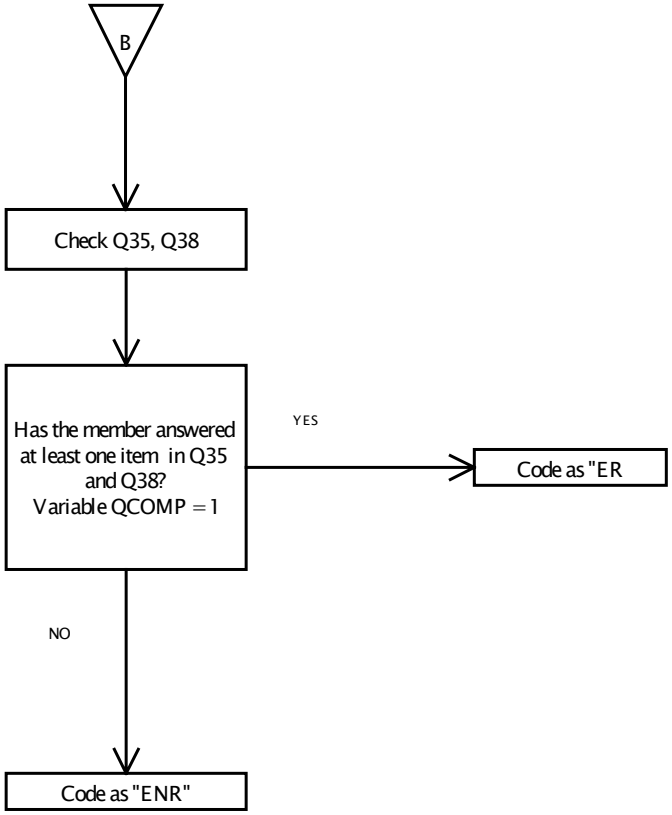


Figure 1. ***(continued)***



Notes:

PND = postal non-delivery
ER = eligible respondent
ENR = eligible nonrespondent
IN1, IN2, IN3 = ineligibles
UNK = unknown eligibility

Table 8.
Combinations of Variables Used to Determine Dispositions for the Form B Survey

Row	Eligibility ELIG	Matched November 1999 Frame MATCH	Promoted PROMO	Married November 1999 Frame FMARST	Self- or proxy-reported eligibility SR_E	Survey Control System Disposition Code FLAG_FIN	Completed Questionnaire QCOMP	Frequency
Eligible respondents								
1	ER	1	0	1	1	1 Returned survey	1	16,081
2	ER	1	0	3	1	1 Returned survey	1	19
3	ER	1	0	1	1	2 Returned survey (member deceased)	1	1
4	ER	1	0	1	1	4 Returned survey (divorced/ separated/widowed)	1	2
Eligible nonrespondents								
5	ENR	1	0	1	1	1 Returned survey	2	233
Ineligible as reported by self or proxy								
6	IN1	1	0	1	2	1 Returned survey	1	1,453
7	IN1	1	0	1	2	1 Returned survey	2	52
8	IN1	1	0	1	2	4 Returned survey (divorced/ separated/widowed)	1	1
9	IN1	1	0	1	3	4 Returned survey (divorced/ separated/widowed)	2	4
10	IN1	1	0	1	3	5 Blank (member deceased)	2	2
11	IN1	1	0	1	3	7 Blank (member left military)	2	216
12	IN1	1	0	1	4	10 Not returned (member deceased)	0	10
13	IN1	1	0	1	4	11 Not returned (member permanently ill)	0	2
14	IN1	1	0	1	4	13 Not returned (other reason)	0	116
15	IN1	1	0	3	2	1 Returned survey	1	2
16	IN1	1	0	3	3	7 Blank (member left military)	2	1
17	IN1	1	0	3	4	13 Not returned (other reason)	0	1
18	IN2	0	0	Missing	1	1 Returned survey	1	171
19	IN2	0	0	Missing	1	1 Returned survey	2	1
20	IN2	0	0	Missing	2	1 Returned survey	1	323
21	IN2	0	0	Missing	2	1 Returned survey	2	13
22	IN2	0	0	Missing	3	1 Returned survey	1	19
23	IN2	0	0	Missing	3	1 Returned survey	2	19
24	IN2	0	0	Missing	3	5 Blank (member deceased)	2	1
25	IN2	0	0	Missing	3	7 Blank (member left military)	2	170

Table 8. ***(continued)***

Row	Eligibility ELIG	Matched November 1999 Frame MATCH	Promoted PROMO	Married November 1999 Frame FMARST	Self- or proxy-reported eligibility SR_E	Survey Control System Disposition Code FLAG_FIN	Completed Questionnaire QCOMP	Frequency
Ineligible as non-match or as unmarried on frame								
26	IN2	0	0	Missing	3	8 Blank (no reason)	2	25
27	IN2	0	0	Missing	4	9 Not returned (no reason)	0	2,014
28	IN2	0	0	Missing	4	10 Not returned (member deceased)	0	1
29	IN2	0	0	Missing	4	12 Not returned (active)	0	1
30	IN2	0	0	Missing	4	13 Not returned (other reason)	0	109
31	IN2	0	0	Missing	4	14 Postal non-delivery PND (member not at address)	0	50
32	IN2	0	0	Missing	4	15 Postal non-delivery PND (invalid last address)	0	61
33	IN2	1	0	2	1	1 Returned survey	1	26
34	IN2	1	0	2	1	1 Returned survey	2	2
35	IN2	1	0	2	2	1 Returned survey	1	26
36	IN2	1	0	2	2	1 Returned survey	2	2
37	IN2	1	0	2	2	4 Returned survey (divorced/ separated/widowed)	1	1
38	IN2	1	0	2	3	1 Returned survey	2	5
39	IN2	1	0	2	3	4 Returned survey (divorced/ separated/widowed)	2	1
40	IN2	1	0	2	3	5 Blank (member deceased)	2	2
41	IN2	1	0	2	3	7 Blank (member left military)	2	27
42	IN2	1	0	2	3	8 Blank (no reason)	2	1
43	IN2	1	0	2	4	9 Not returned (no reason)	0	336
44	IN2	1	0	2	4	10 Not returned (member deceased)	0	2
45	IN2	1	0	2	4	12 Not returned (active)	0	2
46	IN2	1	0	2	4	13 Not returned (other reason)	0	24
47	IN2	1	0	2	4	14 Postal non-delivery (member not at address)	0	7
48	IN2	1	0	2	4	15 Postal non-delivery (invalid last address)	0	18

Table 8. ***(Continued)***

Row	Eligibility ELIG	Matched November 1999 Frame MATCH	Promoted PROMO	Married November 1999 Frame FMARST	Self- or proxy-reported eligibility SR_E	Survey Control System Disposition Code FLAG_FIN	Completed Questionnaire QCOMP	Frequency
Ineligible because of promotion								
49	IN3	1	1	1	1	1 Returned survey	1	1
Unknown eligibility								
50	UNK	1	0	1	3	1 Returned survey	1	293
51	UNK	1	0	1	3	1 Returned survey	2	61
52	UNK	1	0	1	3	8 Blank (no reason)	2	41
53	UNK	1	0	1	4	9 Not returned (no reason)	0	16,021
54	UNK	1	0	1	4	12 Not returned (active)	0	7
55	UNK	1	0	1	4	14 Postal non-delivery (member not at address)	0	194
56	UNK	1	0	1	4	15 Postal non-delivery (invalid last address)	0	565
57	UNK	1	0	1	4	17 Not at address	0	4
58	UNK	1	0	3	3	8 Blank (no reason)	2	1
59	UNK	1	0	3	4	9 Not returned (no reason)	0	54
60	UNK	1	0	3	4	14 Postal non-delivery (member not at address)	0	2
61	UNK	1	0	3	4	15 Postal non-delivery (invalid last address)	0	1
Total								38,901

Notes:

ER = eligible respondent
ENR = eligible nonrespondent
IN1, IN2, IN3 = ineligibles
UNK = unknown eligibility

Weighting Procedures

The analysis of survey data from complex sample designs requires the use of weights to (1) account for variable probabilities of selection; (2) adjust for differential response rates; and (3) improve the precision of the survey-based estimates (Skinner, Holt, & Smith, 1989). To develop the weights for the Form B survey, the following steps were taken. First, base weights equal to the reciprocal of the probability of selection were assigned to each spouse selected for the sample. Next, the base weights were adjusted for nonresponse using weighting classes defined by relevant variables available in the Form B survey frame file for May 1999. Finally, the nonresponse-adjusted weights were ratio-adjusted to population counts from the November 1999 frame. This ratio or poststratification adjustment compensated for changes in the population between the times of sample selection and data collection. Details of the weighting procedures are described in the following sections.

Calculation of Base Weights

The sample was randomly selected without replacement from a stratified frame. The overall probabilities of selection varied by design strata in order to satisfy the precision goals specified by the study. Let U be the frame of the N units in the population (i.e., active duty members at the time of sampling). Note that the frame size N included some units who were ineligible at the time the survey was conducted because, for example, they had left the service. The frame U was partitioned into H non-overlapping strata $U_1,\ldots,U_H$ consisting of N_h units in each stratum h so that

$$N = \sum_{h=1}^{H} N_h \, .$$

An equal probability sample was selected without replacement within each stratum. In strata other than those for joint service married couples, simple random samples were selected. The sample from each stratum for joint service married couples was selected using a two-step process. First, the sample for Form A was selected from the May 1999 frame for each stratum. Then, from among those not selected for Form A, a simple random sample was selected for Form B. Thus, the combined selection probability of a spouse for Form B was

$$\pi_{hi} = \begin{cases} \left(1 - \dfrac{n_{hA}}{N_h}\right)\dfrac{n_{hB}}{N_h - n_{hA}} = \dfrac{n_{hB}}{N_h} & \text{if } n_{hB} \le N_h - n_{hA} \\ \dfrac{N_h - n_{hA}}{N_h} & \text{if } n_{hB} > N_h - n_{hA} \end{cases}$$

where n_{hA} is the allocated sample size for Form A and n_{hB} is the sample allocated for Form B. Note that, if the sample allocated for Form B was greater than the remainder in a stratum after selecting the sample for Form A, then all of the persons in the remainder were selected for the spouse sample.

Given this design, the base weight for the *i*-th sampled spouse in stratum *h* was the reciprocal of the probability of selection:

$$w_{hi} = \pi_{hi}^{-1} \qquad i = 1, \ldots, n_{hB}^{*}$$

where n_{hB}^{*} ($= n_{hB}$ or $N_h - n_{hA}$) is the number of persons actually sampled from stratum *h*.

Note that n_{hA} and n_{hB}^{*} are the initial sample sizes without regard to whether a selected member responded in the Form A survey or whether the selected spouse responded to the Form B survey.

Weighting Adjustments

In an ideal survey, all the units in the inference population are eligible to be selected into the sample and all those that are selected participate in the survey. In practice, neither of these conditions occurs. Some of the sampled units do not respond (unit nonresponse); some sample units are discovered to be ineligible; the status of some units cannot be determined; and some eligible units for sampling are not sampled due to changes and/or updates on the frame (coverage errors). If these problems are not addressed, the estimates of the survey will be biased. We used nonresponse weighting adjustments to deal with unit nonresponse; and poststratification for coverage errors. The following sections describe these methodologies in detail.

Unit Nonresponse Adjustments

Unit nonresponse (i.e., whole questionnaire nonresponse) occurs when a sampled spouse who is eligible for the survey fails to respond for any reason. For example, nonresponse could result from failure to locate the spouse because of mobility or invalid/incorrect addresses on the frame, or from the unwillingness of some spouses to participate in the survey. Because the response rate (defined in a later section) in the spouse survey is around 50 percent, adjusting for unit nonresponse is an important step in attempting to avoid bias.

To compensate for losses due to nonresponse, we adjusted weights in two stages. The first stage of adjustment accounts for the fact that the eligibility status of some sample persons cannot be determined. The second stage of adjustment compensates for losses due to eligible sample persons who do not respond. At each stage the base weights of usable cases were inflated to account for ones that are unusable. These adjustments were done within classes that put persons with similar characteristics together.

This form of adjustment is referred to as sample weighting or weighting class adjustments since it adjusts the weighted distribution of the respondents across the weighting classes to that of the total sample (Kalton and Kasprzyk, 1986). An alternative method of nonresponse adjustment using logistic regression was discussed by Flores-Cervantes and Valliant (2000).

The drawback to nonresponse adjustment is that it increases the variability of the weights and, thus, tends to increase the sampling variance of some estimates (Kish 1992). A nonresponse

adjustment is beneficial only when the reduction in bias more than compensates for the increase in variance. When the cells contain sufficient cases and the adjustment factors do not become inordinately large and disparate, the effect on variances is often modest. Very large adjustment factors can occur in cells with high nonresponse rates or small numbers of respondents. To avoid the second situation, cells with few cases were "collapsed" or combined to form a new cell with a minimum of 30 cases.

For weighting adjustments to effectively reduce nonresponse biases, it is desirable that the weighting classes be internally homogeneous with respect to response propensity. This can be achieved by constructing the weighting classes so that the variation in response propensity between the classes is as large as possible without unduly inflating sampling variances. The criteria that were considered when creating the cells are described in a later section.

Each sampled spouse was assigned to only one of the appropriate response-status groups depending on the survey disposition code described earlier in the section "Disposition Codes." As noted there, the final eligibility codes were:

1. Eligible respondents (*ER*). This group consists of all eligible spouses who participated in the survey and provided substantially complete and usable survey data, as determined by the answers to questions 35 and 38.

2. Eligible nonrespondents (*ENR*). This group consists of all sampled spouses who are known to be eligible for the survey, but did not provide substantially complete and usable survey data.

3. Ineligibles or out-of-scope as determined by the November 1999 frame file (*IN2* or *IN3*). This group consists of all spouses married to members known to be ineligible for the study, e.g. deceased, incarcerated, left the service, promoted to paygrade O7, divorced, widowed, separated, etc., based on the November frame.

4. Ineligibles as determined by their own reports or another person's proxy report (*IN1*). These are persons who said the member was not on active duty in question 15 or who reported that they were not married in question 64.

5. Other nonrespondents whose eligibility is unknown (*UNK*). This group consists of all the nonresponding spouses for whom eligibility for the survey could not be determined, e.g., questionnaire not returned for reasons unknown.

At the first stage, it is assumed that the unknowns (Group *UNK*) would have been distributed among the *ER*, *ENR*, and *IN1* categories had it been possible to determine their status. In particular, it is assumed that there were no cases among the unknowns that were like the *IN2* and *IN3* cases, which were ineligible based on the November frame. Thus, the *IN2* and *IN3* cases did not have their weights increased to represent any of the unknowns. The first-stage nonresponse adjustment factor was calculated within weighting class *c* as:

$$f_c^{A1} = \begin{cases} \dfrac{\sum_{i \in ER_c} w_i + \sum_{i \in ENR_c} w_i + \sum_{i \in IN1_c} w_i + \sum_{i \in UNK_c} w_i}{\sum_{i \in ER_c} w_i + \sum_{i \in ENR_c} w_i + \sum_{i \in IN1_c} w_i} & \text{If the } i\text{-th sample person classified in weighting class } c \text{ belongs to response group } ER_c, ENR_c, \text{ or } IN1_c. \\ 1 & \text{If the } i\text{-th sample person in class } c \text{ belongs to eligibility groups } IN2_c \text{ or } IN3_c. \\ 0 & \text{If the } i\text{-th sample person in class } c \text{ is in } UNK_c. \end{cases}$$

The sums in the numerator of f_c^{A1} extend over the following types of spouses in class *c*: eligible respondents (*ER*), eligible nonrespondents (*ENR*), the first group of ineligibles (*IN1*), and the unknowns (*UNK*). The term w_i is the base weight for the *i*-th sampled person in class *c*. As a notational convenience, the subscript *h* is omitted for the sampling stratum since a class *c* may extend across strata. The eligibility adjustments and the nonresponse adjustments were almost always made using classes that were subdivisions of design strata.

The first nonresponse-adjusted weight w_i^{A1}, for a sample spouse in class *c* was then computed as

$$w_i^{A1} = f_c^{A1} w_i \ .$$

Thus, if persons with unknown eligibility accounted for 50 percent of the weight in class *c*, the weights on the other units were be increased by a factor of 2.

The second nonresponse adjustment increased the adjusted weight of eligible respondents to account for eligible nonrespondents. The second-stage nonresponse adjustment factor for class *c* was computed as:

$$f_c^{A2} = \begin{cases} \dfrac{\sum_{i \in ER_c} w_i^{A1} + \sum_{i \in ENR_c} w_i^{A1}}{\sum_{i \in ER_c} w_i^{A1}} & \text{If the } i\text{-th sample person in weighting class } c \text{ belongs to response group } ER_c. \\ 0 & \text{If the } i\text{-th sample person sampled in weighting class } c \text{ belongs to response group } ENR_c. \\ 1 & \text{If the } i\text{-th sample person is in } IN1_c, IN2_c, \text{ or } IN3_c \end{cases}$$

The first sum in the numerator of f_c^{A2} for eligible respondents extends over the respondents (Group *ER*) in class *c*; the second over the eligible nonrespondents (Group *ENR*) in class *c*; and w_i^{A1} is the previously adjusted weight of the *i*-th sample member.

The second nonresponse-adjusted weight w_{hi}^{A2}, for the *i*-th sample spouse classified in weighting class *c* is then computed as:

$$w_i^{A2} = f_c^{A2}\, w_i^{A1}\,.$$

After the two stages of nonresponse adjustment, the weight for a respondent in weighting class *c* is

$$w_i^{A2} = f_c^{A2}\, f_c^{A1}\, w_i\,.$$

Note that after the two stages of nonresponse adjustment, the persons with non-zero weight are those in *ER*, *IN1*, *IN2*, and *IN3*.

Construction of Weighting Classes

The main objective in constructing weighting classes was to group respondents and nonrespondents with similar characteristics into the same cells. Ideally, the characteristics should be related to both the likelihood of responding to the survey and to values of data items collected. Each of the characteristics had to be available for all initial sample persons in order to be used for creating classes. In the spouse survey, member characteristics were used in forming classes because only member variables were available for both the responding and nonresponding spouses.

The demographic variables used to define strata were considered and included member's service, paygrade, gender, and location. Additional variables were also considered with the full set being listed in Table 9.

A set of univariate profiles of nonresponse was produced for these variables to explore the response propensity at the different levels. These profiles were useful for identifying variables related to response rates. To identify clusters of spouses with similar response rates, a categorical search algorithm called CHAID (Chi-squared Automatic Interaction Detector) (Kass 1980) was used to divide the data into cells based on the variables in Table 9. CHAID attempts to divide the dataset into groups so that the response rates between cells are as different as possible.

Given a set of categorical predictors of response probabilities, CHAID divides the dataset into groups in a stepwise fashion. Through a series of chi-square tests for equality of distributions, CHAID identifies the most important predictor of response and splits the dataset into categories. Each of those categories is further segmented based on other predictors.

Table 9.
Member Characteristics Considered for Creation of Nonresponse Weighting Classes and Poststrata

Description	Level –Description	
Service	1	Army
	2	Navy
	3	Marine Corps
	4	Air Force
	5	Coast Guard
Gender of Member	1	Male
	2	Female
	3	Unknown
Member Location (CONUS/OCONUS)	1	Continental US
	2	Overseas / non-continental US
	3	Unknown
Age Groups	1	17 or 18 years old
	2	19 or 20 years old
	3	21 or 22 years old
	…	…
	24	63 or 64 years old
	25	Otherwise
Race/Ethnicity	1	(Non-Hispanic) White
	2	(Non-Hispanic) Black
	3	Hispanic
	4	Native American & Alaskan Native
	5	Asian & Pacific Islander
	6	Other
	7	Unknown
Race/Ethnicity (Category 2)	1	Non-Hispanic White
	2	Other
	3	Unknown
Member's Location (Regions)	1	US/US territories
	2	Europe
	3	Other
	4	Asia & Pacific Islands
	5	Unknown
Active or Reservist Flag	1	Active duty 9905
	2	Reserve 9905
Member Location (Territories)	1	US
	2	US territories
	3	Overseas, afloat at sea, other locations not listed
	4	Unknown

Table 9. ***(continued)***

Description	Level -Description	
On/Off Base Living Indicator	1	Living on base (not receiving BAQ) with dependents
	2	Living on base (not receiving BAQ) without dependents
	3	Living off base (receiving BAQ) with dependents
	4	Living off base (receiving BAQ) without dependents
	5	Unknown
Pilot Indicator	1	Pilot/Navigator (rated)
	2	Other
Member's Location (Census Region)	1	Northeast
	2	Midwest
	3	South
	4	West
	5	Overseas/Afloat at sea
	6	Unknown
Source of Commission	1	Any Academy
	2	Army Academy
	3	Naval Academy
	4	Air Force Academy
	5	Coast Guard Academy
	6	Merchant Marine Academy
	7	Academy, ANG Academy of Military Science
	8	ROTC / NROTC scholarship
	9	ROTC / NROTC non scholarship
	10	OCS / AOCS / OTS / FLC
	11	Aviation Cadet
	12	National Guard State OCS
	13	Direct Appointment, professional
	14	Direct Appointment, non-professional
	15	Aviation Training program
	16	Direct Appointment, Warrant Officer
	17	Direct Appointment, Commissioned Warrant Officer
	18	WO Aviation Training program
	19	Other
	20	Not applicable
	21	Unknown
Level of Education	1	Less than High School
	2	High School Graduate
	3	Some College, but less than a 4-year degree
	4	4-Year College graduate, Graduate School
	5	Unknown
Military Personnel Category	1	Enlisted
	2	Officer

Table 9. ***(continued)***

Description	Level	-Description
Pay Group	1	Enlisted E1
	2	Enlisted E2
	3	Enlisted E3
	4	Enlisted E4
	5	Enlisted E5
	6	Enlisted E6
	7	Enlisted E7
	8	Enlisted E8
	9	Enlisted E9
	10	Warrant Officer W1
	11	Warrant Officer W2
	12	Warrant Officer W3
	13	Warrant Officer W4
	14	Warrant Officer W5
	15	Commissioned Officer O1
	16	Commissioned Officer O2
	17	Commissioned Officer O3
	18	Commissioned Officer O4
	19	Commissioned Officer O5
	20	Commissioned Officer O6
	21	Unknown
Years of Service	1	Under 1 year
	2	1 year
	3	2 years
	…	…
	28	More than 28 years
	29	N/A
	30	Unknown

Table 9. ***(continued)***

Description	Level	-Description
Constructed Member's Duty Occupation Range	1	Infantry, Gun Crews, and Seamanship specialists
	2	Electronic Equipment repairers
	3	General Officers and Executives, N.E.C.
	4	Communications and Intelligence specialists
	5	Tactical Operations Officers
	6	Health Care specialists
	7	Intelligence Officers
	8	Other Technical and Allied specialists
	9	Engineering and Maintenance Officers
	10	Functional Support and Administration
	11	Scientists and Professionals
	12	Electrical/Mechanical Equipment repairers
	13	Health Care Administrators
	14	Craftsworkers
	15	Administrators
	16	Service and Supply Handlers
	17	Supply, Procurement and Allied Officers
	18	Non-Occupational (Enlisted)
	19	Non-Occupational (Officers)
	20	Unknown
TAFMS in Years	1	Less than 1 year
	2	1 year
	3	2 years
	…	….
	27	26 years
	28	More than 27 years
	29	Not Applicable
	30	Unknown

Categories of a variable that are not significantly different can be merged together. The merging and splitting continues until no more statistically significant predictors are found or until a user-specified stopping rule is met.

CHAID allows some control to be exercised over whether categories can be merged together and over how large the sample in a cell must be. A category that is not permitted to be merged with another category is said to have a "hard boundary."

Before running CHAID any stratum with fewer than 30 cases was combined with another "nearby" stratum. Service and pay group (E1-E4, E5-E6, E7-E9, W1-W5, O1-O6) were treated as hard boundaries in this advance combining of strata. We also examined cells formed in CHAID that had unusually large values of the f_c^{A1} or f_c^{A2} adjustments. These cells were combined with other similar cells to form new cells with smaller adjustments.

Table B-2 lists the cells that were formed from the CHAID analysis. These cells were used for both the first and second stages of nonresponse adjustment. The table also lists the adjustment factors f_c^{A1} and f_c^{A2} for each cell.

Poststratification Adjustment

The nonresponse-adjusted weights were poststratified to force certain sample estimates of numbers of persons to equal known population totals. In the Form B survey, the primary functions of poststratification were variance reduction and adjustment of the May sample to reflect the November distribution among categories defined by the poststrata. The population totals or controls were produced using an updated version of the sampling frame compiled as of November 1999. The updated frame reflected changes in the eligible population between the time of sampling, May 1999, and the beginning of the data collection period. The May frame was matched against the November frame and only individuals married to members who were eligible on both frames were retained to make the poststratification counts.

The first step in poststratification was to identify a set of groups that would partition the population in a way that would improve precision of survey estimates. In the member survey, Westat and DMDC jointly arrived at an effective way of doing this that was adapted to the spouse survey. To that end, we examined question 37 "Now, taking all things together, how satisfied are you with the military way of life?" and question 35 where spouses rated their satisfaction with 33 aspects of military life. Respondents rated themselves using a five-point scale ranging from "Very satisfied" to "Very dissatisfied."

For question 35 we created a composite measure for each person across the 33 items by computing the average score across the parts that were answered, using the codes

1 = Very satisfied
2 = Satisfied
3 = Neither satisfied or dissatisfied
4 = Dissatisfied
5 = Very dissatisfied.

The average score for a person was recoded as:

[1, 1.5) = Very satisfied
[1.5, 2.5) = Satisfied
[2.5, 3.5) = Neither satisfied or dissatisfied
[3.5, 4.5) = Dissatisfied
[4.5, 5] = Very dissatisfied

where a bracket means that the endpoint is included and a parenthesis means that the endpoint is excluded. This composite measure is a simple summary to aid us in splitting the sample into groups whose levels of satisfaction are different.

The distribution of persons in the above five categories was estimated for the question 35 composite measure and the question 37 overall satisfaction measure. Weighted distributions were computed using the weights after the two stages of nonresponse adjustment. An efficient set of poststrata consists of groups in which the distribution is considerably different from one group to another.

As in the analysis to determine nonresponse adjustment cells, CHAID was used to identify groups. With the recoded composite score on question 35 and the answer to question 37 as dependent variables, we considered the characteristics listed in Table 9 as candidates for forming the groups.

This analysis led to the selection of the following five variables as being most effective:

(1) Service

(2) Military personnel category (enlisted vs. officer)

(3) Years of Service

(4) Pay group

(5) Race-ethnicity

As for nonresponse adjustment, these are characteristics of the service member rather than of the member's spouse. Levels of satisfaction were not extremely different among the branches of service, but service was selected as a post-stratifier because it is an important domain for analysis.

Given the above five variables, we ran a further CHAID analysis with question 37 as the dependent variable, forcing service and military personnel category to be the first and second variables used for the decomposition. This step led to the 27 groups shown in Table 10 which were used as poststrata.

Table 10.

Poststrata Definitions, Population Counts, and Sample Counts of Persons That Were Poststratified All characteristics were those of the service member rather than the spouse of the member.

Post-Stratification Cell	Service	Military Personnel Category	Years of Service	Paygroup	Race-ethnicity	Post-stratification Population Count	Sample Count (*ER* and *IN1*)	Post-Stratification Factors f_g^p
1	Army	Enlisted	0-6 years, Unknown	E1-E4, Unknown enlisted	All	46,724	960	1.00275
2	Army	Enlisted	0-6 years, Unknown	E5-E6, E7-E9	All	22,787	389	0.98096
3	Army	Enlisted	7-11 years	All	All	48,234	799	1.08974
4	Army	Enlisted	12-17 years	All	All	52,576	1,126	0.96293
5	Army	Enlisted	18+ years	All	All	34,266	839	0.99169
6	Army	Officer	All	W1-W5,Unknown officer	All	11,255	737	0.94729
7	Army	Officer	All	O1-O6	All	47,808	1,169	1.00514
8	Navy	Enlisted	All	E1-E4,Unknown enlisted	All	30,313	931	1.05131
9	Navy	Enlisted	0-11 years,Unknown	E5-E6	White (non-Hispanic)	27,053	447	1.04838
10	Navy	Enlisted	12+ years	E5-E6	White (non-Hispanic)	31,325	548	0.92829
11	Navy	Enlisted	All	E5-E6	Black (non-Hispanic), Hispanic, Other, Unknown	33,093	474	1.05674
12	Navy	Enlisted	All	E7-E9	All	29,153	454	0.97494
13	Navy	Officers	All	All	All	33,700	1,171	1.00217
14	Marine Corps	Enlisted	All	E1-E4, unknown	All	18,870	783	1.01421
15	Marine Corps	Enlisted	All	E5-E6, E7-E9	All	37,899	863	0.98576
16	Marine Corps	Officer	All	All	All	12,208	945	1.00197
17	Air Force	Enlisted	All	E1-E4, Unknown enlisted	All	45,668	928	1.01375
18	Air Force	Enlisted	All	E5-E6, E7-E9	All	123,427	1,790	0.99945
19	Air Force	Officer	All	All	All	50,277	868	1.01193
20	Coast Guard	Enlisted	All	E1-E4, Unknown enlisted	All	3,120	336	1.00849
21	Coast Guard	Enlisted	All	E5-E6, E7-E9	All	11,122	670	1.01302
22	Coast Guard	Officer	All	All	All	5,102	736	0.98893
						755,980	17,963	

Spouses of officers generally reported higher levels of satisfaction than spouses of enlisted persons. The Army was the only service in which officers were split between warrant officers (W1-W5) and commissioned officers (01-06). Enlisted personnel were split by pay group in all services. In the Army, the number of years of service was also important. In the Navy the E5-E6 pay group was further split by race-ethnicity and years of service.

Given the definitions of poststrata, the mechanics of the poststratification weight adjustment were as follows. The population was partitioned into groups (or poststrata) denoted by $U_1, \ldots, U_G$. The groups were mutually exclusive and cover the entire population. Let N_g be the size of U_g, so that $N = \sum_{g=1}^{G} N_g$. The sample can be also partitioned in groups $s_1, \ldots s_G$. The expression for the poststratification weighting adjustment factor for all the units classified in cell g is

$$f_g^p = \frac{N_g}{\sum_{i \in s_g} w_i^{A2}} .$$

The poststratified final weight w_i^p, for the i-th sample person classified in post-stratum g was then computed as

$$w_i^p = f_g^p w_i^{A2}, \quad i \in s_g .$$

A key point is that sample units were classified into poststrata using November 1999 frame information. The sample was matched against the November frame, and the values needed for poststrata were extracted for the matching cases. Any cases coded as unknown on the frame were assigned to poststrata as shown in Table 10. For example, in poststratum 6 officers with unknown paygrade were combined with warrant officers.

Because the military population is in constant flux, we assume that the November 1999 frame file included some ineligible records, although the number of ineligibles was unknown. Some evidence of this was the fact that there were cases shown as eligible on the November file that responded to the survey and reported themselves as ineligible (see Table 8). Thus, the *IN*1 sample ineligibles (self- or proxy-reported ineligible) were post-stratified on the assumption that there would be similar such cases on the November file.

Table 11 summarizes which cases were included in each step of the weighting process. The last column shows the general form of the final weight applied to persons in the various disposition categories. Only eligible respondents (*ER*) and self-reported or proxy-reported ineligibles (*IN1*) received a non-zero final weight.

Table 11.
Cases Assigned Weights in Each Step of the Weighting Process by Type of Disposition

Disposition	Nonresponse Adjustment Factor, Step 1	Nonresponse Adjustment Factor, Step 2	Nonresponse Adjusted Weight	Post-Stratification Factor	Final Weight
ER	f_c^{A1}	f_c^{A2}	$f_c^{A1} f_c^{A2} w$	f_g^p	$f_c^{A1} f_c^{A2} f_g^p w$
ENR	f_c^{A1}	0	0	0	0
IN1	f_c^{A1}	1	w	f_g^p	$f_g^p w$
IN2	1	1	w	0	0
IN3	1	1	w	0	0
UNK	0	0	0	0	0

Computation of Variance for Estimates for the 1999 ADS

Variance estimation procedures have been developed to account for the sample design employed in a complex survey. Using these procedures, factors such as the selection of sample in multiple stages and the use of differential sampling rates to oversample a targeted subpopulation can be appropriately reflected in estimates of sampling error. The two main methods for estimating variances from a complex survey are known as Taylor series variance estimation and replication. Wolter (1985) is a useful reference on the theory and applications of these methods. The next two sections describe how these methods were implemented to compute variances of the estimates for the 1999 ADS surveys.

Taylor Series Method to Compute Variances

In the Taylor series method, a linear approximation to a statistic is formed and then substituted into the formula for calculating the variance of a linear estimate appropriate for the sample design. The Taylor series method relies on the simplicity associated with estimating the variance for a linear statistic even with a complex sample design and is valid in large samples. In this formulation, the variance strata and primary sampling units (PSUs) must be defined.

SUDAAN® (Software for the Statistical Analysis of Correlated Data) (SUDAAN 1997) is one computer program designed to produce variance estimates for complex surveys using the Taylor series method. SUDAAN computes standard errors of estimates taking into account most features of complex sample designs and estimators. SUDAAN is capable of reflecting stratum-by-stratum finite population correction (*fpc*) factors in the computation of variances. This can be particularly important for some estimates derived from the 1999 ADS surveys, where some strata are sampled at high rates.

For descriptive statistics, SUDAAN offers three procedures: PROC CROSSTAB for categorical variables, PROC DESCRIPT for continuous variables and PROC RATIO for ratios of totals. These procedures can be used to compute statistics of interest, such as estimated totals, means, and percentages along with their corresponding standard errors, design effects, and confidence intervals. SUDAAN can be used to reflect the facts that:

(i) the November frame contains ineligibles,

(ii) the *fpc* is important in some strata, and

(iii) the weights were poststratified.

SUDAAN can postratify the weights to control totals through the use of POSTVAR and POSTWGT statements. The estimates of standard errors will reflect the effect of poststratification. There are some restrictions in using this option. The option is valid only in PROC DESCRIPT and PROC RATIO and design effects are not computed with this option.

To reflect the effect of the design in variance estimation, SUDAAN requires variables that indicate the design strata and sampled PSUs. The design strata are the original sampling strata from which the sample was drawn. The sampled PSU corresponds to the individual

sampled person. In some design strata the initial sample was small and was reduced further by nonresponse. Small sample sizes can lead to unstable variance estimates. We limited this problem by collapsing original strata with fewer than 30 respondents. Table B-3 lists the resulting 78 collapsed strata created for use in SUDAAN.

The variance strata and PSU indicator variables are part of the dataset so estimates and their standard errors can be computed using SUDAAN (Wright, Williams, & Willis, 2001).

Replication Methods

The basic idea behind replication is to draw subsamples from the full sample, compute the estimate from each of the subsamples, and estimate the variance from the subsample estimates. The subsamples are called replicates and the estimates from the subsamples are called replicate estimates. Balanced Repeated Replication (BRR) and jackknife replication are two general approaches to forming subsamples. Rust and Rao (1996) discuss these and other replication methods, show how the units included in the subsamples can be defined using variance strata and units, and describe how these methods can be implemented using weights.

Replicate weights are created to derive a corresponding set of replicate estimates. Each replicate weight was constructed using the same estimation steps as the full sample weight, but using only the subsample of cases composing each replicate. Once the replicate weights are developed, it is straightforward to compute estimates of variance for sample estimates of interest.

WesVar (Westat, 2001) is a computer software program that generates measures of variability (e.g., standard errors, coefficients of variation, and confidence intervals) from a specified set of replicate weights.

An advantage of using replication as the method to estimate variances is the ability to reflect all aspects of weighting: the design, the effect of the nonresponse adjustments, and poststratification. Since for some strata the sampling rate is high, we also have included provisions to approximately reflect the finite population correction factors in the computation of variances. Once replicate weights are constructed, it is operationally convenient to compute estimates of sampling errors. No special care is needed for subgroups of interest, and no knowledge of the sample design is required. If an estimator is needed that was not previously considered, replication methods can be easily used to develop an appropriate estimate of variance.

The Jackknife Method

The method of replication we will use in the spouse survey is known as the stratified, delete-one-group jackknife. The general procedure is to form groups of sample persons, and then to form replicates or subsamples by deleting one group at a time. The method is called JKn in WesVar. The method is discussed in some depth in Chapter 4 of Wolter (1985) and in Rust (1986).

To implement the method, variance strata (denoted in WesVar as *VARSTRAT*) and variance units (denoted as *VARUNIT*) were created. The variance strata were combinations of

design strata. The variance units were groups of initial sample persons, including eligibles, ineligibles, and unknowns. Let $\tilde{h}$ be a variance stratum and denote the number of *VARUNIT*s in stratum $\tilde{h}$ by $n_{\tilde{h}}$. Since one *VARUNIT* is omitted at a time in the JKn method, the total number of replicate estimates is

$$G = \sum_{\tilde{h}=1}^{\tilde{H}} n_{\tilde{h}}$$

where $\tilde{H}$ is the number of variance strata. Note that $\tilde{H}$ may be different from the number of design strata.

Let *g* denote a particular combination of *VARSTRAT* and *VARUNIT*. Denote the replicate estimate formed by deleting *VARSTRAT*-*VARUNIT g* by $\hat{\theta}_{(g)}$. Because one *VARUNIT* is omitted at a time for JKn, *g* can be used to identify the *VARUNIT* itself, the set of sample units (i.e., the replicate) that remains after omitting unit *g*, and the estimate computed from that replicate set of sample units.

The weights used in calculating $\hat{\theta}_{(g)}$ account for the deletion of *g* from the sample as follows. Suppose that *g* identifies a *VARUNIT* in *VARSTRAT* $\tilde{h}$. When *VARSTRAT*-*VARUNIT g* is omitted, the base weights associated with the other $n_{\tilde{h}} - 1$ variance units in *VARSTRAT* $\tilde{h}$ are multiplied by the factor:

$$\frac{n_{\tilde{h}}}{n_{\tilde{h}} - 1} .$$

The base weight for *VARSTRAT*-*VARUNIT g* is multiplied by 0. The weights on all *VARUNIT*s in all other *VARSTAT* are unchanged. The two nonresponse adjustment steps and the poststratification step, described above, are then carried through using the sample units in replicate *g* and their modified base weights. The estimate from replicate *g*, $\hat{\theta}_{(g)}$, thus, reflects all stages of weighting.

The JKn variance estimate for the full sample estimate $\hat{\theta}$ is then

$$v(\hat{\theta}) = \sum_{g=1}^{G} f_g h_g \left[\hat{\theta}_{(g)} - \hat{\theta}\right]^2$$

where f_g is the finite population correction (*fpc*) factor associated with the variance stratum containing unit *g* and $h_g = \left(n_{\tilde{h}} - 1\right)/n_{\tilde{h}}$ where $\tilde{h}$ is the *VARSTRAT* that contains unit *g*. The h_g are referred to as "JKn factors." In forming variance strata, it was important to put design strata having the same or nearly the same *fpc* together in a variance stratum. This can be done only approximately since the sampling rates vary considerably among the spouse design strata.

Each sample person's record in the data file has $G+1$ weights attached—one for the full sample and *G* replicate sample weights, computed as described above. In WesVar a dataset called a *VAR* file is created that contains an indicator that the JKn method was used to create weights, the weights themselves, the finite population correction factors, and the h_g factors. When a user does tabulations or other analyses in WesVar using the *VAR* file, WesVar automatically evaluates variances using the JKn formula. The elaborate steps involved in creation of the weights and their proper usage are transparent to the user.

Number of Replicates

A key step in designing the replicate structure is to determine the number of replicates. The choice of the number of replicates is based on the desire to obtain an adequate number of degrees of freedom (*DF*) to ensure stable estimates of variance while not having so many as to make the time or cost of computing variance estimates unnecessarily high. At *DF*=30, percentiles of the *t*-distribution are near those for the normal distribution; at *DF*=60, they are virtually the same as those for the normal. A rule of thumb is, thus, that at least 30 degrees of freedom are needed to obtain relatively stable variance estimates.

In the member survey, we created 170 replicates because there were other factors that reduce the contribution of a replicate to the total number of degrees of freedom, especially for estimates of subgroups. The stability of a variance estimate for a subgroup is related to the number of *VARSTRAT* and *VARUNIT*s contributing to the subgroup estimate. Some subgroups are found in many design strata while others are in few. These same considerations apply in the spouse survey.

Note that having an adequate number of *DF* is not a concern in SUDAAN because the linearization variance estimates will have thousands of degrees of freedom for full sample estimates. Domain estimates will have variances with fewer *DF* but probably still enough to insure stability.

Formation of Replicates

The inclusion of the finite population correction (*fpc*) factor is not a straightforward process when replicates are used. As shown in the expression of the variance when JKn replicates are used, the inclusion of the *fpc* (factor f_g) is only possible at the replicate level. Ideally, the creation of each replicate should be restricted to include the records from a single stratum only, in order to reflect the effect of the *fpc* in that specific stratum. At the same time, as noted above, to make better estimates at the stratum level, at least 30 replicates per stratum are desirable. Then the total number of replicates to create would be approximately as

Total replicates ≥ 30 * Number of strata

The spouse survey has 227 strata, and with the rule above the required number of replicates needed to fully reflect the *fpc* in each design stratum would be about 6,810. Such a large number of replicates would be burdensome in practice. To solve this problem, we used an overall *fpc* for groups with similar sampling fractions, and collapsed design strata when the variance strata were created. The *fpc* for a stratum *h* is

$$fpc_h = 1 - r_h = 1 - \frac{n_h}{N_h}$$

where

r_h = the sampling fraction or sampling rate defined as the ratio of the sample size n_h to the total population N_h in stratum *h*.

The pertinent sampling rate here is the achieved rate defined as the number of respondents (not the initial sample size) divided by the population size.

As in the member survey, we created zones of strata such that the design strata within a zone all have approximately the same *fpc*. The zones were then equated to the *VARSTRAT* for use in WesVar. Table 12 shows the ranges of stratum sampling rates in each zone and the number of design strata in each.

Table 12.
Replicate Zones for the 1999 Form B ADS

Zone	Range of Sampling Rate	Number of Strata	Percent of The Population
1	[0.24, 1]	4	0.27
2	[0.18 , 0.24)	6	0.13
3	[0.10, 0.18)	20	1.25
4	(0, 0.10)	196	98.35
Total		226	100.0 %

Note: In zone 4 stratum 58 had no respondents. The count of 196 for zone 4 excludes this stratum.

An overall *fpc* factor is applied to the strata within each zone. The overall *fpc* factor is computed using the minimum sampling rate within the zone. The overall *fpc* is an approximation of the actual stratum *fpc* except for the stratum with the minimum sampling rate where these are the same. Except in this case, the overall *fpc* is larger than the actual stratum *fpc* leading to an overestimation of the variance for estimates for these strata. As a result, this procedure yields somewhat conservative variance estimates. Nevertheless, large improvements

are expected in the precision of some domain estimates compared to the case where the *fpc* is ignored entirely. The *fpcs* for each zone for the Form B survey are shown in Table 13.

Table 13.
Overall fpc for the Replicate Zones

Zone	Minimum Sampling Rate	Overall *fpc* Factor
1	0.24576	0.75424
2	0.18447	0.81553
3	0.10606	0.89394
4	0.00111	0.99889

Note: In zone 4 stratum 58 had no respondents. The minimum sampling rate above is for strata that had one or more respondents.

Another alternative is to use an overall *fpc* computed using the average of the sampling rates of the strata within each zone. However, in this case, the variance can be underestimated for all the strata with a *fpc* larger than the average *fpc*.

To reduce the number of replicates, the design strata can be collapsed (or "folded") into pseudo-strata or variance strata (*VARSTRAT*). The number of variance strata and the number of replicates created within each variance stratum affect the number of degrees of freedom of the estimate of variance. As described before, each design stratum should ideally contain at least 30 replicates. For simplicity, the replicate zones were used as variance strata for the Form B survey. Table 14 shows the number of variance strata and number of replicates created within each variance stratum. The number of replicates for VARSTRAT=4 is larger than for the other VARSTRAT since it covers 98.35 percent of the population.

Table 14.
VARSTRAT and VARUNIT for the Form B ADS

VARSTRAT	Number of Replicates(VARUNIT)	JKn Factor(h_g)
1	30	0.966667
2	30	0.966667
3	30	0.966667
4	80	0.987500
Total	170	

To assign the value of *VARUNIT*, all the records were sorted in the same random order in which they were sampled within *VARSTRAT*. The value of *VARUNIT* was a sequential number starting from 1 that was assigned to each record. When the sequential number reached the maximum number of *VARUNIT* within *VARSTRAT*, it restarted at one. This process was repeated until each member had a value of *VARUNIT*. For example, in *VARSTRAT*=1 (i.e., zone

=1) the records were serially numbered 1, 2, …, 30, 1, 2, …,30 and so on. All of the records numbered 1 were assigned to *VARUNIT* 1; all of the records numbered 2 were assigned to *VARUNIT* 2, and so on. The records with *VARUNIT*=1 were, thus, a subsample of the sample from all design strata assigned to *VARSTRAT*=1, as were the records in the other *VARUNIT*s. Because the ordering of the sample persons was random, this method effectively divides the sample in each *VARSTRAT* into random groups.

To create the replicates, a series of factors REPF$\left(\tilde{h}, g\right)$ (replicate factor for *VARUNIT*=g in *VARSTRAT*= $\tilde{h}$) were created with the following values:

$$REPF\left(\tilde{h}, g\right) = \begin{cases} 0 & \text{if the spouse is in } VARSTRAT = \tilde{h} \text{ and } VARUNIT = g \\ \dfrac{n_{\tilde{h}}}{n_{\tilde{h}} - 1} & \text{if the spouse is in } VARSTRAT = \tilde{h} \text{ and } VARUNIT \neq g \\ 1 & \text{if the spouse is in } VARSTRAT \neq \tilde{h} \end{cases}$$

where

$n_{\tilde{h}}$ = the number of *VARUNIT*s in *VARSTRAT* = $\tilde{h}$

The replicate weight is the product of *REPF* $\left(\tilde{h}, g\right)$ and the base weight.

Table B-2 in the Appendix B shows in detail the assignment of *VARSTRAT* for the design strata for the Form B survey. It also shows the achieved sampling rate, the actual fpc, and the overall fpc used in each stratum. For the Form B survey, replicate weights 1 to 30 correspond to *VARSTRAT*=1, replicates 31 to 60 correspond to *VARSTRAT*=2, replicates 61 to 90 to *VARSTRAT*=3, and replicates 91 to 170 to *VARSTRAT*=4.

Calculation of Response Rates

Several rates for the spouse survey were computed in accordance with the standards defined by the Council of American Survey Research Organizations (1982). The rates are referred to as:

- Location rate (*LR*)
- Completion rate (*CR*)
- Response rate (*RR*)

These quantities were computed in such a way that *RR* = *LR* * *CR*. The rates are adjusted, as described below, to account for the fact that the eligibility of some units is unknown.

The *location rate* used for the Form B survey is

$$LR = \frac{\text{adjusted located sample}}{\text{adjusted eligible sample}} = \frac{N_L}{N_E}$$

with N_L and N_E defined below. The adjustments account for the fact that the eligibility status of some persons is unknown so that the proportion of eligibles among the unknowns must be estimated. An assumption in these calculations is that the only ineligibles among the persons with unknown disposition (ELIG = *UNK*) would be ones who would be self-reported or proxy-reported as ineligible if they had returned a survey form. That is, the November 1999 frame file is assumed to properly identify all other ineligibles.

(a) N_E = Adjusted eligible sample

= (Total sample)

– (Known ineligibles)

– (Estimate of self-reported or proxy-reported ineligibles among non-located unknowns)

– (Estimate of self-reported or proxy-reported ineligibles among other unknowns)

$$= A - B - C\frac{D}{E} - F\frac{D}{E}$$

where

A = Total sample

B = number of known ineligibles

C = number of non-located unknowns

D = number of self-reported or proxy-reported ineligibles

E = number with known status

F = number of located unknowns

(b) N_L = Adjusted located sample

= (Total sample)

– (Known ineligibles)

– (Non-located unknowns)

– (Estimate of self-reported or proxy-reported ineligibles among other unknowns)

$= A - B - C - F\dfrac{D}{E}$.

The ratio D/E is the proportion of spouses reported by themselves or by proxies as ineligible in questions 15 and 64 out of the total number whose status is known. The product $C(D/E)$ is, thus, an estimate of the number of non-located unknowns that would be classified as ineligible had they answered questions 15 and 64. Similarly, $F(D/E)$ is an estimate of the number of located unknowns that would be reported as ineligible.

The *completion rate* for the Form A survey is defined to be

$$CR = \frac{\text{complete responses}}{\text{adjusted located sample}} = \frac{N_R}{N_L}$$

where

N_R = number of complete responses

and the adjusted located sample, N_L, was defined above.

The *response rate* is defined as

$$RR = \frac{\text{complete responses}}{\text{adjusted eligible sample}} = \frac{N_R}{N_E}.$$

Both weighted and unweighted location, completion, and response rates were calculated for the strata used in the sample design and are shown in Table B-4. Weighted and unweighted rates are reported for the full sample, and summary rates for the member's services, paygrades, gender, joint-service marital status, and location. In all cases, base weights were used in computing the weighted rates. Summary rates for member's service, gender, marital status, paygrade, and location are shown in Table 15.

Table 15.
Unweighted and Weighted Location, Completion, and Response Rates for the Full Sample and Categories of Service, Gender, Marital Status, Paygrade, and Location

				Unweighted			Weighted		
Group	**Adjusted Eligible Sample**	**Adjusted Located Sample**	**Complete Responses**	**Location Rate**	**Completion Rate**	**Response Rate**	**Location Rate**	**Completion Rate**	**Response Rate**
Full Sample	31,817	31,130	16,103	97.8%	51.7%	50.6%	98.0%	52.4%	51.3%
Service									
Army	10,684	10,411	5,356	97.4%	51.4%	50.1%	97.4%	51.6%	50.3%
Navy	7,223	7,053	3,628	97.6%	51.4%	50.2%	98.0%	53.6%	52.5%
Marine Corps	4,678	4,581	2,312	97.9%	50.5%	49.4%	97.8%	51.3%	50.2%
Air Force	6,412	6,315	3,184	98.5%	50.4%	49.7%	98.6%	52.0%	51.3%
Coast Guard	2,803	2,753	1,623	98.2%	59.0%	57.9%	98.4%	58.8%	57.9%
Member's Gender									
Male	28,723	28,125	15,002	97.9%	53.3%	52.2%	98.0%	54.0%	52.9%
Female	3,014	2,928	1,084	97.2%	37.0%	36.0%	97.2%	39.3%	38.2%
Unknown	26	26	17	96.4%	66.7%	64.3%	96.4%	66.7%	64.3%
Marital Status									
Married to Civilian or Other Nonjoint Service	29,537	28,880	15,200	97.8%	52.6%	51.5%	97.9%	53.1%	52.0%
Married to Active Duty or AGR Member	2,214	2,186	883	98.7%	40.4%	39.9%	98.8%	45.1%	44.5%
Unknown	55	52	20	93.4%	38.6%	36.1%	93.4%	38.6%	36.1%
Paygrade									
E1-E3	5,491	5,309	2,103	96.7%	39.6%	38.3%	96.9%	39.0%	37.7%
E4	4,365	4,232	1,730	97.0%	40.9%	39.6%	97.0%	40.1%	38.8%
E5-E6	9,684	9,465	4,704	97.7%	49.7%	48.6%	97.8%	49.8%	48.7%
E7-E9	4,465	4,393	2,503	98.4%	57.0%	56.1%	98.5%	57.0%	56.1%
W1-W5	2,378	2,357	1,454	99.1%	61.7%	61.1%	99.0%	60.7%	60.1%
O1-O3	2,802	2,772	1,817	98.9%	65.6%	64.9%	98.9%	64.9%	64.2%
O4-O6	2,550	2,524	1,775	99.0%	70.3%	69.6%	99.0%	69.3%	68.6%
Unknown	26	26	17	96.4%	66.7%	64.3%	96.4%	66.7%	64.3%
Location									
Conus	25,078	24,574	12,772	98.0%	52.0%	50.9%	98.1%	52.8%	51.8%
Oconus	6,504	6,323	3,213	97.2%	50.8%	49.4%	97.3%	51.0%	49.6%
Unknown	234	232	118	99.2%	50.9%	50.5%	99.2%	50.9%	50.5%

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APPENDIX A

Sampling Data Tables

Table A-1.
Precision Requirements for the 1999 Survey of Active Duty Personnel

Domain Number	Domain Size[2]	Population Proportion	Precision Constraint[3]	Prevalence		Domain Label
	1	835,040	99.32%	0.03	0.50	Army+Navy+Marine Corps+Air Force+Coast Guard
	2	813,987	96.82%	0.03	0.50	Army+Navy+Marine Corps+Air Force
	3	289,647	34.45%	0.03	0.50	Army
	4	206,695	24.59%	0.03	0.50	Navy
	5	77,810	9.26%	0.03	0.50	Marine Corps
	6	239,835	28.53%	0.03	0.50	Air Force
	7	21,053	2.50%	0.04	0.50	Coast Guard
	8	789,316	93.89%	0.03	0.50	Active-duty
	9	45,724	5.44%	0.05	0.50	AGR(NG/Reserve)
	10	65,503	7.79%	0.03	0.50	E1-E3
	11	128,628	15.30%	0.03	0.50	E4
	12	310,740	36.96%	0.03	0.50	E4-E5
	13	333,295	39.64%	0.03	0.50	E5-E6
	14	136,216	16.20%	0.03	0.50	E7-E9
	15	287,399	34.18%	0.03	0.50	E6-E9
	16	663,642	78.94%	0.03	0.50	E1-E9
	17	15,535	1.85%	0.05	0.50	W1-W5
	18	155,863	18.54%	0.03	0.50	O1-O6
	19	75,870	9.02%	0.03	0.50	O1-O3
	20	79,993	9.51%	0.03	0.50	O4-O6
	21	58,265	6.93%		0.50	Enl - Electronic repair
	22	58,268	6.93%		0.50	Enl - Communications
	23	48,709	5.79%		0.50	Enl - Health care
	24	22,520	2.68%		0.50	Enl - Other technical
	25	145,068	17.26%		0.50	Enl - Functional support
	26	130,134	15.48%		0.50	Enl - Mechanical repair
	27	26,126	3.11%		0.50	Enl - Craftsman
	28	52,095	6.20%		0.50	Enl - Service & supply
	29	7,991	0.95%		0.50	Enl - Nonoccupational
	30	107,023	12.73%		0.50	Enl - Infantry
	31	3,129	0.37%		0.50	Off - Officers & Execs
	32	52,370	6.23%		0.50	Off - Tactical Opers
	33	6,780	0.81%		0.50	Off - Intelligence
	34	20,826	2.48%		0.50	Off - Engineering
	35	11,261	1.34%		0.50	Off - Scientist & Profess
	36	25,466	3.03%		0.50	Off - Health care
	37	13,792	1.64%		0.50	Off - Adminstrators
	38	13,999	1.67%		0.50	Off - Supply & Procurement
	39	12,291	1.46%		0.50	Off - Nonoccupational
	40	44,543	5.30%	0.05	0.50	Pilot
	41	661,187	78.64%	0.03	0.50	CONUS
	42	173,853	20.68%	0.03	0.50	OCONUS
	43	700,159	83.28%	0.03	0.50	US
	44	4,690	0.56%		0.50	US territories
	45	130,191	15.49%		0.50	Overseas & other locations
	46	711,343	84.61%	0.05	0.50	US & US territories
	47	67,003	7.97%	0.05	0.50	Europe
	48	48,323	5.75%	0.05	0.50	Asia & Pacific Islands
	49	7,404	0.88%		0.50	Other
	50	738,739	87.87%	0.03	0.50	Male
	51	96,301	11.45%	0.03	0.50	Female

[2] The domain sizes exclude 7,167 persons classified into the unknown stratum.

[3] The precision constraint is given as the maximum half-width of a 95% confidence interval.

Table A-1. ***(continued)***

Domain Number	Domain Size	Population Proportion	Precision Constraint	Prevalence	Domain Label
	52	258,872	30.79%	0.03	0.50 Minority
	53	575,256	68.42%	0.03	0.50 Non-minority
	54	835,040	99.32%	0.03	0.50 Married NonJoint+Joint Service Married
	55	758,996	90.28%	0.03	0.50 Married NonJoint
	56	76,044	9.05%	0.05	0.50 Joint Service Married
	57	34,840	4.14%		0.50 Single w child/children
	58	315,750	37.56%	0.05	0.50 Living on base w deps
	59	20,354	2.42%		0.50 Living on base wo deps
	60	424,386	50.48%	0.05	0.50 Living off base w deps
	61	45,015	5.35%		0.50 Living off base wo deps
	62	263,005	31.28%		0.50 Army*Active-duty
	63	26,642	3.17%		0.50 Army*AGR(NG/Reserve)
	64	198,077	23.56%		0.50 Navy*Active-duty
	65	8,618	1.03%		0.50 Navy*AGR(NG/Reserve)
	66	76,141	9.06%		0.50 Marine Corps*Active-duty
	67	1,669	0.20%		0.50 Marine Corps*AGR(NG/Reserve)
	68	231,040	27.48%		0.50 Air Force*Active-duty
	69	8,795	1.05%		0.50 Air Force*AGR(NG/Reserve)
	70	21,053	2.50%		0.50 Coast Guard*Active-duty
	71	20,523	2.44%	0.05	0.50 Army*E1-E3
	72	46,656	5.55%	0.05	0.50 Army*E4
	73	100,902	12.00%	0.05	0.50 Army*E4-E5
	74	105,815	12.59%	0.05	0.50 Army*E5-E6
	75	54,262	6.45%	0.05	0.50 Army*E7-E9
	76	105,831	12.59%	0.05	0.50 Army*E6-E9
	77	227,256	27.03%	0.05	0.50 Army*E1-E9
	78	11,168	1.33%	0.05	0.50 Army*W1-W5
	79	51,223	6.09%	0.05	0.50 Army*O1-O6
	80	24,257	2.89%	0.05	0.50 Army*O1-O3
	81	26,966	3.21%	0.05	0.50 Army*O4-O6
	82	12,022	1.43%	0.05	0.50 Navy*E1-E3
	83	27,282	3.25%	0.05	0.50 Navy*E4
	84	77,766	9.25%	0.05	0.50 Navy*E4-E5
	85	99,569	11.84%	0.05	0.50 Navy*E5-E6
	86	30,732	3.66%	0.05	0.50 Navy*E7-E9
	87	79,817	9.49%	0.05	0.50 Navy*E6-E9
	88	169,605	20.17%	0.05	0.50 Navy*E1-E9
	89	1,469	0.17%	0.05	0.50 Navy*W1-W5
	90	35,621	4.24%	0.05	0.50 Navy*O1-O6
	91	17,702	2.11%	0.05	0.50 Navy*O1-O3
	92	17,919	2.13%	0.05	0.50 Navy*O4-O6
	93	13,258	1.58%	0.05	0.50 Marine Corps*E1-E3
	94	12,183	1.45%	0.05	0.50 Marine Corps*E4
	95	27,623	3.29%	0.05	0.50 Marine Corps*E4-E5
	96	27,538	3.28%	0.05	0.50 Marine Corps*E5-E6
	97	12,026	1.43%	0.05	0.50 Marine Corps*E7-E9
	98	24,124	2.87%	0.05	0.50 Marine Corps*E6-E9
	99	65,005	7.73%	0.05	0.50 Marine Corps*E1-E9
	100	1,619	0.19%	0.05	0.50 Marine Corps*W1-W5
	101	11,186	1.33%	0.05	0.50 Marine Corps*O1-O6
	102	5,802	0.69%	0.05	0.50 Marine Corps*O1-O3
	103	5,384	0.64%	0.05	0.50 Marine Corps*O4-O6
	104	18,312	2.18%	0.05	0.50 Air Force*E1-E3
	105	39,307	4.68%	0.05	0.50 Air Force*E4
	106	97,270	11.57%	0.05	0.50 Air Force*E4-E5
	107	92,134	10.96%	0.05	0.50 Air Force*E5-E6

Table A-1. ***(continued)***

Domain Number	Domain Size	Population Proportion	Precision Constraint	Prevalence	Domain Label
	108	36,223	4.31%	0.05	0.50 Air Force*E7-E9
	109	70,394	8.37%	0.05	0.50 Air Force*E6-E9
	110	185,976	22.12%	0.05	0.50 Air Force*E1-E9
	111	53,859	6.41%	0.05	0.50 Air Force*O1-O6
	112	26,079	3.10%	0.05	0.50 Air Force*O1-O3
	113	27,780	3.30%	0.05	0.50 Air Force*O4-O6
	114	1,388	0.17%	0.06	0.50 Coast Guard*E1-E3
	115	3,200	0.38%	0.06	0.50 Coast Guard*E4
	116	7,179	0.85%	0.06	0.50 Coast Guard*E4-E5
	117	8,239	0.98%	0.06	0.50 Coast Guard*E5-E6
	118	2,973	0.35%	0.06	0.50 Coast Guard*E7-E9
	119	7,233	0.86%	0.06	0.50 Coast Guard*E6-E9
	120	15,800	1.88%	0.05	0.50 Coast Guard*E1-E9
	121	1,279	0.15%	0.05	0.50 Coast Guard*W1-W5
	122	3,974	0.47%	0.05	0.50 Coast Guard*O1-O6
	123	2,030	0.24%	0.06	0.50 Coast Guard*O1-O3
	124	1,944	0.23%	0.06	0.50 Coast Guard*O4-O6
	125	12,433	1.48%		0.50 Army*Enl - Electronic repair
	126	19,076	2.27%		0.50 Army*Enl - Communications
	127	18,039	2.15%		0.50 Army*Enl - Health care
	128	7,185	0.85%		0.50 Army*Enl - Other technical
	129	52,118	6.20%		0.50 Army*Enl - Functional support
	130	30,211	3.59%		0.50 Army*Enl - Mechanical repair
	131	4,129	0.49%		0.50 Army*Enl - Craftsman
	132	25,015	2.98%		0.50 Army*Enl - Service & supply
	133	668	0.08%		0.50 Army*Enl - Nonoccupational
	134	57,682	6.86%		0.50 Army*Enl - Infantry
	135	49	0.01%		0.50 Army*Off - Officers & Execs
	136	17,754	2.11%		0.50 Army*Off - Tactical Opers
	137	2,709	0.32%		0.50 Army*Off - Intelligence
	138	5,773	0.69%		0.50 Army*Off - Engineering
	139	4,156	0.49%		0.50 Army*Off - Scientist & Profess
	140	9,328	1.11%		0.50 Army*Off - Health care
	141	4,281	0.51%		0.50 Army*Off - Adminstrators
	142	5,537	0.66%		0.50 Army*Off - Supply & Procurement
	143	7,970	0.95%		0.50 Army*Off - Nonoccupational
	144	21,031	2.50%		0.50 Navy*Enl - Electronic repair
	145	18,665	2.22%		0.50 Navy*Enl - Communications
	146	15,032	1.79%		0.50 Navy*Enl - Health care
	147	4,784	0.57%		0.50 Navy*Enl - Other technical
	148	24,175	2.88%		0.50 Navy*Enl - Functional support
	149	43,964	5.23%		0.50 Navy*Enl - Mechanical repair
	150	9,690	1.15%		0.50 Navy*Enl - Craftsman
	151	9,309	1.11%		0.50 Navy*Enl - Service & supply
	152	2	0.00%		0.50 Navy*Enl - Nonoccupational
	153	18,501	2.20%		0.50 Navy*Enl - Infantry
	154	1,971	0.23%		0.50 Navy*Off - Officers & Execs
	155	9,989	1.19%		0.50 Navy*Off - Tactical Opers
	156	1,382	0.16%		0.50 Navy*Off - Intelligence
	157	6,302	0.75%		0.50 Navy*Off - Engineering
	158	2,516	0.30%		0.50 Navy*Off - Scientist & Profess
	159	6,162	0.73%		0.50 Navy*Off - Health care
	160	3,882	0.46%		0.50 Navy*Off - Adminstrators
	161	2,024	0.24%		0.50 Navy*Off - Supply & Procurement
	162	354	0.04%		0.50 Navy*Off - Nonoccupational
	163	4,499	0.54%		0.50 Marine Corps*Enl - Electronic repair
	164	4,940	0.59%		0.50 Marine Corps*Enl - Communications

Table A-1. ***(continued)***

Domain Number	Domain Size	Population Proportion	Precision Constraint	Prevalence	Domain Label
	165	1,889	0.22%	0.50	Marine Corps*Enl - Other technical
	166	15,777	1.88%	0.50	Marine Corps*Enl - Functional support
	167	11,317	1.35%	0.50	Marine Corps*Enl - Mechanical repair
	168	1,546	0.18%	0.50	Marine Corps*Enl - Craftsman
	169	8,502	1.01%	0.50	Marine Corps*Enl - Service & supply
	170	4,490	0.53%	0.50	Marine Corps*Enl - Nonoccupational
	171	11,887	1.41%	0.50	Marine Corps*Enl - Infantry
	172	446	0.05%	0.50	Marine Corps*Off - Officers & Execs
	173	4,120	0.49%	0.50	Marine Corps*Off - Tactical Opers
	174	474	0.06%	0.50	Marine Corps*Off - Intelligence
	175	1,375	0.16%	0.50	Marine Corps*Off - Engineering
	176	372	0.04%	0.50	Marine Corps*Off - Scientist & Profess
	177	1,140	0.14%	0.50	Marine Corps*Off - Adminstrators
	178	1,460	0.17%	0.50	Marine Corps*Off - Supply & Procurement
	179	2,144	0.26%	0.50	Marine Corps*Off - Nonoccupational
	180	18,971	2.26%	0.50	Air Force*Enl - Electronic repair
	181	14,653	1.74%	0.50	Air Force*Enl - Communications
	182	15,091	1.80%	0.50	Air Force*Enl - Health care
	183	7,719	0.92%	0.50	Air Force*Enl - Other technical
	184	50,189	5.97%	0.50	Air Force*Enl - Functional support
	185	43,498	5.17%	0.50	Air Force*Enl - Mechanical repair
	186	8,442	1.00%	0.50	Air Force*Enl - Craftsman
	187	9,260	1.10%	0.50	Air Force*Enl - Service & supply
	188	1,858	0.22%	0.50	Air Force*Enl - Nonoccupational
	189	16,189	1.93%	0.50	Air Force*Enl - Infantry
	190	663	0.08%	0.50	Air Force*Off - Officers & Execs
	191	19,382	2.31%	0.50	Air Force*Off - Tactical
	192	2,158	0.26%	0.50	Air Force*Off - Intelligence
	193	6,600	0.79%	0.50	Air Force*Off - Engineering
	194	4,146	0.49%	0.50	Air Force*Off - Scientist & Profess
	195	9,945	1.18%	0.50	Air Force*Off - Health care
	196	3,767	0.45%	0.50	Air Force*Off - Adminstrators
	197	4,935	0.59%	0.50	Air Force*Off - Supply & Procurement
	198	1,823	0.22%	0.50	Air Force*Off - Nonoccupational
	199	1,331	0.16%	0.50	Coast Guard*Enl - Electronic repair
	200	934	0.11%	0.50	Coast Guard*Enl - Communications
	201	547	0.07%	0.50	Coast Guard*Enl - Health care
	202	943	0.11%	0.50	Coast Guard*Enl - Other technical
	203	2,809	0.33%	0.50	Coast Guard*Enl - Functional support
	204	1,144	0.14%	0.50	Coast Guard*Enl - Mechanical repair
	205	2,319	0.28%	0.50	Coast Guard*Enl - Craftsman
	206	9	0.00%	0.50	Coast Guard*Enl - Service & supply
	207	973	0.12%	0.50	Coast Guard*Enl - Nonoccupational
	208	2,764	0.33%	0.50	Coast Guard*Enl - Infantry
	209	1,125	0.13%	0.50	Coast Guard*Off - Tactical Opers
	210	57	0.01%	0.50	Coast Guard*Off - Intelligence
	211	776	0.09%	0.50	Coast Guard*Off - Engineering
	212	71	0.01%	0.50	Coast Guard*Off - Scientist & Profess
	213	31	0.00%	0.50	Coast Guard*Off - Health care
	214	722	0.09%	0.50	Coast Guard*Off - Adminstrators
	215	43	0.01%	0.50	Coast Guard*Off - Supply & Procurement
	216	8,941	1.06%	0.50	Army*Pilot
	217	10,803	1.28%	0.50	Navy*Pilot
	218	5,654	0.67%	0.50	Marine Corps*Pilot
	219	18,446	2.19%	0.50	Air Force*Pilot
	220	699	0.08%	0.50	Coast Guard*Pilot
	221	218,778	26.02%	0.50	Army*CONUS

Table A-1. ***(continued)***

Domain Number	Domain Size	Population Proportion	Precision Constraint	Prevalence	Domain Label
	222	70,869	8.43%	0.50	Army*OCONUS
	223	233,249	27.74%	0.50	Army*US
	224	691	0.08%	0.50	Army*US territories
	225	55,707	6.63%	0.50	Army*Overseas & other locations
	226	233,963	27.83%	0.50	Army*US & US territories
	227	36,511	4.34%	0.50	Army*Europe
	228	16,525	1.97%	0.50	Army*Asia & Pacific Islands
	229	2,556	0.30%	0.50	Army*Other
	230	173,137	20.59%	0.50	Navy*CONUS
	231	33,558	3.99%	0.50	Navy*OCONUS
	232	182,590	21.72%	0.50	Navy*US
	233	2,124	0.25%	0.50	Navy*US territories
	234	21,981	2.61%	0.50	Navy*Overseas & other locations
	235	189,859	22.58%	0.50	Navy*US & US territories
	236	6,854	0.82%	0.50	Navy*Europe
	237	8,593	1.02%	0.50	Navy*Asia & Pacific Islands
	238	1,111	0.13%	0.50	Navy*Other
	239	64,360	7.66%	0.50	Marine Corps*CONUS
	240	13,450	1.60%	0.50	Marine Corps*OCONUS
	241	67,327	8.01%	0.50	Marine Corps*US
	242	29	0.00%	0.50	Marine Corps*US territories
	243	10,454	1.24%	0.50	Marine Corps*Overseas & other locations
	244	67,414	8.02%	0.50	Marine Corps*US & US territories
	245	524	0.06%	0.50	Marine Corps*Europe
	246	7,792	0.93%	0.50	Marine Corps*Asia & Pacific Islands
	247	2,024	0.24%	0.50	Marine Corps*Other
	248	187,281	22.28%	0.50	Air Force*CONUS
	249	52,554	6.25%	0.50	Air Force*OCONUS
	250	197,582	23.50%	0.50	Air Force*US
	251	1,516	0.18%	0.50	Air Force*US territories
	252	40,737	4.85%	0.50	Air Force*Overseas & other locations
	253	199,099	23.68%	0.50	Air Force*US & US territories
	254	23,112	2.75%	0.50	Air Force*Europe
	255	15,404	1.83%	0.50	Air Force*Asia & Pacific Islands
	256	1,711	0.20%	0.50	Air Force*Other
	257	17,631	2.10%	0.50	Coast Guard*CONUS
	258	3,422	0.41%	0.50	Coast Guard*OCONUS
	259	19,411	2.31%	0.50	Coast Guard*US
	260	330	0.04%	0.50	Coast Guard*US territories
	261	1,312	0.16%	0.50	Coast Guard*Overseas & other locations
	262	21,008	2.50%	0.50	Coast Guard*US & US territories
	263	2	0.00%	0.50	Coast Guard*Europe
	264	9	0.00%	0.50	Coast Guard*Asia & Pacific Islands
	265	2	0.00%	0.50	Coast Guard*Other
	266	254,035	30.22%	0.50	Army*Male
	267	35,612	4.24%	0.50	Army*Female
	268	186,239	22.15%	0.50	Navy*Male
	269	20,456	2.43%	0.50	Navy*Female
	270	73,755	8.77%	0.50	Marine Corps*Male
	271	4,055	0.48%	0.50	Marine Corps*Female
	272	205,121	24.40%	0.50	Air Force*Male
	273	34,714	4.13%	0.50	Air Force*Female
	274	19,589	2.33%	0.50	Coast Guard*Male
	275	1,464	0.17%	0.50	Coast Guard*Female
	276	112,626	13.40%	0.50	Army*Minority
	277	176,795	21.03%	0.50	Army*Non-minority
	278	64,391	7.66%	0.50	Navy*Minority

Table A-1. ***(continued)***

Domain Number	Domain Size	Population Proportion	Precision Constraint	Prevalence	Domain Label
	279	141,675	16.85%	0.50	Navy*Non-minority
	280	25,328	3.01%	0.50	Marine Corps*Minority
	281	52,480	6.24%	0.50	Marine Corps*Non-minority
	282	52,910	6.29%	0.50	Air Force*Minority
	283	186,870	22.23%	0.50	Air Force*Non-minority
	284	3,617	0.43%	0.50	Coast Guard*Minority
	285	17,436	2.07%	0.50	Coast Guard*Non-minority
	286	289,647	34.45%	0.50	Army*Married NonJoint+Joint Service Married
	287	206,695	24.59%	0.50	Navy*Married NonJoint+Joint Service Married
	288	77,810	9.26%	0.50	Marine Corps*Married NonJoint+Joint Service Married
	289	239,835	28.53%	0.50	Air Force*Married NonJoint+Joint Service Married
	290	21,053	2.50%	0.50	Coast Guard*Married NonJoint+Joint Service Married
	291	20,190	2.40%	0.50	Army*Single w child/children
	292	6,889	0.82%	0.50	Navy*Single w child/children
	293	1,354	0.16%	0.50	Marine Corps*Single w child/children
	294	6,407	0.76%	0.50	Air Force*Single w child/children
	295	106,188	12.63%	0.50	Army*Living on base w deps
	296	7,351	0.87%	0.50	Army*Living on base wo deps
	297	156,002	18.56%	0.50	Army*Living off base w deps
	298	15,075	1.79%	0.50	Army*Living off base wo deps
	299	51,982	6.18%	0.50	Navy*Living on base w deps
	300	2,550	0.30%	0.50	Navy*Living on base wo deps
	301	140,911	16.76%	0.50	Navy*Living off base w deps
	302	10,260	1.22%	0.50	Navy*Living off base wo deps
	303	70,516	8.39%	0.50	Marine Corps*Living on base w deps
	304	4,441	0.53%	0.50	Marine Corps*Living on base wo deps
	305	1,151	0.14%	0.50	Marine Corps*Living off base w deps
	306	927	0.11%	0.50	Marine Corps*Living off base wo deps
	307	87,064	10.36%	0.50	Air Force*Living on base w deps
	308	6,012	0.72%	0.50	Air Force*Living on base wo deps
	309	126,322	15.03%	0.50	Air Force*Living off base w deps
	310	18,753	2.23%	0.50	Air Force*Living off base wo deps
	311	626,250	74.49%	0.50	Active-duty*E1-E9
	312	14,205	1.69%	0.50	Active-duty*W1-W5
	313	148,861	17.71%	0.50	Active-duty*O1-O6
	314	37,392	4.45%	0.50	AGR(NG/Reserve)*E1-E9
	315	1,330	0.16%	0.50	AGR(NG/Reserve)*W1-W5
	316	7,002	0.83%	0.50	AGR(NG/Reserve)*O1-O6
	317	21	0.00%	0.50	W1-W5*Off - Officers & Execs
	318	4,528	0.54%	0.50	W1-W5*Off - Tactical Opers
	319	797	0.09%	0.50	W1-W5*Off - Intelligence
	320	3,621	0.43%	0.50	W1-W5*Off - Engineering
	321	124	0.01%	0.50	W1-W5*Off - Scientist & Profess
	322	110	0.01%	0.50	W1-W5*Off - Health care
	323	1,429	0.17%	0.50	W1-W5*Off - Adminstrators
	324	1,570	0.19%	0.50	W1-W5*Off - Supply & Procurement
	325	800	0.10%	0.50	W1-W5*Off - Nonoccupational
	326	3,108	0.37%	0.50	O1-O6*Off - Officers & Execs
	327	47,842	5.69%	0.50	O1-O6*Off - Tactical Opers
	328	5,983	0.71%	0.50	O1-O6*Off - Intelligence
	329	17,205	2.05%	0.50	O1-O6*Off - Engineering
	330	11,137	1.32%	0.50	O1-O6*Off - Scientist & Profess
	331	25,356	3.02%	0.50	O1-O6*Off - Health care
	332	12,363	1.47%	0.50	O1-O6*Off - Adminstrators
	333	12,429	1.48%	0.50	O1-O6*Off - Supply & Procurement

Table A-1. ***(continued)***

Domain Number	Domain Size	Population Proportion	Precision Constraint	Prevalence	Domain Label
	334	11,491	1.37%	0.50	O1-O6*Off - Nonoccupational
	335	8,246	0.98%	0.50	Pilot*E1-E9
	336	4,455	0.53%	0.50	Pilot*W1-W5
	337	31,842	3.79%	0.50	Pilot*O1-O6
	338	520,781	61.94%	0.50	E1-E9*CONUS
	339	142,861	16.99%	0.50	E1-E9*OCONUS
	340	553,120	65.79%	0.50	E1-E9*US
	341	4,024	0.48%	0.50	E1-E9*US territories
	342	106,498	12.67%	0.50	E1-E9*Overseas & other location
	343	561,425	66.78%	0.50	E1-E9*US & US territories
	344	54,823	6.52%	0.50	E1-E9*Europe
	345	40,925	4.87%	0.50	E1-E9*Asia & Pacific Islands
	346	5,649	0.67%	0.50	E1-E9*Other
	347	11,803	1.40%	0.50	W1-W5*CONUS
	348	3,732	0.44%	0.50	W1-W5*OCONUS
	349	12,517	1.49%	0.50	W1-W5*US
	350	61	0.01%	0.50	W1-W5*US territories
	351	2,957	0.35%	0.50	W1-W5*Overseas & other location
	352	12,787	1.52%	0.50	W1-W5*US & US territories
	353	1,461	0.17%	0.50	W1-W5*Europe
	354	1,079	0.13%	0.50	W1-W5*Asia & Pacific Islands
	355	198	0.02%	0.50	W1-W5*Other
	356	128,603	15.30%	0.50	O1-O6*CONUS
	357	27,260	3.24%	0.50	O1-O6*OCONUS
	358	134,522	16.00%	0.50	O1-O6*US
	359	605	0.07%	0.50	O1-O6*US territories
	360	20,736	2.47%	0.50	O1-O6*Overseas & other location
	361	137,131	16.31%	0.50	O1-O6*US & US territories
	362	10,719	1.27%	0.50	O1-O6*Europe
	363	6,319	0.75%	0.50	O1-O6*Asia & Pacific Islands
	364	1,557	0.19%	0.50	O1-O6*Other
	365	52,290	6.22%	0.50	Male*E1-E3
	366	105,566	12.56%	0.50	Male*E4
	367	268,154	31.90%	0.50	Male*E4-E5
	368	301,288	35.84%	0.50	Male*E5-E6
	369	125,865	14.97%	0.50	Male*E7-E9
	370	264,565	31.47%	0.50	Male*E6-E9
	371	585,009	69.58%	0.50	Male*E1-E9
	372	14,836	1.76%	0.50	Male*W1-W5
	373	138,894	16.52%	0.50	Male*O1-O6
	374	65,875	7.84%	0.50	Male*O1-O3
	375	73,019	8.69%	0.50	Male*O4-O6
	376	13,213	1.57%	0.50	Female*E1-E3
	377	23,062	2.74%	0.50	Female*E4
	378	42,586	5.07%	0.50	Female*E4-E5
	379	32,007	3.81%	0.50	Female*E5-E6
	380	10,351	1.23%	0.50	Female*E7-E9
	381	22,834	2.72%	0.50	Female*E6-E9
	382	78,633	9.35%	0.50	Female*E1-E9
	383	699	0.08%	0.50	Female*W1-W5
	384	16,969	2.02%	0.50	Female*O1-O6
	385	9,995	1.19%	0.50	Female*O1-O3
	386	6,974	0.83%	0.50	Female*O4-O6
	387	65,503	7.79%	0.50	Married NonJoint+Joint Service Married*E1-E3
	388	128,628	15.30%	0.50	Married NonJoint+Joint Service Married*E4
	389	310,740	36.96%	0.50	Married NonJoint+Joint Service Married*E4-E5
	390	333,295	39.64%	0.50	Married NonJoint+Joint Service Married*E5-E6

Table A-1. ***(continued)***

Domain Number	Domain Size	Population Proportion	Precision Constraint	Prevalence	Domain Label
	391	136,216	16.20%	0.50	Married NonJoint+Joint Service Married*E7-E9
	392	287,399	34.18%	0.50	Married NonJoint+Joint Service Married*E6-E9
	393	663,642	78.94%	0.50	Married NonJoint+Joint Service Married*E1-E9
	394	15,535	1.85%	0.50	Married NonJoint+Joint Service Married*W1-W5
	395	155,863	18.54%	0.50	Married NonJoint+Joint Service Married*O1-O6
	396	75,870	9.02%	0.50	Married NonJoint+Joint Service Married*O1-O3
	397	79,993	9.51%	0.50	Married NonJoint+Joint Service Married*O4-O6
	398	303	0.04%	0.50	Single w child/children*E1-E3
	399	1,038	0.12%	0.50	Single w child/children*E4
	400	6,611	0.79%	0.50	Single w child/children*E4-E5
	401	14,718	1.75%	0.50	Single w child/children*E5-E6
	402	12,358	1.47%	0.50	Single w child/children*E7-E9
	403	21,503	2.56%	0.50	Single w child/children*E6-E9
	404	28,417	3.38%	0.50	Single w child/children*E1-E9
	405	897	0.11%	0.50	Single w child/children*W1-W5
	406	5,526	0.66%	0.50	Single w child/children*O1-O6
	407	1,276	0.15%	0.50	Single w child/children*O1-O3
	408	4,250	0.51%	0.50	Single w child/children*O4-O6
	409	263,808	31.38%	0.50	E1-E9*Living on base w deps
	410	18,800	2.24%	0.50	E1-E9*Living on base wo deps
	411	321,990	38.30%	0.50	E1-E9*Living off base w deps
	412	35,968	4.28%	0.50	E1-E9*Living off base wo deps
	413	5,501	0.65%	0.50	W1-W5*Living on base w deps
	414	88	0.01%	0.50	W1-W5*Living on base wo deps
	415	8,186	0.97%	0.50	W1-W5*Living off base w deps
	416	348	0.04%	0.50	W1-W5*Living off base wo deps
	417	46,441	5.52%	0.50	O1-O6*Living on base w deps
	418	1,466	0.17%	0.50	O1-O6*Living on base wo deps
	419	94,210	11.21%	0.50	O1-O6*Living off base w deps
	420	8,699	1.03%	0.50	O1-O6*Living off base wo deps
	421	584,894	69.57%	0.50	Male*CONUS
	422	153,845	18.30%	0.50	Male*OCONUS
	423	619,193	73.65%	0.50	Male*US
	424	4,052	0.48%	0.50	Male*US territories
	425	115,494	13.74%	0.50	Male*Overseas & other location
	426	629,356	74.86%	0.50	Male*US & US territories
	427	58,134	6.91%	0.50	Male*Europe
	428	43,493	5.17%	0.50	Male*Asia & Pacific Islands
	429	6,847	0.81%	0.50	Male*Other
	430	76,293	9.07%	0.50	Female*CONUS
	431	20,008	2.38%	0.50	Female*OCONUS
	432	80,966	9.63%	0.50	Female*US
	433	638	0.08%	0.50	Female*US territories
	434	14,697	1.75%	0.50	Female*Overseas & other location
	435	81,987	9.75%	0.50	Female*US & US territories
	436	8,869	1.05%	0.50	Female*Europe
	437	4,830	0.57%	0.50	Female*Asia & Pacific Islands
	438	557	0.07%	0.50	Female*Other
	439	198,117	23.57%	0.50	Minority*CONUS
	440	60,755	7.23%	0.50	Minority*OCONUS
	441	210,168	25.00%	0.50	Minority*US
	442	2,266	0.27%	0.50	Minority*US territories
	443	46,438	5.52%	0.50	Minority*Overseas & other location
	444	214,096	25.47%	0.50	Minority*US & US territories
	445	22,942	2.73%	0.50	Minority*Europe
	446	18,896	2.25%	0.50	Minority*Asia & Pacific Islands
	447	2,661	0.32%	0.50	Minority*Other

Table A-1. ***(continued)***

Domain Number	Domain Size	Population Proportion	Precision Constraint	Prevalence	Domain Label
	448	462,294	54.99%	0.50	Non-Minority*CONUS
	449	112,962	13.44%	0.50	Non-Minority*OCONUS
	450	489,192	58.19%	0.50	Non-Minority*US
	451	2,415	0.29%	0.50	Non-Minority*US territories
	452	83,649	9.95%	0.50	Non-Minority*Overseas & other location
	453	496,416	59.05%	0.50	Non-Minority*US & US territories
	454	44,033	5.24%	0.50	Non-Minority*Europe
	455	29,379	3.49%	0.50	Non-Minority*Asia & Pacific Islands
	456	4,739	0.56%	0.50	Non-Minority*Other
	457	661,187	78.64%	0.50	Married NonJoint+Joint Service Married*CONUS
	458	173,853	20.68%	0.50	Married NonJoint+Joint Service Married*OCONUS
	459	700,159	83.28%	0.50	Married NonJoint+Joint Service Married*US
	460	4,690	0.56%	0.50	Married NonJoint+Joint Service Married*US territories
	461	130,191	15.49%	0.50	Married NonJoint+Joint Service Married*Overseas & other location
	462	711,343	84.61%	0.50	Married NonJoint+Joint Service Married*US & US territories
	463	67,003	7.97%	0.50	Married NonJoint+Joint Service Married*Europe
	464	48,323	5.75%	0.50	Married NonJoint+Joint Service Married*Asia & Pacific Islands
	465	7,404	0.88%	0.50	Married NonJoint+Joint Service Married*Other
	466	33,347	3.97%	0.50	Single w child/children*CONUS
	467	1,493	0.18%	0.50	Single w child/children*OCONUS
	468	34,079	4.05%	0.50	Single w child/children*US
	469	541	0.06%	0.50	Single w child/children*US territories
	470	220	0.03%	0.50	Single w child/children*Overseas & other location
	471	34,629	4.12%	0.50	Single w child/children*US & US territories
	472	34	0.00%	0.50	Single w child/children*Europe
	473	23	0.00%	0.50	Single w child/children*Asia & Pacific Islands
	474	31	0.00%	0.50	Single w child/children*Other
	475	218,427	25.98%	0.50	Living on base w deps*CONUS
	476	97,323	11.58%	0.50	Living on base w deps*OCONUS
	477	240,807	28.64%	0.50	Living on base w deps*US
	478	2,633	0.31%	0.50	Living on base w deps*US territories
	479	72,310	8.60%	0.50	Living on base w deps*Overseas & other location
	480	244,798	29.12%	0.50	Living on base w deps*US & US territories
	481	37,591	4.47%	0.50	Living on base w deps*Europe
	482	28,506	3.39%	0.50	Living on base w deps*Asia & Pacific Islands
	483	4,582	0.55%	0.50	Living on base w deps*Other
	484	12,522	1.49%	0.50	Living on base wo deps*CONUS
	485	7,832	0.93%	0.50	Living on base wo deps*OCONUS
	486	13,709	1.63%	0.50	Living on base wo deps*US
	487	246	0.03%	0.50	Living on base wo deps*US territories
	488	6,399	0.76%	0.50	Living on base wo deps*Overseas & other location
	489	14,039	1.67%	0.50	Living on base wo deps*US & US territories
	490	3,185	0.38%	0.50	Living on base wo deps*Europe
	491	2,805	0.33%	0.50	Living on base wo deps*Asia & Pacific Islands
	492	309	0.04%	0.50	Living on base wo deps*Other
	493	367,237	43.68%	0.50	Living off base w deps*CONUS
	494	57,149	6.80%	0.50	Living off base w deps*OCONUS
	495	378,492	45.02%	0.50	Living off base w deps*US
	496	1,307	0.16%	0.50	Living off base w deps*US territories
	497	44,587	5.30%	0.50	Living off base w deps*Overseas & other location
	498	383,340	45.60%	0.50	Living off base w deps*US & US territories
	499	22,733	2.70%	0.50	Living off base w deps*Europe
	500	15,391	1.83%	0.50	Living off base w deps*Asia & Pacific Islands

Table A-1. ***(continued)***

Domain Number	Domain Size	Population Proportion	Precision Constraint	Prevalence	Domain Label
	501	2,322	0.28%	0.50	Living off base w deps*Other
	502	37,858	4.50%	0.50	Living off base wo deps*CONUS
	503	7,157	0.85%	0.50	Living off base wo deps*OCONUS
	504	39,926	4.75%	0.50	Living off base wo deps*US
	505	158	0.02%	0.50	Living off base wo deps*US territories
	506	4,931	0.59%	0.50	Living off base wo deps*Overseas & other location
	507	40,309	4.79%	0.50	Living off base wo deps*US & US territories
	508	3,096	0.37%	0.50	Living off base wo deps*Europe
	509	1,425	0.17%	0.50	Living off base wo deps*Asia & Pacific Islands
	510	142	0.02%	0.50	Living off base wo deps*Other
	511	219,276	26.08%	0.50	Male*Minority
	512	518,668	61.69%	0.50	Male*Non-Minority
	513	39,596	4.71%	0.50	Female*Minority
	514	56,588	6.73%	0.50	Female*Non-Minority
	515	738,739	87.87%	0.50	Male*Married NonJoint+Joint Service Married
	516	96,301	11.45%	0.50	Female*Married NonJoint+Joint Service Married
	517	30,789	3.66%	0.50	Male*Single w child/children
	518	4,051	0.48%	0.50	Female*Single w child/children
	519	293,303	34.89%	0.50	Male*Living on base w deps
	520	11,440	1.36%	0.50	Male*Living on base wo deps
	521	383,820	45.65%	0.50	Male*Living off base w deps
	522	23,222	2.76%	0.50	Male*Living off base wo deps
	523	22,447	2.67%	0.50	Female*Living on base w deps
	524	8,914	1.06%	0.50	Female*Living on base wo deps
	525	40,566	4.83%	0.50	Female*Living off base w deps
	526	21,793	2.59%	0.50	Female*Living off base wo deps
	527	306,581	36.47%	0.50	Married NonJoint+Joint Service Married*Living on base w deps
	528	403,491	47.99%	0.50	Married NonJoint+Joint Service Married*Living off base w deps
	529	714	0.08%	0.50	Army*Pilot*E1-E9
	530	4,438	0.53%	0.50	Army*Pilot*W1-W5
	531	3,789	0.45%	0.50	Army*Pilot*O1-O6
	532	2,635	0.31%	0.50	Navy*Pilot*E1-E9
	533	8,167	0.97%	0.50	Navy*Pilot*O1-O6
	534	2,584	0.31%	0.50	Marine Corps*Pilot*E1-E9
	535	16	0.00%	0.50	Marine Corps*Pilot*W1-W5
	536	3,054	0.36%	0.50	Marine Corps*Pilot*O1-O6
	537	2,313	0.28%	0.50	Air Force*Pilot*E1-E9
	538	16,133	1.92%	0.50	Air Force*Pilot*O1-O6
	539	699	0.08%	0.50	Coast Guard*Pilot*O1-O6
	540	169,229	20.13%	0.50	Army*CONUS*E1-E9
	541	41,237	4.90%	0.50	Army*CONUS*O1-O6
	542	58,027	6.90%	0.50	Army*OCONUS*E1-E9
	543	9,986	1.19%	0.50	Army*OCONUS*O1-O6
	544	143,093	17.02%	0.50	Navy*CONUS*E1-E9
	545	28,941	3.44%	0.50	Navy*CONUS*O1-O6
	546	26,512	3.15%	0.50	Navy*OCONUS*E1-E9
	547	6,680	0.79%	0.50	Navy*OCONUS*O1-O6
	548	53,734	6.39%	0.50	Marine Corps*CONUS*E1-E9
	549	9,352	1.11%	0.50	Marine Corps*CONUS*O1-O6
	550	11,271	1.34%	0.50	Marine Corps*OCONUS*E1-E9
	551	1,834	0.22%	0.50	Marine Corps*OCONUS*O1-O6
	552	141,670	16.85%	0.50	Air Force*CONUS*E1-E9
	553	45,611	5.43%	0.50	Air Force*CONUS*O1-O6
	554	44,306	5.27%	0.50	Air Force*OCONUS*E1-E9
	555	8,248	0.98%	0.50	Air Force*OCONUS*O1-O6

Table A-1. ***(continued)***

Domain Number	Domain Size	Population Proportion	Precision Constraint	Prevalence	Domain Label
	556	197,862	23.53%	0.50	Army*Male*E1-E9
	557	45,544	5.42%	0.50	Army*Male*O1-O6
	558	29,394	3.50%	0.50	Army*Female*E1-E9
	559	5,679	0.68%	0.50	Army*Female*O1-O6
	560	153,087	18.21%	0.50	Navy*Male*E1-E9
	561	31,731	3.77%	0.50	Navy*Male*O1-O6
	562	16,518	1.96%	0.50	Navy*Female*E1-E9
	563	3,890	0.46%	0.50	Navy*Female*O1-O6
	564	61,369	7.30%	0.50	Marine Corps*Male*E1-E9
	565	10,853	1.29%	0.50	Marine Corps*Male*O1-O6
	566	3,636	0.43%	0.50	Marine Corps*Female*E1-E9
	567	333	0.04%	0.50	Marine Corps*Female*O1-O6
	568	158,046	18.80%	0.50	Air Force*Male*E1-E9
	569	47,075	5.60%	0.50	Air Force*Male*O1-O6
	570	27,930	3.32%	0.50	Air Force*Female*E1-E9
	571	6,784	0.81%	0.50	Air Force*Female*O1-O6
	572	14,645	1.74%	0.50	Coast Guard*Male*E1-E9
	573	3,691	0.44%	0.50	Coast Guard*Male*O1-O6
	574	1,155	0.14%	0.50	Coast Guard*Female*E1-E9
	575	283	0.03%	0.50	Coast Guard*Female*O1-O6
	576	227,256	27.03%	0.50	Army*Married NonJoint+Joint Service Married*E1-E9
	577	51,223	6.09%	0.50	Army*Married NonJoint+Joint Service Married*O1-O6
	578	169,605	20.17%	0.50	Navy*Married NonJoint+Joint Service Married*E1-E9
	579	35,621	4.24%	0.50	Navy*Married NonJoint+Joint Service Married*O1-O6
	580	65,005	7.73%	0.50	Marine Corps*Married NonJoint+Joint Service Married*E1-E9
	581	11,186	1.33%	0.50	Marine Corps*Married NonJoint+Joint Service Married*O1-O6
	582	185,976	22.12%	0.50	Air Force*Married NonJoint+Joint Service Married*E1-E9
	583	53,859	6.41%	0.50	Air Force*Married NonJoint+Joint Service Married*O1-O6
	584	15,800	1.88%	0.50	Coast Guard*Married NonJoint+Joint Service Married*E1-E9
	585	3,974	0.47%	0.50	Coast Guard*Married NonJoint+Joint Service Married*O1-O6
	586	15,466	1.84%	0.50	Army*Single w child/children*E1-E9
	587	3,872	0.46%	0.50	Army*Single w child/children*O1-O6
	588	6,850	0.81%	0.50	Navy*Single w child/children*E1-E9
	589	34	0.00%	0.50	Navy*Single w child/children*O1-O6
	590	1,104	0.13%	0.50	Marine Corps*Single w child/children*E1-E9
	591	210	0.02%	0.50	Marine Corps*Single w child/children*O1-O6
	592	4,997	0.59%	0.50	Air Force*Single w child/children*E1-E9
	593	1,410	0.17%	0.50	Air Force*Single w child/children*O1-O6
	594	87,254	10.38%	0.50	Army*Living on base w deps*E1-E9
	595	15,238	1.81%	0.50	Army*Living on base w deps*O1-O6
	596	45,008	5.35%	0.50	Navy*Living on base w deps*E1-E9
	597	6,703	0.80%	0.50	Navy*Living on base w deps*O1-O6
	598	58,344	6.94%	0.50	Marine Corps*Living on base w deps*E1-E9
	599	10,638	1.27%	0.50	Marine Corps*Living on base w deps*O1-O6
	600	73,202	8.71%	0.50	Air Force*Living on base w deps*E1-E9
	601	13,862	1.65%	0.50	Air Force*Living on base w deps*O1-O6
	602	6,750	0.80%	0.50	Army*Living on base wo deps*E1-E9

Table A-1. ***(continued)***

Domain Number	Domain Size	Population Proportion	Precision Constraint	Prevalence	Domain Label
	603	543	0.06%	0.50	Army*Living on base wo deps*O1-O6
	604	2,405	0.29%	0.50	Navy*Living on base wo deps*E1-E9
	605	142	0.02%	0.50	Navy*Living on base wo deps*O1-O6
	606	4,043	0.48%	0.50	Marine Corps*Living on base wo deps*E1-E9
	607	371	0.04%	0.50	Marine Corps*Living on base wo deps*O1-O6
	608	5,602	0.67%	0.50	Air Force*Living on base wo deps*E1-E9
	609	410	0.05%	0.50	Air Force*Living on base wo deps*O1-O6
	610	117,282	13.95%	0.50	Army*Living off base w deps*E1-E9
	611	31,707	3.77%	0.50	Army*Living off base w deps*O1-O6
	612	112,902	13.43%	0.50	Navy*Living off base w deps*E1-E9
	613	26,845	3.19%	0.50	Navy*Living off base w deps*O1-O6
	614	1,053	0.13%	0.50	Marine Corps*Living off base w deps*E1-E9
	615	89	0.01%	0.50	Marine Corps*Living off base w deps*O1-O6
	616	90,753	10.79%	0.50	Air Force*Living off base w deps*E1-E9
	617	35,569	4.23%	0.50	Air Force*Living off base w deps*O1-O6
	618	11,485	1.37%	0.50	Army*Living off base wo deps*E1-E9
	619	3,272	0.39%	0.50	Army*Living off base wo deps*O1-O6
	620	8,385	1.00%	0.50	Navy*Living off base wo deps*E1-E9
	621	1,846	0.22%	0.50	Navy*Living off base wo deps*O1-O6
	622	887	0.11%	0.50	Marine Corps*Living off base wo deps*E1-E9
	623	39	0.00%	0.50	Marine Corps*Living off base wo deps*O1-O6
	624	15,211	1.81%	0.50	Air Force*Living off base wo deps*E1-E9
	625	3,542	0.42%	0.50	Air Force*Living off base wo deps*O1-O6
	626	74,175	8.82%	0.50	Enl - Health care+Off - Health care

Table A-2.
Design Stratum Definitions in Terms of Marital Status, Service, Paygrade, Gender, and Location Along with May 1999 Frame Population and Initial Sample Counts

1999 ACTIVE DUTY SURVEY -- FORM B

STRATUM	Marital Status	Service	Paygrade	Member's Gender	Location	Sample Size	Population Size
001	Married, Non-Joint	Army	E1-E3	Male	CONUS	1033	10638
002	Married, Non-Joint	Army	E1-E3	Male	OCONUS	318	2728
003	Married, Non-Joint	Army	E1-E3	Female	CONUS	142	2053
004	Married, Non-Joint	Army	E1-E3	Female	OCONUS	39	443
005	Married, Non-Joint	Army	E4	Male	CONUS	733	23252
006	Married, Non-Joint	Army	E4	Male	OCONUS	450	10926
007	Married, Non-Joint	Army	E4	Female	CONUS	106	3376
008	Married, Non-Joint	Army	E4	Female	OCONUS	50	1398
009	Married, Non-Joint	Army	E5-E6	Male	CONUS	2962	63487
010	Married, Non-Joint	Army	E5-E6	Male	OCONUS	789	22350
011	Married, Non-Joint	Army	E5-E6	Female	CONUS	284	5431
012	Married, Non-Joint	Army	E5-E6	Female	OCONUS	55	1597
013	Married, Non-Joint	Army	E7-E9	Male	CONUS	1896	39624
014	Married, Non-Joint	Army	E7-E9	Male	OCONUS	292	9174
015	Married, Non-Joint	Army	E7-E9	Female	CONUS	156	2797
016	Married, Non-Joint	Army	E7-E9	Female	OCONUS	24	589
017	Married, Non-Joint	Army	W1-W5	Male	CONUS	873	7648
018	Married, Non-Joint	Army	W1-W5	Male	OCONUS	321	2614
019	Married, Non-Joint	Army	W1-W5	Female	CONUS	21	279
020	Married, Non-Joint	Army	W1-W5	Female	OCONUS	6	75
021	Married, Non-Joint	Army	O1-O3	Male	CONUS	567	15081
022	Married, Non-Joint	Army	O1-O3	Male	OCONUS	141	4049
023	Married, Non-Joint	Army	O1-O3	Female	CONUS	54	1471
024	Married, Non-Joint	Army	O1-O3	Female	OCONUS	13	362
025	Married, Non-Joint	Army	O4-O6	Male	CONUS	776	19649
026	Married, Non-Joint	Army	O4-O6	Male	OCONUS	131	4424
027	Married, Non-Joint	Army	O4-O6	Female	CONUS	51	1347
028	Married, Non-Joint	Army	O4-O6	Female	OCONUS	6	240
029	Married, Non-Joint	Navy	E1-E3	Male	CONUS	1316	8634
030	Married, Non-Joint	Navy	E1-E3	Male	OCONUS	145	982
031	Married, Non-Joint	Navy	E1-E3	Female	CONUS	191	1747
032	Married, Non-Joint	Navy	E1-E3	Female	OCONUS	26	226
033	Married, Non-Joint	Navy	E4	Male	CONUS	879	17973
034	Married, Non-Joint	Navy	E4	Male	OCONUS	143	3066
035	Married, Non-Joint	Navy	E4	Female	CONUS	116	2381
036	Married, Non-Joint	Navy	E4	Female	OCONUS	19	429
037	Married, Non-Joint	Navy	E5-E6	Male	CONUS	2377	71029
038	Married, Non-Joint	Navy	E5-E6	Male	OCONUS	397	14081
039	Married, Non-Joint	Navy	E5-E6	Female	CONUS	204	4271
040	Married, Non-Joint	Navy	E5-E6	Female	OCONUS	20	855
041	Married, Non-Joint	Navy	E7-E9	Male	CONUS	572	22601
042	Married, Non-Joint	Navy	E7-E9	Male	OCONUS	105	4353
043	Married, Non-Joint	Navy	E7-E9	Female	CONUS	37	968
044	Married, Non-Joint	Navy	E7-E9	Female	OCONUS	5	174

Table A-2. ***(continued)***

STRATUM	Marital Status	Service	Paygrade	Member's Gender	Location	Sample Size	Population Size
045	Married, Non-Joint	Navy	W1-W5	Male and Female	CONUS	380	985
044	Married, Non-Joint	Navy	E7-E9	Female	OCONUS	5	174
045	Married, Non-Joint	Navy	W1-W5	Male and Female	CONUS	380	985
046	Married, Non-Joint	Navy	W1-W5	Male and Female	OCONUS	137	354
047	Married, Non-Joint	Navy	O1-O3	Male	CONUS	482	11412
048	Married, Non-Joint	Navy	O1-O3	Male	OCONUS	139	3183
049	Married, Non-Joint	Navy	O1-O3	Female	CONUS	50	1324
050	Married, Non-Joint	Navy	O1-O3	Female	OCONUS	12	287
051	Married, Non-Joint	Navy	O4-O6	Male	CONUS	466	12900
052	Married, Non-Joint	Navy	O4-O6	Male	OCONUS	113	2969
053	Married, Non-Joint	Navy	O4-O6	Female	CONUS	39	1209
054	Married, Non-Joint	Navy	O4-O6	Female	OCONUS	8	214
055	Married, Non-Joint	Marine Corps	E1-E3	Male	CONUS	1045	9644
056	Married, Non-Joint	Marine Corps	E1-E3	Male	OCONUS	186	1367
057	Married, Non-Joint	Marine Corps	E1-E3	Female	CONUS	41	363
058	Married, Non-Joint	Marine Corps	E1-E3	Female	OCONUS	10	34
059	Married, Non-Joint	Marine Corps	E4	Male	CONUS	707	8837
060	Married, Non-Joint	Marine Corps	E4	Male	OCONUS	171	1681
061	Married, Non-Joint	Marine Corps	E4	Female	CONUS and OCONUS	40	385
062	Married, Non-Joint	Marine Corps	E5-E6	Male	CONUS	786	21389
063	Married, Non-Joint	Marine Corps	E5-E6	Male	OCONUS	216	4270
064	Married, Non-Joint	Marine Corps	E5-E6	Female	CONUS	23	484
065	Married, Non-Joint	Marine Corps	E5-E6	Female	OCONUS	6	73
066	Married, Non-Joint	Marine Corps	E7-E9	Male	CONUS	407	9204
067	Married, Non-Joint	Marine Corps	E7-E9	Male	OCONUS	114	2032
068	Married, Non-Joint	Marine Corps	E7-E9	Female	CONUS	12	194
069	Married, Non-Joint	Marine Corps	E7-E9	Female	OCONUS	4	48
070	Married, Non-Joint	Marine Corps	W1-W5	Male	CONUS	389	1323
071	Married, Non-Joint	Marine Corps	W1-W5	Male	OCONUS	95	319
072	Married, Non-Joint	Marine Corps	W1-W5	Female	CONUS and OCONUS	15	48
073	Married, Non-Joint	Marine Corps	O1-O3	Male	CONUS	416	4555
074	Married, Non-Joint	Marine Corps	O1-O3	Male	OCONUS	84	813
075	Married, Non-Joint	Marine Corps	O1-O3	Female	CONUS and OCONUS	10	90
076	Married, Non-Joint	Marine Corps	O4-O6	Male	CONUS	375	4382
077	Married, Non-Joint	Marine Corps	O4-O6	Male	OCONUS	79	880
078	Married, Non-Joint	Marine Corps	O4-O6	Female	CONUS and OCONUS	8	75
079	Married, Non-Joint	Air Force	E1-E3	Male	CONUS	843	9398
080	Married, Non-Joint	Air Force	E1-E3	Male	OCONUS	189	1827
081	Married, Non-Joint	Air Force	E1-E3	Female	CONUS	128	2039
082	Married, Non-Joint	Air Force	E1-E3	Female	OCONUS	26	357
083	Married, Non-Joint	Air Force	E4	Male	CONUS	575	18401
084	Married, Non-Joint	Air Force	E4	Male	OCONUS	314	7028
085	Married, Non-Joint	Air Force	E4	Female	CONUS	79	2777
086	Married, Non-Joint	Air Force	E4	Female	OCONUS	28	737
087	Married, Non-Joint	Air Force	E5-E6	Male	CONUS	1500	55547
088	Married, Non-Joint	Air Force	E5-E6	Male	OCONUS	588	18419
089	Married, Non-Joint	Air Force	E5-E6	Female	CONUS	145	4007
090	Married, Non-Joint	Air Force	E5-E6	Female	OCONUS	29	904

Table A-2. ***(continued)***

STRATUM	Marital Status	Service	Paygrade	Member's Gender	Location	Sample Size	Population Size
091	Married, Non-Joint	Air Force	E7-E9	Male	CONUS	775	23691
092	Married, Non-Joint	Air Force	E7-E9	Male	OCONUS	181	6849
093	Married, Non-Joint	Air Force	E7-E9	Female	CONUS	95	1961
094	Married, Non-Joint	Air Force	E7-E9	Female	OCONUS	12	333
095	Married, Non-Joint	Air Force	W1-W5 and O1-O3	Male	CONUS	542	16883
096	Married, Non-Joint	Air Force	W1-W5 and O1-O3	Male	OCONUS	113	2994
097	Married, Non-Joint	Air Force	W1-W5 and O1-O3	Female	CONUS	56	2063
098	Married, Non-Joint	Air Force	W1-W5 and O1-O3	Female	OCONUS	12	335
099	Married, Non-Joint	Air Force	O4-O6	Male	CONUS	522	20625
100	Married, Non-Joint	Air Force	O4-O6	Male	OCONUS	93	3918
101	Married, Non-Joint	Air Force	O4-O6	Female	CONUS	32	1688
102	Married, Non-Joint	Air Force	O4-O6	Female	OCONUS	6	280
103	Married, Non-Joint	Coast Guard	E1-E3	Male	CONUS	298	977
104	Married, Non-Joint	Coast Guard	E1-E3	Male	OCONUS	56	160
105	Married, Non-Joint	Coast Guard	E1-E3	Female	CONUS and OCONUS	30	83
106	Married, Non-Joint	Coast Guard	E4	Male	CONUS	320	2050
107	Married, Non-Joint	Coast Guard	E4	Male	OCONUS	89	415
108	Married, Non-Joint	Coast Guard	E4	Female	CONUS and OCONUS	40	179
109	Married, Non-Joint	Coast Guard	E5-E6	Male	CONUS	453	6317
110	Married, Non-Joint	Coast Guard	E5-E6	Male	OCONUS	128	1327
111	Married, Non-Joint	Coast Guard	E5-E6	Female	CONUS	24	279
112	Married, Non-Joint	Coast Guard	E5-E6	Female	OCONUS	8	49
113	Married, Non-Joint	Coast Guard	E7-E9	Male	CONUS	429	2365
114	Married, Non-Joint	Coast Guard	E7-E9	Male	OCONUS	87	477
115	Married, Non-Joint	Coast Guard	E7-E9	Female	CONUS and OCONUS	13	61
116	Married, Non-Joint	Coast Guard	W1-W5	Male and Female	CONUS	378	1005
117	Married, Non-Joint	Coast Guard	W1-W5	Male and Female	OCONUS	73	138
118	Married, Non-Joint	Coast Guard	O1-O3	Male	CONUS	234	1556
119	Married, Non-Joint	Coast Guard	O1-O3	Male	OCONUS	50	272
120	Married, Non-Joint	Coast Guard	O1-O3	Female	CONUS and OCONUS	19	102
121	Married, Non-Joint	Coast Guard	O4-O6	Male	CONUS	225	1626
122	Married, Non-Joint	Coast Guard	O4-O6	Male	OCONUS	33	211
123	Married, Non-Joint	Coast Guard	O4-O6	Female	CONUS and OCONUS	9	56
124	Joint Service Married	Army	E1-E3	Male	CONUS	59	515
125	Joint Service Married	Army	E1-E3	Male	OCONUS	22	160
126	Joint Service Married	Army	E1-E3	Female	CONUS	76	1009
127	Joint Service Married	Army	E1-E3	Female	OCONUS	21	263
128	Joint Service Married	Army	E4	Male	CONUS	59	1861
129	Joint Service Married	Army	E4	Male	OCONUS	38	944
130	Joint Service Married	Army	E4	Female	CONUS	56	2574
131	Joint Service Married	Army	E4	Female	OCONUS	36	1235
132	Joint Service Married	Army	E5-E6	Male	CONUS	14	3762
133	Joint Service Married	Army	E5-E6	Male	OCONUS	43	1740
134	Joint Service Married	Army	E5-E6	Female	CONUS	14	3023
135	Joint Service Married	Army	E5-E6	Female	OCONUS	31	1381
136	Joint Service Married	Army	E7-E9	Male	CONUS	4	1436
137	Joint Service Married	Army	E7-E9	Male	OCONUS	11	496
138	Joint Service Married	Army	E7-E9	Female	CONUS	5	903
139	Joint Service Married	Army	E7-E9	Female	OCONUS	8	331

Table A-2. ***(continued)***

STRATUM	Marital Status	Service	Paygrade	Member's Gender	Location	Sample Size	Population Size
140	Joint Service Married	Army	W1-W5	Male	CONUS	15	187
141	Joint Service Married	Army	W1-W5	Male	OCONUS	9	112
142	Joint Service Married	Army	W1-W5	Female	CONUS and OCONUS	12	188
143	Joint Service Married	Army	O1-O3	Male	CONUS	19	823
144	Joint Service Married	Army	O1-O3	Male	OCONUS	9	260
145	Joint Service Married	Army	O1-O3	Female	CONUS	21	1064
146	Joint Service Married	Army	O1-O3	Female	OCONUS	10	328
147	Joint Service Married	Army	O4-O6	Male	CONUS	4	684
148	Joint Service Married	Army	O4-O6	Male	OCONUS	3	174
149	Joint Service Married	Army	O4-O6	Female	CONUS	3	641
150	Joint Service Married	Army	O4-O6	Female	OCONUS	3	136
151	Joint Service Married	Navy	E1-E3	Male	CONUS	31	189
152	Joint Service Married	Navy	E1-E3	Male	OCONUS	9	54
153	Joint Service Married	Navy	E1-E3	Female	CONUS	47	409
154	Joint Service Married	Navy	E1-E3	Female	OCONUS	13	105
155	Joint Service Married	Navy	E4	Male	CONUS	38	657
156	Joint Service Married	Navy	E4	Male	OCONUS	9	167
157	Joint Service Married	Navy	E4	Female	CONUS	38	966
158	Joint Service Married	Navy	E4	Female	OCONUS	10	258
159	Joint Service Married	Navy	E5-E6	Male	CONUS	6	1792
160	Joint Service Married	Navy	E5-E6	Male	OCONUS	13	539
161	Joint Service Married	Navy	E5-E6	Female	CONUS	8	1654
162	Joint Service Married	Navy	E5-E6	Female	OCONUS	11	480
163	Joint Service Married	Navy	E7-E9	Male	CONUS	8	598
164	Joint Service Married	Navy	E7-E9	Male	OCONUS	4	134
165	Joint Service Married	Navy	E7-E9	Female	CONUS	5	381
166	Joint Service Married	Navy	E7-E9	Female	OCONUS	3	77
167	Joint Service Married	Navy	W1-W5 and O1-O3	Male and Female	CONUS and OCONUS	31	142
168	Joint Service Married	Navy	O1-O3	Male	OCONUS	3	42
169	Joint Service Married	Navy	O1-O3	Female	CONUS	10	239
170	Joint Service Married	Navy	O1-O3	Female	OCONUS	4	75
171	Joint Service Married	Navy	O4-O6	Male	CONUS	9	241
172	Joint Service Married	Navy	O4-O6	Male	OCONUS	3	66
173	Joint Service Married	Navy	O4-O6	Female	CONUS	10	293
174	Joint Service Married	Navy	O4-O6	Female	OCONUS	3	63
175	Joint Service Married	Marine Corps	E1-E3	Male	CONUS	100	408
176	Joint Service Married	Marine Corps	E1-E3	Male	OCONUS	29	81
177	Joint Service Married	Marine Corps	E1-E3	Female	CONUS	82	527
178	Joint Service Married	Marine Corps	E1-E3	Female	OCONUS	18	89
179	Joint Service Married	Marine Corps	E4	Male	CONUS	100	562
180	Joint Service Married	Marine Corps	E4	Male	OCONUS	24	142
181	Joint Service Married	Marine Corps	E4	Female	CONUS	65	497
182	Joint Service Married	Marine Corps	E4	Female	OCONUS	10	77
183	Joint Service Married	Marine Corps	E5-E6	Male	CONUS	50	874
184	Joint Service Married	Marine Corps	E5-E6	Male	OCONUS	15	256
185	Joint Service Married	Marine Corps	E5-E6	Female	CONUS	29	551
186	Joint Service Married	Marine Corps	E5-E6	Female	OCONUS	8	145
187	Joint Service Married	Marine Corps	E7-E9	Male	CONUS	20	263
188	Joint Service Married	Marine Corps	E7-E9	Male	OCONUS	10	84

Table A-2. ***(continued)***

STRATUM	Marital Status	Service	Paygrade	Member's Gender	Location	Sample Size	Population Size
189	Joint Service Married	Marine Corps	E7-E9	Female	CONUS and OCONUS	15	204
190	Joint Service Married	Marine Corps	W1-W5	Male and Female	CONUS and OCONUS	24	88
191	Joint Service Married	Marine Corps	O1-O3	Male	CONUS and OCONUS	27	166
192	Joint Service Married	Marine Corps	O1-O3	Female	CONUS and OCONUS	16	123
193	Joint Service Married	Marine Corps	O4-O6	Male and Female	CONUS and OCONUS	17	135
194	Joint Service Married	Air Force	E1-E3	Male	CONUS	107	1420
195	Joint Service Married	Air Force	E1-E3	Male	OCONUS	26	341
196	Joint Service Married	Air Force	E1-E3	Female	CONUS	118	2132
197	Joint Service Married	Air Force	E1-E3	Female	OCONUS	32	540
198	Joint Service Married	Air Force	E4	Male	CONUS	84	2868
199	Joint Service Married	Air Force	E4	Male	OCONUS	48	1269
200	Joint Service Married	Air Force	E4	Female	CONUS	83	3551
201	Joint Service Married	Air Force	E4	Female	OCONUS	42	1313
202	Joint Service Married	Air Force	E5-E6	Male	CONUS	56	4691
203	Joint Service Married	Air Force	E5-E6	Male	OCONUS	37	1600
204	Joint Service Married	Air Force	E5-E6	Female	CONUS	60	4304
205	Joint Service Married	Air Force	E5-E6	Female	OCONUS	32	1397
206	Joint Service Married	Air Force	E7-E9	Male	CONUS	30	1560
207	Joint Service Married	Air Force	E7-E9	Male	OCONUS	11	452
208	Joint Service Married	Air Force	E7-E9	Female	CONUS	25	1009
209	Joint Service Married	Air Force	E7-E9	Female	OCONUS	7	265
210	Joint Service Married	Air Force	W1-W5 and O1-O3	Male	CONUS	30	1118
211	Joint Service Married	Air Force	W1-W5 and O1-O3	Male	OCONUS	8	216
212	Joint Service Married	Air Force	W1-W5 and O1-O3	Female	CONUS	32	1346
213	Joint Service Married	Air Force	W1-W5 and O1-O3	Female	OCONUS	7	237
214	Joint Service Married	Air Force	O4-O6	Male	CONUS	12	714
215	Joint Service Married	Air Force	O4-O6	Male	OCONUS	3	121
216	Joint Service Married	Air Force	O4-O6	Female	CONUS	9	663
217	Joint Service Married	Air Force	O4-O6	Female	OCONUS	3	114
218	Joint Service Married	Coast Guard	E1-E3	Male and Female	CONUS and OCONUS	59	103
219	Joint Service Married	Coast Guard	E4	Male	CONUS and OCONUS	39	114
220	Joint Service Married	Coast Guard	E4	Female	CONUS and OCONUS	35	132
221	Joint Service Married	Coast Guard	E5-E6	Male	CONUS and OCONUS	30	238
222	Joint Service Married	Coast Guard	E5-E6	Female	CONUS and OCONUS	25	220
223	Joint Service Married	Coast Guard	E7-E9	Male and Female	CONUS and OCONUS	24	115
224	Joint Service Married	Coast Guard	W1-W5 and O1-O3	Male and Female	CONUS and OCONUS	50	118
225	Joint Service Married	Coast Guard	O1-O3	Female	CONUS and OCONUS	20	97
226	Joint Service Married	Coast Guard	O4-O6	Male and Female	CONUS and OCONUS	10	52
348	Unknown					332	7167
						38,901	823,685

APPENDIX B

Detailed Tables

Table B-1.
Nonresponse Adjustment Cell Definitions and Adjustment Factors

Segment	Stratum	Description	f_c^{A1}	f_c^{A2}
101	79, 81	Service: Air Force Paygrade: E1-E3 Marital Status: Married, Non-Joint Member's gender: Male and Female Location: CONUS	2.3957	1.0112
102	80, 82	Service: Air Force Paygrade: E1-E3 Marital Status: Married, Non-Joint Member's gender: Male and Female Location: OCONUS	2.7897	1.0294
103	83, 85	Service: Air Force Paygrade: E4 Marital Status: Married, Non-Joint Member's gender: Male and Female Location: CONUS	2.5533	1.0108
104	84, 86	Service: Air Force Paygrade: E4 Marital Status: Married, Non-Joint Member's gender: Male and Female Location: OCONUS	2.0958	1.0078
105	194, 195	Service: Air Force Paygrade: E1-E3 Marital Status: Joint Service Married Member's gender: Male Location: CONUS and OCONUS	2.7161	1.0251
106	196, 197	Service: Air Force Paygrade: E1-E3 Marital Status: Joint Service Married Member's gender: Female Location: CONUS and OCONUS	3.0441	1.0000
107	198, 199	Service: Air Force Paygrade: E4 Marital Status: Joint Service Married Member's gender: Male Location: CONUS and OCONUS	2.5669	1.0277
108	200, 201	Service: Air Force Paygrade: E4 Marital Status: Joint Service Married Member's gender: Female Location: CONUS and OCONUS	3.2039	1.0000

Table B-1. ***(continued)***

Segment	Stratum	Description	f_c^{A1}	f_c^{A2}
201	87	Service: Air Force Paygrade: E5-E6 Marital Status: Married, Non-Joint Member's gender: Male Location: CONUS Race/ethnicity: Non-Hispanic White	1.8154	1.0203
202	87	Service: Air Force Paygrade: E5-E6 Marital Status: Married, Non-Joint Member's gender: Male Location: CONUS Race/ethnicity: Other	2.0903	1.0078
203	88	Service: Air Force Paygrade: E5-E6 Marital Status: Married, Non-Joint Member's gender: Male Location: OCONUS Race/ethnicity: non-Hispanic White	1.9358	1.0153
204	88	Service: Air Force Paygrade: E5-E6 Marital Status: Married, Non-Joint Member's gender: Male Location: OCONUS Race/ethnicity: Other	2.4590	1.0000
205	89, 90, 91	Service: Air Force Paygrade: E5-E6,E7-E9 Marital Status: Married, Non-Joint Member's gender: Male and Female Location: CONUS and OCONUS	1.9125	1.0188
206	92	Service: Air Force Paygrade: E7-E9 Marital Status: Married, Non-Joint Member's gender: Male Location: OCONUS	1.7030	1.0345
207	93, 94	Service: Air Force Paygrade: E7-E9 Marital Status: Married, Non-Joint Member's gender: Female Location: CONUS and OCONUS	2.1810	1.0540
208	202, 203	Service: Air Force Paygrade: E5-E6 Marital Status: Joint Service Married Member's gender: Male Location: CONUS and OCONUS	1.8556	1.0292
209	204, 205	Service: Air Force Paygrade: E5-E6 Marital Status: Joint Service Married Member's gender: Female Location: CONUS and OCONUS	1.9691	1.0304

Table B-1. ***(continued)***

Segment	Stratum	Description	f_c^{A1}	f_c^{A2}
210	206, 207, 208, 209	Service: Air Force Paygrade: E7-E9 Marital Status: Joint Service Married Member's gender: Male and Female Location: CONUS and OCONUS	1.6102	1.0000
301	95, 97, 98	Service: Air Force Paygrade: W1-W5 Marital Status: Married, Non-Joint Member's gender: Male and Female Location: CONUS and OCONUS	1.6168	1.0032
302	96	Service: Air Force Paygrade: O1-O3 Marital Status: Married, Non-Joint Member's gender: Male Location: OCONUS	1.5270	1.0000
303	99, 100, 101, 102, 214, 215, 216, 217	Service: Air Force Paygrade: O4-O6 Marital Status: Married, Non-Joint and Joint Service Married Member's gender: Male and Female Location: CONUS and OCONUS	1.5359	1.0207
304	210, 211, 212, 213	Service: Air Force Paygrade: O1-O3 Marital Status: Joint Service Married Member's gender: Male and Female Location: CONUS and OCONUS	1.9021	1.0000
401	1, 3	Service: Army Paygrade: E1-E3 Marital Status: Married, Non-Joint Member's gender: Male and Female Location: CONUS	2.6325	1.0087
402	2, 4	Service: Army Paygrade: E1-E3 Marital Status: Married, Non-Joint Member's gender: Male and Female Location: OCONUS	2.5737	1.0091
403	5, 7	Service: Army Paygrade: E4 Marital Status: Married, Non-Joint Member's gender: Male and Female Location: Conus	2.5697	1.0243
404	6, 8	Service: Army Paygrade: E4 Marital Status: Married, Non-Joint Member's gender: Male and Female Location: OCONUS	2.6334	1.0192

Table B-1. ***(continued)***

Segment	Stratum	Description	f_c^{A1}	f_c^{A2}
405	124, 125, 126, 127, 128, 129, 130, 131	Service: Army Paygrade: E1-E3, E4 Marital Status: Joint Service Married Member's gender: Male and Female Location: CONUS and OCONUS	3.0375	1.0065
501	9	Service: Army Paygrade: E5-E6 Marital Status: Married, Non-Joint Member's gender: Male Location: CONUS Race/ethncity: non-Hispanic White Base living indicator: Not living off base (receiving BAQ) with dependents	2.0000	1.0181
502	9	Service: Army Paygrade: E5-E6 Marital Status: Married, Non-Joint Member's gender: Male Location: CONUS Race/ethncity: non-Hispanic White Base living indicator: Living off base (receiving BAQ) with dependents	1.7383	1.0098
503	9	Service: Army Paygrade: E5-E6 Marital Status: Married, Non-Joint Member's gender: Male Location: CONUS	2.5373	1.0134
504	10	Service: Army Paygrade: E5-E6 Marital Status: Married, Non-Joint Member's gender: Male Location: OCONUS Race/ethncity: Other	2.3070	1.0102
505	11, 12	Service: Army Paygrade: E5-E6 Marital Status: Married, Non-Joint Member's gender: Female Location: CONUS and OCONUS	2.8143	1.0260
506	13, 136	Service: Army Paygrade: E7-E9 Marital Status: Married, Non-Joint and Joint Service Married Member's gender: Male Location: CONUS Race \ ethnicity: (non-Hispanic) White, Native American Alaskan Native, unknown Education: Less than High School, High school graduate, some college less than 4 year degree	1.6195	1.0162

Table B-1. ***(continued)***

Segment	Stratum	Description	f_c^{A1}	f_c^{A2}
507	13,136	Service: Army Paygrade: E7-E9 Marital Status: Married, Non-Joint Member's gender: Male Location: CONUS Race \ ethnicity: (non-Hispanic) White, Native American Alaskan Native, unknown Education: 4Year college graduate, graduate school, unknown	1.2783	1.0283
508	13, 136	Service: Army Paygrade: E7-E9 Marital Status: Married, Non-Joint and Joint Service Married Member's gender: Male Location: CONUS Race \ ethnicity: Black, Hispanic	1.9410	1.0115
509	14, 137	Service: Army Paygrade: E7-E9 Marital Status: Married, Non-Joint and Joint Service Married Member's gender: Male Location: OCONUS	1.9464	1.0152
510	15, 16, 138, 139	Service: Army Paygrade: E7-E9 Marital Status: Married, Non-Joint and Joint Service Married Member's gender: Female Location: CONUS and OCONUS Flag active /reservist: Active duty	2.3295	1.0000
511	15, 16, 138, 139	Service: Army Paygrade: E7-E9 Marital Status: Married, Non-Joint and Joint Service Married Member's gender: Female Location: CONUS and OCONUS Flag active /reservist: Reserve	1.4857	1.0357
512	132, 133, 134, 135	Service: Army Paygrade: E5-E6 Marital Status: Joint Service Married Member's gender: Male and Female Location: CONUS and OCONUS	2.4110	1.0000
610	25	Service: Army Paygrade: O4-O6 Marital Status: Married, Non-Joint Member's gender: Male Location: CONUS	1.6140	1.0200
611	26, 148	Service: Army Paygrade: O4-O6 Marital Status: Married, Non-Joint and Joint Service Married Member's gender: Male Location: OCONUS	1.4776	1.0133

Table B-1. ***(continued)***

Segment	Stratum	Description	f_c^{A1}	f_c^{A2}
612	27, 28, 149, 150	Service: Army Paygrade: O4-O6 Marital Status: Married, Non-Joint and Joint Service Married Member's gender: Female Location: CONUS and OCONUS	1.6106	1.0000
701	103, 104, 105, 218	Service: Coast Guard Paygrade: E1-E3 Marital Status: Married, Non-Joint and Joint Service Married Member's gender: Male and Female Location: CONUS and OCONUS	2.0717	1.0127
702	106, 107, 108, 219, 220	Service: Coast Guard Paygrade: E4 Marital Status: Married, Non-Joint and Joint Service Married Member's gender: Male and Female Location: CONUS and OCONUS	2.0897	1.0193
703	109, 110, 111, 112, 221, 222	Service: Coast Guard Paygrade: E5-E6 Marital Status: Married, Non-Joint and Joint Service Married Member's gender: Male and Female Location: CONUS and OCONUS	1.8054	1.0198
704	113, 114, 115, 223	Service: Coast Guard Paygrade: E7-E9 Marital Status: Married, Non-Joint and Joint Service Married Member's gender: Male and Female Location: CONUS and OCONUS	1.6242	1.0211
705	116, 117, 224	Service: Coast Guard Paygrade: W1-W5 Marital Status: Married, Non-Joint and Joint Service Married Member's gender: Male and Female Location: CONUS and OCONUS	1.4753	1.0032
706	118, 119, 120, 225	Service: Coast Guard Paygrade: O1-O3 Marital Status: Married, Non-Joint and Joint Service Married Member's gender: Male and Female Location: CONUS and OCONUS Age: Less than 33 years old	1.2056	1.0088
707	118, 119, 120, 225	Service: Coast Guard Paygrade: O1-O3 Marital Status: Married, Non-Joint and Joint Service Married Member's gender: Male and Female Location: CONUS and OCONUS Age: 33 years old or older, unknown age	1.5757	1.0249

Table B-1. ***(continued)***

Segment	Stratum	Description	f_c^{A1}	f_c^{A2}
708	121, 122, 123, 226	Service: Coast Guard Paygrade: O4-O6 Marital Status: Married, Non-Joint and Joint Service Married Member's gender: Male and Female Location: CONUS and OCONUS	1.3984	1.0118
809	180, 181, 182, 183, 184, 185, 186	Service: Marine Corps Paygrade: E4, E5-E6 Marital Status: Joint Service Married Member's gender: Male and Female Location: CONUS and OCONUS	2.9298	1.0000
904	71, 72, 73, 74, 76, 190	Service: Marine Corps Paygrade: W1-W5 Marital Status: Married, Non-Joint and Joint Service Married Member's gender: Male and Female Location: CONUS and OCONUS	2.0880	1.0000
905	76, 77, 78, 193	Service: Marine Corps Paygrade: O4-O6 Marital Status: Married, Non-Joint and Joint Service Married Member's gender: Male and Female Location: CONUS and OCONUS	1.2431	1.0147
1009	164, 165, 166	Service: Navy Paygrade: E7-E9 Marital Status: Joint Service Married Member's gender: Male and Female Location: CONUS and OCONUS	1.6673	1.0143
1101	45, 46, 167	Service: Navy Paygrade: W1-W5 Marital Status: Married, Non-Joint and Joint Service Married Member's gender: Male and Female Location: CONUS and OCONUS	1.6182	1.0276
1102	47	Service: Navy Paygrade: O1-O3 Marital Status: Married, Non-Joint Member's gender: Male Location: CONUS Race\ethnicity: non-Hispanic White	1.3593	1.0079
1103	47	Service: Navy Paygrade: O1-O3 Marital Status: Married, Non-Joint Member's gender: Male Location: CONUS Race\ethnicity: Other	1.8085	1.0233
1104	48, 168	Service: Navy Paygrade: O1-O3 Marital Status: Married, Non-Joint and Joint Service Married Member's gender: Male Location: OCONUS	1.6764	1.0137

Table B-1. ***(continued)***

Segment	Stratum	Description	f_c^{A1}	f_c^{A2}
1105	49, 50, 169, 170	Service: Navy Paygrade: O1-O3 Marital Status: Married, Non-Joint and Joint Service Married Member's gender: Female Location: CONUS and OCONUS	1.8081	1.0824
1106	51, 171	Service: Navy Paygrade: O4-O6 Marital Status: Married, Non-Joint and Joint Service Married Member's gender: Male Location: CONUS	1.3822	1.0181
1107	52, 172	Service: Navy Paygrade: O4-O6 Marital Status: Married, Non-Joint and Joint Service Married Member's gender: Male Location: OCONUS	1.3121	1.0000
1108	53, 54, 173, 174	Service: Navy Paygrade: O4-O6 Marital Status: Married, Non-Joint and Joint Service Married Member's gender: Female Location: CONUS and OCONUS	1.4485	1.0331
1201	348	Service: Army Paygrade: E1-E9, W1-W5, O1-O6, unknown Marital Status: Married, Non-Joint and Joint Service Married, unknown Member's gender: Male and Female Location: CONUS and OCONUS, unknown	2.5645	1.0185
1202	348	Service: Navy, Marine Corps, Coast Guard, Air-Force Paygrade: E1-E9, W1-W5, O1-O6, unknown Marital Status: Married, Non-Joint and Joint Service Married, unknown Member's gender: Male and Female Location: CONUS and OCONUS, unknown	1.7568	1.0149

Table B-2.
Assignment of VARSTRAT and Overall Finite Population Factors

VARSTRAT	Strata	Achieved Sampling Rate	Minimun Sampling Rate Within VARSTRAT	Actual Fpc	Overall fpc Within VARSTRAT
1	117	0.3913	0.2458	0.6087	0.7542
1	116	0.2667	0.2458	0.7333	0.7542
1	045	0.2518	0.2458	0.7482	0.7542
1	224	0.2458	0.2458	0.7542	0.7542
2	046	0.2260	0.1845	0.7740	0.8155
2	176	0.2222	0.1845	0.7778	0.8155
2	104	0.2188	0.1845	0.7813	0.8155
2	072	0.2083	0.1845	0.7917	0.8155
2	071	0.2006	0.1845	0.7994	0.8155
2	218	0.1845	0.1845	0.8155	0.8155
3	070	0.1799	0.1061	0.8201	0.8939
3	190	0.1705	0.1061	0.8296	0.8939
3	103	0.1699	0.1061	0.8301	0.8939
3	225	0.1340	0.1061	0.8660	0.8939
3	167	0.1338	0.1061	0.8662	0.8939
3	105	0.1325	0.1061	0.8675	0.8939
3	219	0.1316	0.1061	0.8684	0.8939
3	107	0.1301	0.1061	0.8699	0.8939
3	152	0.1296	0.1061	0.8704	0.8939
3	119	0.1287	0.1061	0.8713	0.8939
3	223	0.1217	0.1061	0.8783	0.8939
3	113	0.1197	0.1061	0.8803	0.8939
3	226	0.1154	0.1061	0.8846	0.8939
3	191	0.1145	0.1061	0.8855	0.8939
3	118	0.1144	0.1061	0.8856	0.8939
3	193	0.1111	0.1061	0.8889	0.8939
3	120	0.1078	0.1061	0.8922	0.8939
3	114	0.1069	0.1061	0.8931	0.8939
3	121	0.1064	0.1061	0.8936	0.8939
3	220	0.1061	0.1061	0.8939	0.8939
4	175	0.0956	0.0011	0.9044	0.9989
4	122	0.0948	0.0011	0.9052	0.9989
4	078	0.0933	0.0011	0.9067	0.9989
4	179	0.0890	0.0011	0.9110	0.9989
4	106	0.0859	0.0011	0.9142	0.9989
4	115	0.0820	0.0011	0.9180	0.9989
4	112	0.0816	0.0011	0.9184	0.9989
4	192	0.0813	0.0011	0.9187	0.9989
4	018	0.0773	0.0011	0.9227	0.9989
4	030	0.0754	0.0011	0.9246	0.9989
4	032	0.0752	0.0011	0.9248	0.9989

Table B-2. ***(continued)***

VARSTRAT	Strata	Achieved Sampling Rate	Minimun Sampling Rate Within VARSTRAT	Actual Fpc	Overall fpc Within VARSTRAT
4	108	0.0726	0.0011	0.9274	0.9989
4	168	0.0714	0.0011	0.9286	0.9989
4	180	0.0704	0.0011	0.9296	0.9989
4	017	0.0697	0.0011	0.9303	0.9989
4	029	0.0692	0.0011	0.9309	0.9989
4	178	0.0674	0.0011	0.9326	0.9989
4	075	0.0667	0.0011	0.9333	0.9989
4	077	0.0636	0.0011	0.9364	0.9989
4	073	0.0628	0.0011	0.9372	0.9989
4	076	0.0625	0.0011	0.9375	0.9989
4	069	0.0625	0.0011	0.9375	0.9989
4	151	0.0582	0.0011	0.9418	0.9989
4	181	0.0563	0.0011	0.9437	0.9989
4	056	0.0556	0.0011	0.9444	0.9989
4	074	0.0554	0.0011	0.9446	0.9989
4	060	0.0547	0.0011	0.9453	0.9989
4	221	0.0546	0.0011	0.9454	0.9989
4	123	0.0536	0.0011	0.9464	0.9989
4	110	0.0535	0.0011	0.9465	0.9989
4	055	0.0532	0.0011	0.9468	0.9989
4	002	0.0521	0.0011	0.9479	0.9989
4	182	0.0519	0.0011	0.9481	0.9989
4	019	0.0502	0.0011	0.9498	0.9989
4	222	0.0500	0.0011	0.9500	0.9989
4	061	0.0494	0.0011	0.9506	0.9989
4	153	0.0489	0.0011	0.9511	0.9989
4	142	0.0479	0.0011	0.9521	0.9989
4	001	0.0459	0.0011	0.9541	0.9989
4	172	0.0455	0.0011	0.9545	0.9989
4	189	0.0441	0.0011	0.9559	0.9989
4	109	0.0429	0.0011	0.9571	0.9989
4	079	0.0429	0.0011	0.9571	0.9989
4	124	0.0427	0.0011	0.9573	0.9989
4	187	0.0418	0.0011	0.9582	0.9989
4	177	0.0417	0.0011	0.9583	0.9989
4	080	0.0416	0.0011	0.9584	0.9989
4	059	0.0414	0.0011	0.9586	0.9989
4	065	0.0411	0.0011	0.9589	0.9989
4	170	0.0400	0.0011	0.9600	0.9989
4	184	0.0391	0.0011	0.9609	0.9989
4	127	0.0380	0.0011	0.9620	0.9989
4	125	0.0375	0.0011	0.9625	0.9989
4	068	0.0361	0.0011	0.9639	0.9989

Table B-2. ***(continued)***

VARSTRAT	Strata	Achieved Sampling Rate	Minimun Sampling Rate Within VARSTRAT	Actual Fpc	Overall fpc Within VARSTRAT
4	141	0.0357	0.0011	0.9643	0.9989
4	188	0.0357	0.0011	0.9643	0.9989
4	067	0.0344	0.0011	0.9656	0.9989
4	015	0.0329	0.0011	0.9671	0.9989
4	031	0.0321	0.0011	0.9679	0.9989
4	174	0.0317	0.0011	0.9683	0.9989
4	004	0.0316	0.0011	0.9684	0.9989
4	194	0.0310	0.0011	0.9690	0.9989
4	057	0.0303	0.0011	0.9697	0.9989
4	047	0.0301	0.0011	0.9699	0.9989
4	013	0.0294	0.0011	0.9706	0.9989
4	025	0.0294	0.0011	0.9706	0.9989
4	171	0.0290	0.0011	0.9710	0.9989
4	052	0.0290	0.0011	0.9710	0.9989
4	111	0.0287	0.0011	0.9713	0.9989
4	154	0.0286	0.0011	0.9714	0.9989
4	063	0.0281	0.0011	0.9719	0.9989
4	054	0.0280	0.0011	0.9720	0.9989
4	126	0.0268	0.0011	0.9732	0.9989
4	140	0.0267	0.0011	0.9733	0.9989
4	020	0.0267	0.0011	0.9733	0.9989
4	021	0.0267	0.0011	0.9733	0.9989
4	051	0.0266	0.0011	0.9734	0.9989
4	195	0.0264	0.0011	0.9736	0.9989
4	048	0.0264	0.0011	0.9736	0.9989
4	217	0.0263	0.0011	0.9737	0.9989
4	022	0.0262	0.0011	0.9738	0.9989
4	166	0.0260	0.0011	0.9740	0.9989
4	155	0.0259	0.0011	0.9741	0.9989
4	093	0.0255	0.0011	0.9745	0.9989
4	185	0.0254	0.0011	0.9746	0.9989
4	027	0.0252	0.0011	0.9748	0.9989
4	066	0.0250	0.0011	0.9750	0.9989
4	096	0.0247	0.0011	0.9753	0.9989
4	348	0.0247	0.0011	0.9753	0.9989
4	033	0.0246	0.0011	0.9754	0.9989
4	003	0.0244	0.0011	0.9756	0.9989
4	009	0.0242	0.0011	0.9758	0.9989
4	084	0.0240	0.0011	0.9760	0.9989
4	183	0.0240	0.0011	0.9760	0.9989
4	016	0.0238	0.0011	0.9762	0.9989
4	196	0.0235	0.0011	0.9765	0.9989
4	053	0.0232	0.0011	0.9768	0.9989

Table B-2. ***(continued)***

VARSTRAT	Strata	Achieved Sampling Rate	Minimun Sampling Rate Within VARSTRAT	Actual Fpc	Overall fpc Within VARSTRAT
4	064	0.0227	0.0011	0.9773	0.9989
4	023	0.0224	0.0011	0.9776	0.9989
4	164	0.0224	0.0011	0.9776	0.9989
4	197	0.0222	0.0011	0.9778	0.9989
4	011	0.0219	0.0011	0.9781	0.9989
4	034	0.0215	0.0011	0.9785	0.9989
4	039	0.0213	0.0011	0.9787	0.9989
4	050	0.0209	0.0011	0.9791	0.9989
4	028	0.0208	0.0011	0.9792	0.9989
4	095	0.0207	0.0011	0.9793	0.9989
4	081	0.0206	0.0011	0.9794	0.9989
4	035	0.0206	0.0011	0.9794	0.9989
4	062	0.0206	0.0011	0.9794	0.9989
4	173	0.0205	0.0011	0.9795	0.9989
4	049	0.0204	0.0011	0.9796	0.9989
4	026	0.0201	0.0011	0.9799	0.9989
4	091	0.0197	0.0011	0.9803	0.9989
4	082	0.0196	0.0011	0.9804	0.9989
4	211	0.0185	0.0011	0.9815	0.9989
4	097	0.0184	0.0011	0.9816	0.9989
4	006	0.0182	0.0011	0.9818	0.9989
4	199	0.0181	0.0011	0.9819	0.9989
4	037	0.0181	0.0011	0.9819	0.9989
4	156	0.0180	0.0011	0.9820	0.9989
4	098	0.0179	0.0011	0.9821	0.9989
4	207	0.0177	0.0011	0.9823	0.9989
4	099	0.0170	0.0011	0.9830	0.9989
4	169	0.0167	0.0011	0.9833	0.9989
4	160	0.0167	0.0011	0.9833	0.9989
4	024	0.0166	0.0011	0.9834	0.9989
4	157	0.0166	0.0011	0.9834	0.9989
4	043	0.0165	0.0011	0.9835	0.9989
4	215	0.0165	0.0011	0.9835	0.9989
4	014	0.0164	0.0011	0.9836	0.9989
4	041	0.0162	0.0011	0.9838	0.9989
4	089	0.0162	0.0011	0.9838	0.9989
4	137	0.0161	0.0011	0.9839	0.9989
4	010	0.0159	0.0011	0.9841	0.9989
4	088	0.0159	0.0011	0.9841	0.9989
4	038	0.0158	0.0011	0.9842	0.9989
4	092	0.0156	0.0011	0.9844	0.9989
4	100	0.0156	0.0011	0.9844	0.9989
4	158	0.0155	0.0011	0.9845	0.9989

Table B-2. ***(continued)***

VARSTRAT	Strata	Achieved Sampling Rate	Minimun Sampling Rate Within VARSTRAT	Actual Fpc	Overall fpc Within VARSTRAT
4	005	0.0154	0.0011	0.9846	0.9989
4	042	0.0154	0.0011	0.9846	0.9989
4	144	0.0154	0.0011	0.9846	0.9989
4	146	0.0152	0.0011	0.9848	0.9989
4	139	0.0151	0.0011	0.9849	0.9989
4	209	0.0151	0.0011	0.9849	0.9989
4	128	0.0150	0.0011	0.9850	0.9989
4	094	0.0150	0.0011	0.9850	0.9989
4	087	0.0150	0.0011	0.9850	0.9989
4	083	0.0149	0.0011	0.9851	0.9989
4	212	0.0149	0.0011	0.9851	0.9989
4	150	0.0147	0.0011	0.9853	0.9989
4	210	0.0143	0.0011	0.9857	0.9989
4	208	0.0139	0.0011	0.9861	0.9989
4	186	0.0138	0.0011	0.9862	0.9989
4	129	0.0138	0.0011	0.9862	0.9989
4	206	0.0135	0.0011	0.9865	0.9989
4	143	0.0134	0.0011	0.9866	0.9989
4	198	0.0129	0.0011	0.9871	0.9989
4	213	0.0127	0.0011	0.9873	0.9989
4	214	0.0126	0.0011	0.9874	0.9989
4	012	0.0125	0.0011	0.9875	0.9989
4	162	0.0125	0.0011	0.9875	0.9989
4	101	0.0124	0.0011	0.9876	0.9989
4	201	0.0122	0.0011	0.9878	0.9989
4	205	0.0122	0.0011	0.9878	0.9989
4	203	0.0119	0.0011	0.9881	0.9989
4	036	0.0117	0.0011	0.9883	0.9989
4	085	0.0115	0.0011	0.9885	0.9989
4	044	0.0115	0.0011	0.9885	0.9989
4	148	0.0115	0.0011	0.9885	0.9989
4	145	0.0113	0.0011	0.9887	0.9989
4	090	0.0111	0.0011	0.9889	0.9989
4	130	0.0109	0.0011	0.9891	0.9989
4	086	0.0109	0.0011	0.9891	0.9989
4	102	0.0107	0.0011	0.9893	0.9989
4	216	0.0106	0.0011	0.9894	0.9989
4	133	0.0103	0.0011	0.9897	0.9989
4	135	0.0101	0.0011	0.9899	0.9989
4	008	0.0100	0.0011	0.9900	0.9989
4	200	0.0093	0.0011	0.9907	0.9989
4	007	0.0092	0.0011	0.9908	0.9989
4	131	0.0089	0.0011	0.9911	0.9989

Table B-2. ***(continued)***

VARSTRAT	Strata	Achieved Sampling Rate	Minimun Sampling Rate Within VARSTRAT	Actual Fpc	Overall fpc Within VARSTRAT
4	040	0.0070	0.0011	0.9930	0.9989
4	204	0.0070	0.0011	0.9930	0.9989
4	202	0.0068	0.0011	0.9932	0.9989
4	163	0.0067	0.0011	0.9933	0.9989
4	165	0.0052	0.0011	0.9948	0.9989
4	147	0.0044	0.0011	0.9956	0.9989
4	149	0.0031	0.0011	0.9969	0.9989
4	136	0.0028	0.0011	0.9972	0.9989
4	134	0.0023	0.0011	0.9977	0.9989
4	159	0.0022	0.0011	0.9978	0.9989
4	132	0.0019	0.0011	0.9981	0.9989
4	161	0.0018	0.0011	0.9982	0.9989
4	138	0.0011	0.0011	0.9989	0.9989

Table B-3.
Collapsed Design Strata Used for Variance Estimation in SUDAAN

Variance Strata (TVSTR)	Total Population in Variance Strata (POPTVSTR)	Achieved Sample Size	Design Strata
1	12,691	396	001, 003
2	3,171	128	002, 004
3	26,628	277	005, 007
4	12,324	173	006, 008
5	63,487	1,309	009
6	22,350	326	010
7	7,028	107	011, 012
8	41,060	994	013, 136
9	9,670	147	014, 137
10	4,620	94	015, 016, 138, 139
11	11,103	713	017, 018, 019, 020, 140, 141, 142
12	15,904	368	021, 143
13	4,309	104	022, 144
14	3,225	42	023, 024, 145, 146
15	20,333	519	025, 147
16	4,598	87	026, 148
17	2,364	36	027, 028, 149, 150
18	8,823	455	029, 151
19	1,036	68	030, 152
20	2,487	50	031, 032, 153, 154
21	18,630	327	033, 155,
22	3,233	53	034, 156
23	4,034	43	035, 036, 157, 158
24	72,821	1,113	037, 159
25	14,620	211	038, 160
26	7,260	81	039, 040, 161, 162
27	29,286	399	041, 042, 043, 044, 163, 164, 165, 166
28	1,481	306	045, 046, 167
29	11,412	314	047
30	3,225	80	048, 168
31	1,925	38	049, 050, 169, 170
32	13,141	309	051, 171
33	3,035	87	052, 172
34	1,779	37	053, 054, 173,174
35	10,007	390	055, 057
36	1,401	58	056, 058
37	10,903	303	059, 060, 061
38	21,873	367	062, 064
39	4,343	107	063, 065
40	12,029	282	066, 067, 068, 069, 187, 188, 189

Table B-3. ***(continued)***

Variance Strata (TVSTR)	Total Population in Variance Strata POPTVSTR)	Achieved Sample Size	Design Strata
41	1,778	298	070, 071, 072, 190
42	5,747	324	073, 074, 075, 191, 192
43	5,472	321	076, 077, 078, 193
44	11,437	387	079, 081
45	2,184	73	080, 082
46	21,178	222	083, 085
47	7,765	151	084, 086
48	55,547	739	087
49	18,419	276	088
50	4,911	58	089, 090
51	23,691	370	091
52	6,849	98	092
53	2,294	41	093, 094
54	19,281	349	095, 097, 098
55	2,994	74	096
56	28,123	396	099, 100, 101, 102, 214, 215, 216, 217
57	1,323	181	103, 104, 105, 218
58	2,890	213	106, 107, 108, 219, 220
59	8,430	337	109, 110, 111, 112, 221, 222
60	3,018	303	113, 114, 115, 223
61	1,261	313	116, 117, 224
62	2,027	217	118, 119, 120, 225
63	1,945	177	121, 122, 123, 226
64	1,947	45	124, 125, 126, 127
65	6,614	56	128, 129, 130, 131
66	9,906	38	132, 133, 134, 135
67	1,105	53	175, 176, 177, 178
68	1,278	47	179, 180, 181, 182
69	1,826	40	183, 184, 185, 186
70	1,761	45	194, 195
71	2,672	43	196, 197
72	4,137	45	198, 199
73	4,864	34	200, 201
74	6,291	44	202, 203
75	5,701	45	204, 205
76	3,286	41	206, 207, 208, 209
77	2,917	37	210, 211, 212, 213
78	7,167	134	348
Total	823,685	17,963	

* Achieved sample size includes cases coded as *ER* and *IN1* (see the section titled "Weighting Procedures").

Table B-4.
Location, Completion, Response Rates by Design Stratum for the 1999 Active Duty Survey - Form B

						Unweighted			Weighted		
						Location	Completion	Response	Location	Completion	Response
Stratum	Marital Status	Service	Paygrade	Member Gender	Location	Rate	Rate	Rate	Rate	Rate	Rate
001	Married, Non-Joint	Army	E1 - E3	Male	CONUS	95.4%	42.1%	40.1%	95.4%	42.1%	40.1%
002	Married, Non-Joint	Army	E1 - E3	Male	OCONUS	97.6%	41.0%	40.1%	97.6%	41.0%	40.1%
003	Married, Non-Joint	Army	E1 - E3	Female	CONUS	96.7%	25.4%	24.6%	96.7%	25.4%	24.6%
004	Married, Non-Joint	Army	E1 - E3	Female	OCONUS	94.3%	30.3%	28.6%	94.3%	30.3%	28.6%
005	Married, Non-Joint	Army	E4	Male	CONUS	95.8%	43.1%	41.3%	95.8%	43.1%	41.3%
006	Married, Non-Joint	Army	E4	Male	OCONUS	96.6%	41.0%	39.6%	96.6%	41.0%	39.6%
007	Married, Non-Joint	Army	E4	Female	CONUS	92.0%	15.0%	13.8%	92.0%	15.0%	13.8%
008	Married, Non-Joint	Army	E4	Female	OCONUS	93.2%	19.5%	18.2%	93.2%	19.5%	18.2%
009	Married, Non-Joint	Army	E5 - E6	Male	CONUS	97.3%	49.1%	47.8%	97.3%	49.1%	47.8%
010	Married, Non-Joint	Army	E5 - E6	Male	OCONUS	96.7%	44.4%	42.9%	96.7%	44.4%	42.9%
011	Married, Non-Joint	Army	E5 - E6	Female	CONUS	94.9%	36.8%	34.9%	94.9%	36.8%	34.9%
012	Married, Non-Joint	Army	E5 - E6	Female	OCONUS	96.2%	35.2%	33.9%	96.2%	35.2%	33.9%
013	Married, Non-Joint	Army	E7 - E9	Male	CONUS	98.1%	58.6%	57.5%	98.1%	58.6%	57.5%
014	Married, Non-Joint	Army	E7 - E9	Male	OCONUS	97.9%	50.5%	49.4%	97.9%	50.5%	49.4%
015	Married, Non-Joint	Army	E7 - E9	Female	CONUS	97.8%	55.0%	53.8%	97.8%	55.0%	53.8%
016	Married, Non-Joint	Army	E7 - E9	Female	OCONUS	91.3%	61.9%	56.5%	91.3%	61.9%	56.5%
017	Married, Non-Joint	Army	W1 - W5	Male	CONUS	99.3%	59.2%	58.8%	99.3%	59.2%	58.8%
018	Married, Non-Joint	Army	W1 - W5	Male	OCONUS	98.1%	63.4%	62.2%	98.1%	63.4%	62.2%
019	Married, Non-Joint	Army	W1 - W5	Female	CONUS	94.7%	66.7%	63.2%	94.7%	66.7%	63.2%
020	Married, Non-Joint	Army	W1 - W5	Female	OCONUS	100.0%	33.3%	33.3%	100.0%	33.3%	33.3%
021	Married, Non-Joint	Army	O1 - O3	Male	CONUS	99.2%	68.8%	68.3%	99.2%	68.8%	68.3%
022	Married, Non-Joint	Army	O1 - O3	Male	OCONUS	97.0%	76.3%	74.1%	97.0%	76.3%	74.1%
023	Married, Non-Joint	Army	O1 - O3	Female	CONUS	100.0%	52.3%	52.3%	100.0%	52.3%	52.3%
024	Married, Non-Joint	Army	O1 - O3	Female	OCONUS	100.0%	46.2%	46.2%	100.0%	46.2%	46.2%
025	Married, Non-Joint	Army	O4 - O6	Male	CONUS	99.0%	72.9%	72.2%	99.0%	72.9%	72.2%
026	Married, Non-Joint	Army	O4 - O6	Male	OCONUS	97.6%	68.4%	66.8%	97.6%	68.4%	66.8%
027	Married, Non-Joint	Army	O4 - O6	Female	CONUS	100.0%	63.0%	63.0%	100.0%	63.0%	63.0%

Table B-4. ***(Continued)***

						Unweighted			Weighted		
						Location	Completion	Response	Location	Completion	Response
Stratum	Marital Status	Service	Paygrade	Member Gender	Location	Rate	Rate	Rate	Rate	Rate	Rate
028	Married, Non-Joint	Army	O4 - O6	Female	OCONUS	100.0%	83.3%	83.3%	100.0%	83.3%	83.3%
029	Married, Non-Joint	Navy	E1 - E3	Male	CONUS	95.9%	39.9%	38.2%	95.9%	39.9%	38.2%
030	Married, Non-Joint	Navy	E1 - E3	Male	OCONUS	98.5%	47.3%	46.6%	98.5%	47.3%	46.6%
031	Married, Non-Joint	Navy	E1 - E3	Female	CONUS	92.4%	15.5%	14.3%	92.4%	15.5%	14.3%
032	Married, Non-Joint	Navy	E1 - E3	Female	OCONUS	100.0%	60.2%	60.2%	100.0%	60.2%	60.2%
033	Married, Non-Joint	Navy	E4	Male	CONUS	95.9%	43.7%	41.9%	95.9%	43.7%	41.9%
034	Married, Non-Joint	Navy	E4	Male	OCONUS	97.7%	41.6%	40.6%	97.7%	41.6%	40.6%
035	Married, Non-Joint	Navy	E4	Female	CONUS	95.7%	28.9%	27.7%	95.7%	28.9%	27.7%
036	Married, Non-Joint	Navy	E4	Female	OCONUS	94.1%	18.8%	17.6%	94.1%	18.8%	17.6%
037	Married, Non-Joint	Navy	E5 - E6	Male	CONUS	97.8%	51.5%	50.3%	97.8%	51.5%	50.3%
038	Married, Non-Joint	Navy	E5 - E6	Male	OCONUS	99.2%	54.3%	53.8%	99.2%	54.3%	53.8%
039	Married, Non-Joint	Navy	E5 - E6	Female	CONUS	96.7%	39.9%	38.6%	96.7%	39.9%	38.6%
040	Married, Non-Joint	Navy	E5 - E6	Female	OCONUS	100.0%	22.2%	22.2%	100.0%	22.2%	22.2%
041	Married, Non-Joint	Navy	E7 - E9	Male	CONUS	99.6%	60.9%	60.7%	99.6%	60.9%	60.7%
042	Married, Non-Joint	Navy	E7 - E9	Male	OCONUS	94.8%	63.7%	60.4%	94.8%	63.7%	60.4%
043	Married, Non-Joint	Navy	E7 - E9	Female	CONUS	100.0%	36.4%	36.4%	100.0%	36.4%	36.4%
044	Married, Non-Joint	Navy	E7 - E9	Female	OCONUS	100.0%	40.0%	40.0%	100.0%	40.0%	40.0%
045	Married, Non-Joint	Navy	W1 - W5	Male+Female	CONUS	99.7%	62.0%	61.8%	99.7%	62.0%	61.8%
046	Married, Non-Joint	Navy	W1 - W5	Male+Female	OCONUS	98.5%	57.2%	56.3%	98.5%	57.2%	56.3%
047	Married, Non-Joint	Navy	O1 - O3	Male	CONUS	99.3%	69.9%	69.4%	99.3%	69.9%	69.4%
048	Married, Non-Joint	Navy	O1 - O3	Male	OCONUS	95.5%	61.1%	58.3%	95.5%	61.1%	58.3%
049	Married, Non-Joint	Navy	O1 - O3	Female	CONUS	98.0%	54.0%	52.9%	98.0%	54.0%	52.9%
050	Married, Non-Joint	Navy	O1 - O3	Female	OCONUS	100.0%	45.5%	45.5%	100.0%	45.5%	45.5%
051	Married, Non-Joint	Navy	O4 - O6	Male	CONUS	99.5%	71.3%	71.0%	99.5%	71.3%	71.0%
052	Married, Non-Joint	Navy	O4 - O6	Male	OCONUS	99.1%	76.4%	75.7%	99.1%	76.4%	75.7%
053	Married, Non-Joint	Navy	O4 - O6	Female	CONUS	100.0%	68.6%	68.6%	100.0%	68.6%	68.6%
054	Married, Non-Joint	Navy	O4 - O6	Female	OCONUS	100.0%	75.0%	75.0%	100.0%	75.0%	75.0%
055	Married, Non-Joint	Marine Corps	E1 - E3	Male	CONUS	98.4%	42.6%	41.9%	98.4%	42.6%	41.9%
056	Married, Non-Joint	Marine Corps	E1 - E3	Male	OCONUS	94.0%	36.3%	34.2%	94.0%	36.3%	34.2%
057	Married, Non-Joint	Marine Corps	E1 - E3	Female	CONUS	97.1%	14.7%	14.3%	97.1%	14.7%	14.3%
058	Married, Non-Joint	Marine Corps	E1 - E3	Female	OCONUS	90.0%	0.0%	0.0%	90.0%	0.0%	0.0%
059	Married, Non-Joint	Marine Corps	E4	Male	CONUS	96.7%	42.4%	41.0%	96.7%	42.4%	41.0%

Table B-4. ***(Continued)***

						Unweighted			Weighted		
						Location	Completion	Response	Location	Completion	Response
Stratum	Marital Status	Service	Paygrade	Member Gender	Location	Rate	Rate	Rate	Rate	Rate	Rate
060	Married, Non-Joint	Marine Corps	E4	Male	OCONUS	96.4%	43.9%	42.3%	96.4%	43.9%	42.3%
061	Married, Non-Joint	Marine Corps	E4	Female	CONUS and OCONUS	96.6%	28.6%	27.6%	96.6%	28.6%	27.6%
062	Married, Non-Joint	Marine Corps	E5 - E6	Male	CONUS	98.0%	51.8%	50.8%	98.0%	51.8%	50.8%
063	Married, Non-Joint	Marine Corps	E5 - E6	Male	OCONUS	97.5%	54.0%	52.7%	97.5%	54.0%	52.7%
064	Married, Non-Joint	Marine Corps	E5 - E6	Female	CONUS	95.2%	45.0%	42.9%	95.2%	45.0%	42.9%
065	Married, Non-Joint	Marine Corps	E5 - E6	Female	OCONUS	100.0%	0.0%	0.0%	100.0%	0.0%	0.0%
066	Married, Non-Joint	Marine Corps	E7 - E9	Male	CONUS	96.7%	53.2%	51.5%	96.7%	53.2%	51.5%
067	Married, Non-Joint	Marine Corps	E7 - E9	Male	OCONUS	98.1%	60.0%	58.9%	98.1%	60.0%	58.9%
068	Married, Non-Joint	Marine Corps	E7 - E9	Female	CONUS	100.0%	50.9%	50.9%	100.0%	50.9%	50.9%
069	Married, Non-Joint	Marine Corps	E7 - E9	Female	OCONUS	100.0%	75.0%	75.0%	100.0%	75.0%	75.0%
070	Married, Non-Joint	Marine Corps	W1 - W5	Male	CONUS	99.7%	58.4%	58.3%	99.7%	58.4%	58.3%
071	Married, Non-Joint	Marine Corps	W1 - W5	Male	OCONUS	97.8%	67.6%	66.2%	97.8%	67.6%	66.2%
072	Married, Non-Joint	Marine Corps	W1 - W5	Female	CONUS and OCONUS	100.0%	64.3%	64.3%	100.0%	64.3%	64.3%
073	Married, Non-Joint	Marine Corps	O1 - O3	Male	CONUS	98.7%	66.6%	65.7%	98.7%	66.6%	65.7%
074	Married, Non-Joint	Marine Corps	O1 - O3	Male	OCONUS	100.0%	52.4%	52.4%	100.0%	52.4%	52.4%
075	Married, Non-Joint	Marine Corps	O1 - O3	Female	CONUS and OCONUS	100.0%	55.6%	55.6%	100.0%	55.6%	55.6%
076	Married, Non-Joint	Marine Corps	O4 - O6	Male	CONUS	99.4%	71.1%	70.7%	99.4%	71.1%	70.7%
077	Married, Non-Joint	Marine Corps	O4 - O6	Male	OCONUS	96.1%	73.0%	70.1%	96.1%	73.0%	70.1%
078	Married, Non-Joint	Marine Corps	O4 - O6	Female	CONUS and OCONUS	100.0%	87.5%	87.5%	100.0%	87.5%	87.5%
079	Married, Non-Joint	Air Force	E1 - E3	Male	CONUS	98.1%	46.1%	45.3%	98.1%	46.1%	45.3%
080	Married, Non-Joint	Air Force	E1 - E3	Male	OCONUS	98.3%	38.1%	37.4%	98.3%	38.1%	37.4%
081	Married, Non-Joint	Air Force	E1 - E3	Female	CONUS	99.1%	20.6%	20.4%	99.1%	20.6%	20.4%
082	Married, Non-Joint	Air Force	E1 - E3	Female	OCONUS	91.7%	22.7%	20.8%	91.7%	22.7%	20.8%
083	Married, Non-Joint	Air Force	E4	Male	CONUS	98.4%	41.3%	40.6%	98.4%	41.3%	40.6%
084	Married, Non-Joint	Air Force	E4	Male	OCONUS	99.0%	50.6%	50.1%	99.0%	50.6%	50.1%
085	Married, Non-Joint	Air Force	E4	Female	CONUS	95.2%	25.5%	24.3%	95.2%	25.5%	24.3%
086	Married, Non-Joint	Air Force	E4	Female	OCONUS	96.0%	20.8%	20.0%	96.0%	20.8%	20.0%
087	Married, Non-Joint	Air Force	E5 - E6	Male	CONUS	98.9%	53.0%	52.5%	98.9%	53.0%	52.5%

Table B-4. ***(Continued)***

						Unweighted			Weighted		
						Location	Completion	Response	Location	Completion	Response
Stratum	Marital Status	Service	Paygrade	Member Gender	Location	Rate	Rate	Rate	Rate	Rate	Rate
088	Married, Non-Joint	Air Force	E5 - E6	Male	OCONUS	96.3%	50.0%	48.2%	96.3%	50.0%	48.2%
089	Married, Non-Joint	Air Force	E5 - E6	Female	CONUS	98.5%	39.1%	38.5%	98.5%	39.1%	38.5%
090	Married, Non-Joint	Air Force	E5 - E6	Female	OCONUS	92.6%	32.0%	29.6%	92.6%	32.0%	29.6%
091	Married, Non-Joint	Air Force	E7 - E9	Male	CONUS	99.4%	54.8%	54.4%	99.4%	54.8%	54.4%
092	Married, Non-Joint	Air Force	E7 - E9	Male	OCONUS	97.1%	58.5%	56.8%	97.1%	58.5%	56.8%
093	Married, Non-Joint	Air Force	E7 - E9	Female	CONUS	100.0%	44.8%	44.8%	100.0%	44.8%	44.8%
094	Married, Non-Joint	Air Force	E7 - E9	Female	OCONUS	90.9%	40.0%	36.4%	90.9%	40.0%	36.4%
095	Married, Non-Joint	Air Force	W1 - W5	Male	CONUS	99.2%	62.5%	62.0%	99.2%	62.5%	62.0%
096	Married, Non-Joint	Air Force	O1 - O3	Male	OCONUS	99.1%	66.1%	65.5%	99.1%	66.1%	65.5%
097	Married, Non-Joint	Air Force	W1 - W5	Female	CONUS	100.0%	60.9%	60.9%	100.0%	60.9%	60.9%
098	Married, Non-Joint	Air Force	W1 - W5	Female	OCONUS	75.0%	66.7%	50.0%	75.0%	66.7%	50.0%
099	Married, Non-Joint	Air Force	O4 - O6	Male	CONUS	98.7%	64.4%	63.6%	98.7%	64.4%	63.6%
100	Married, Non-Joint	Air Force	O4 - O6	Male	OCONUS	97.8%	65.7%	64.3%	97.8%	65.7%	64.3%
101	Married, Non-Joint	Air Force	O4 - O6	Female	CONUS	100.0%	56.0%	56.0%	100.0%	56.0%	56.0%
102	Married, Non-Joint	Air Force	O4 - O6	Female	OCONUS	100.0%	50.0%	50.0%	100.0%	50.0%	50.0%
103	Married, Non-Joint	Coast Guard	E1 - E3	Male	CONUS	95.5%	52.9%	50.5%	95.5%	52.9%	50.5%
104	Married, Non-Joint	Coast Guard	E1 - E3	Male	OCONUS	90.2%	65.2%	58.8%	90.2%	65.2%	58.8%
105	Married, Non-Joint	Coast Guard	E1 - E3	Female	CONUS and OCONUS	95.8%	21.7%	20.8%	95.8%	21.7%	20.8%
106	Married, Non-Joint	Coast Guard	E4	Male	CONUS	97.9%	49.8%	48.7%	97.9%	49.8%	48.7%
107	Married, Non-Joint	Coast Guard	E4	Male	OCONUS	96.3%	59.5%	57.3%	96.3%	59.5%	57.3%
108	Married, Non-Joint	Coast Guard	E4	Female	CONUS and OCONUS	94.1%	21.9%	20.6%	94.1%	21.9%	20.6%
109	Married, Non-Joint	Coast Guard	E5 - E6	Male	CONUS	99.1%	57.2%	56.7%	99.1%	57.2%	56.7%
110	Married, Non-Joint	Coast Guard	E5 - E6	Male	OCONUS	96.8%	55.8%	54.0%	96.8%	55.8%	54.0%
111	Married, Non-Joint	Coast Guard	E5 - E6	Female	CONUS	95.2%	25.0%	23.8%	95.2%	25.0%	23.8%
112	Married, Non-Joint	Coast Guard	E5 - E6	Female	OCONUS	100.0%	50.0%	50.0%	100.0%	50.0%	50.0%
113	Married, Non-Joint	Coast Guard	E7 - E9	Male	CONUS	99.5%	62.9%	62.6%	99.5%	62.9%	62.6%
114	Married, Non-Joint	Coast Guard	E7 - E9	Male	OCONUS	96.1%	55.4%	53.2%	96.1%	55.4%	53.2%
115	Married, Non-Joint	Coast Guard	E7 - E9	Female	CONUS and OCONUS	92.3%	41.7%	38.5%	92.3%	41.7%	38.5%
116	Married, Non-Joint	Coast Guard	W1 - W5	Male+Female	CONUS	98.9%	69.4%	68.6%	98.9%	69.4%	68.6%

Table B-4. ***(Continued)***

						Unweighted			Weighted		
						Location	Completion	Response	Location	Completion	Response
Stratum	Marital Status	Service	Paygrade	Member Gender	Location	Rate	Rate	Rate	Rate	Rate	Rate
117	Married, Non-Joint	Coast Guard	W1 - W5	Male+Female	OCONUS	100.0%	71.6%	71.6%	100.0%	71.6%	71.6%
118	Married, Non-Joint	Coast Guard	O1 - O3	Male	CONUS	99.1%	75.3%	74.6%	99.1%	75.3%	74.6%
119	Married, Non-Joint	Coast Guard	O1 - O3	Male	OCONUS	100.0%	68.1%	68.1%	100.0%	68.1%	68.1%
120	Married, Non-Joint	Coast Guard	O1 - O3	Female	CONUS	100.0%	52.9%	52.9%	100.0%	52.9%	52.9%
121	Married, Non-Joint	Coast Guard	O4 - O6	Male	CONUS	100.0%	74.2%	74.2%	100.0%	74.2%	74.2%
122	Married, Non-Joint	Coast Guard	O4 - O6	Male	OCONUS	90.6%	65.1%	59.0%	90.6%	65.1%	59.0%
123	Married, Non-Joint	Coast Guard	O4 - O6	Female	CONUS	100.0%	33.3%	33.3%	100.0%	33.3%	33.3%
124	Joint Service Married	Army	E1 - E3	Male	CONUS	98.2%	33.3%	32.7%	98.2%	33.3%	32.7%
125	Joint Service Married	Army	E1 - E3	Male	OCONUS	90.9%	30.0%	27.3%	90.9%	30.0%	27.3%
127	Joint Service Married	Army	E1-E3	Female	OCONUS	100.0%	53.3%	53.3%	100.0%	53.3%	53.3%
128	Joint Service Married	Army	E4	Male	CONUS	96.4%	35.0%	33.7%	96.4%	35.0%	33.7%
129	Joint Service Married	Army	E4	Male	OCONUS	94.3%	35.9%	33.9%	94.3%	35.9%	33.9%
130	Joint Service Married	Army	E4	Female	CONUS	98.7%	38.2%	37.7%	98.7%	38.2%	37.7%
131	Joint Service Married	Army	E4	Female	OCONUS	100.0%	32.7%	32.7%	100.0%	32.7%	32.7%
132	Joint Service Married	Army	E5-E6	Male	CONUS	98.9%	35.9%	35.5%	98.9%	35.9%	35.5%
133	Joint Service Married	Army	E5-E6	Male	OCONUS	98.6%	44.4%	43.8%	98.6%	44.4%	43.8%
134	Joint Service Married	Army	E5-E6	Female	CONUS	98.2%	44.6%	43.9%	98.2%	44.6%	43.9%
135	Joint Service Married	Army	E5-E6	Female	OCONUS	98.0%	60.0%	58.8%	98.0%	60.0%	58.8%
136	Joint Service Married	Army	E7-E9	Male	CONUS	100.0%	67.9%	67.9%	100.0%	67.9%	67.9%
137	Joint Service Married	Army	E7-E9	Male	OCONUS	94.7%	60.6%	57.4%	94.7%	60.6%	57.4%
138	Joint Service Married	Army	E7-E9	Female	CONUS	100.0%	44.4%	44.4%	100.0%	44.4%	44.4%
139	Joint Service Married	Army	E7-E9	Female	OCONUS	92.9%	46.2%	42.9%	92.9%	46.2%	42.9%
140	Joint Service Married	Army	W1-W5	Male	CONUS	100.0%	78.6%	78.6%	100.0%	78.6%	78.6%
141	Joint Service Married	Army	W1-W5	Male	OCONUS	100.0%	44.4%	44.4%	100.0%	44.4%	44.4%
142	Joint Service Married	Army	W1-W5	Female	CONUS and OCONUS	100.0%	66.6%	66.6%	100.0%	66.6%	66.6%
143	Joint Service Married	Army	O1-O3	Male	CONUS	99.2%	71.1%	70.5%	99.2%	71.1%	70.5%
144	Joint Service Married	Army	O1 - O3	Male	OCONUS	100.0%	44.4%	44.4%	100.0%	44.4%	44.4%
145	Joint Service Married	Army	O1 - O3	Female	CONUS	100.0%	50.0%	50.0%	100.0%	50.0%	50.0%
146	Joint Service Married	Army	O1 - O3	Female	OCONUS	100.0%	44.4%	44.4%	100.0%	44.4%	44.4%
147	Joint Service Married	Army	O4 - O6	Male	CONUS	100.0%	75.0%	75.0%	100.0%	75.0%	75.0%
148	Joint Service Married	Army	O4 - O6	Male	OCONUS	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Table B-4. ***(Continued)***

						Unweighted			Weighted		
						Location	Completion	Response	Location	Completion	Response
Stratum	Marital Status	Service	Paygrade	Member Gender	Location	Rate	Rate	Rate	Rate	Rate	Rate
149	Joint Service Married	Army	O4 - O6	Female	CONUS	100.0%	50.0%	50.0%	100.0%	50.0%	50.0%
150	Joint Service Married	Army	O4 - O6	Female	OCONUS	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%
151	Joint Service Married	Navy	E1 - E3	Male	CONUS	92.9%	30.8%	28.6%	92.9%	30.8%	28.6%
152	Joint Service Married	Navy	E1 - E3	Male	OCONUS	100.0%	75.0%	75.0%	100.0%	75.0%	75.0%
153	Joint Service Married	Navy	E1 - E3	Female	CONUS	97.4%	31.6%	30.8%	97.4%	31.6%	30.8%
154	Joint Service Married	Navy	E1 - E3	Female	OCONUS	90.9%	10.0%	9.1%	90.9%	10.0%	9.1%
155	Joint Service Married	Navy	E4	Male	CONUS	100.0%	34.4%	34.4%	100.0%	34.4%	34.4%
158	Joint Service Married	Navy	E4	Female	OCONUS	90.0%	44.4%	40.0%	90.0%	44.4%	40.0%
159	Joint Service Married	Navy	E5 - E6	Male	CONUS	100.0%	60.0%	60.0%	100.0%	60.0%	60.0%
160	Joint Service Married	Navy	E5 - E6	Male	OCONUS	100.0%	63.6%	63.6%	100.0%	63.6%	63.6%
161	Joint Service Married	Navy	E5 - E6	Female	CONUS	100.0%	28.6%	28.6%	100.0%	28.6%	28.6%
162	Joint Service Married	Navy	E5 - E6	Female	OCONUS	100.0%	44.4%	44.4%	100.0%	44.4%	44.4%
163	Joint Service Married	Navy	E7 - E9	Male	CONUS	100.0%	42.9%	42.9%	100.0%	42.9%	42.9%
164	Joint Service Married	Navy	E7 - E9	Male	OCONUS	100.0%	66.7%	66.7%	100.0%	66.7%	66.7%
165	Joint Service Married	Navy	E7 - E9	Female	CONUS	100.0%	40.0%	40.0%	100.0%	40.0%	40.0%
166	Joint Service Married	Navy	E7 - E9	Female	OCONUS	100.0%	66.7%	66.7%	100.0%	66.7%	66.7%
167	Joint Service Married	Navy	W1 - W5	Male+Female	CONUS and OCONUS	100.0%	58.6%	58.6%	100.0%	58.6%	58.6%
168	Joint Service Married	Navy	O1 - O3	Male	OCONUS	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
169	Joint Service Married	Navy	O1 - O3	Female	CONUS	100.0%	40.0%	40.0%	100.0%	40.0%	40.0%
170	Joint Service Married	Navy	O1 - O3	Female	OCONUS	100.0%	75.0%	75.0%	100.0%	75.0%	75.0%
171	Joint Service Married	Navy	O4 - O6	Male	CONUS	100.0%	75.0%	75.0%	100.0%	75.0%	75.0%
172	Joint Service Married	Navy	O4 - O6	Male	OCONUS	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
173	Joint Service Married	Navy	O4 - O6	Female	CONUS	100.0%	53.3%	53.3%	100.0%	53.3%	53.3%
174	Joint Service Married	Navy	O4 - O6	Female	OCONUS	100.0%	66.7%	66.7%	100.0%	66.7%	66.7%
175	Joint Service Married	Marine Corps	E1 - E3	Male	CONUS	96.4%	28.4%	27.4%	96.4%	28.4%	27.4%
176	Joint Service Married	Marine Corps	E1 - E3	Male	OCONUS	95.8%	56.5%	54.2%	95.8%	56.5%	54.2%
177	Joint Service Married	Marine Corps	E1 - E3	Female	CONUS	98.6%	18.1%	17.8%	98.6%	18.1%	17.8%
178	Joint Service Married	Marine Corps	E1 - E3	Female	OCONUS	93.8%	26.7%	25.0%	93.8%	26.7%	25.0%
179	Joint Service Married	Marine Corps	E4	Male	CONUS	98.7%	35.5%	35.1%	98.7%	35.5%	35.1%
180	Joint Service Married	Marine Corps	E4	Male	OCONUS	94.7%	27.8%	26.3%	94.7%	27.8%	26.3%
181	Joint Service Married	Marine Corps	E4	Female	CONUS	98.0%	26.5%	26.0%	98.0%	26.5%	26.0%

Table B-4. ***(Continued)***

						Unweighted			Weighted		
						Location	Completion	Response	Location	Completion	Response
Stratum	Marital Status	Service	Paygrade	Member Gender	Location	Rate	Rate	Rate	Rate	Rate	Rate
182	Joint Service Married	Marine Corps	E4	Female	OCONUS	100.0%	25.0%	25.0%	100.0%	25.0%	25.0%
183	Joint Service Married	Marine Corps	E5 - E6	Male	CONUS	100.0%	37.0%	37.0%	100.0%	37.0%	37.0%
184	Joint Service Married	Marine Corps	E5 - E6	Male	OCONUS	100.0%	64.3%	64.3%	100.0%	64.3%	64.3%
185	Joint Service Married	Marine Corps	E5 - E6	Female	CONUS	100.0%	46.4%	46.4%	100.0%	46.4%	46.4%
186	Joint Service Married	Marine Corps	E5 - E6	Female	OCONUS	100.0%	14.3%	14.3%	100.0%	14.3%	14.3%
187	Joint Service Married	Marine Corps	E7 - E9	Male	CONUS	100.0%	55.0%	55.0%	100.0%	55.0%	55.0%
188	Joint Service Married	Marine Corps	E7 - E9	Male	OCONUS	100.0%	30.0%	30.0%	100.0%	30.0%	30.0%
189	Joint Service Married	Marine Corps	E7 - E9	Female	CONUS and OCONUS	100.0%	57.1%	57.1%	100.0%	57.1%	57.1%
190	Joint Service Married	Marine Corps	W1 - W5	Male+Female	CONUS and OCONUS	100.0%	62.5%	62.5%	100.0%	62.5%	62.5%
191	Joint Service Married	Marine Corps	O1 - O3	Male	CONUS and OCONUS	100.0%	68.0%	68.0%	100.0%	68.0%	68.0%
192	Joint Service Married	Marine Corps	O1 - O3	Female	CONUS and OCONUS	100.0%	60.0%	60.0%	100.0%	60.0%	60.0%
193	Joint Service Married	Marine Corps	O4 - O6	Male+Female	CONUS and OCONUS	100.0%	88.2%	88.2%	100.0%	88.2%	88.2%
194	Joint Service Married	Air Force	E1 - E3	Male	CONUS	99.0%	37.9%	37.5%	99.0%	37.9%	37.5%
195	Joint Service Married	Air Force	E1 - E3	Male	OCONUS	100.0%	29.2%	29.2%	100.0%	29.2%	29.2%
196	Joint Service Married	Air Force	E1 - E3	Female	CONUS	99.0%	33.7%	33.3%	99.0%	33.7%	33.3%
197	Joint Service Married	Air Force	E1 - E3	Female	OCONUS	89.7%	34.6%	31.0%	89.7%	34.6%	31.0%
198	Joint Service Married	Air Force	E4	Male	CONUS	100.0%	35.4%	35.4%	100.0%	35.4%	35.4%
199	Joint Service Married	Air Force	E4	Male	OCONUS	97.7%	44.2%	43.2%	97.7%	44.2%	43.2%
200	Joint Service Married	Air Force	E4	Female	CONUS	100.0%	32.4%	32.4%	100.0%	32.4%	32.4%
201	Joint Service Married	Air Force	E4	Female	OCONUS	97.2%	28.6%	27.8%	97.2%	28.6%	27.8%
202	Joint Service Married	Air Force	E5 - E6	Male	CONUS	100.0%	54.6%	54.6%	100.0%	54.6%	54.6%
203	Joint Service Married	Air Force	E5 - E6	Male	OCONUS	100.0%	45.5%	45.5%	100.0%	45.5%	45.5%
204	Joint Service Married	Air Force	E5 - E6	Female	CONUS	100.0%	48.1%	48.1%	100.0%	48.1%	48.1%
205	Joint Service Married	Air Force	E5 - E6	Female	OCONUS	100.0%	53.1%	53.1%	100.0%	53.1%	53.1%
206	Joint Service Married	Air Force	E7 - E9	Male	CONUS	100.0%	69.0%	69.0%	100.0%	69.0%	69.0%
207	Joint Service Married	Air Force	E7 - E9	Male	OCONUS	100.0%	70.0%	70.0%	100.0%	70.0%	70.0%
208	Joint Service Married	Air Force	E7 - E9	Female	CONUS	100.0%	47.6%	47.6%	100.0%	47.6%	47.6%

Table B-4. ***(Continued)***

						Unweighted			Weighted		
						Location	Completion	Response	Location	Completion	Response
Stratum	Marital Status	Service	Paygrade	Member Gender	Location	Rate	Rate	Rate	Rate	Rate	Rate
209	Joint Service Married	Air Force	E7 - E9	Female	OCONUS	100.0%	57.1%	57.1%	100.0%	57.1%	57.1%
210	Joint Service Married	Air Force	O1 - O3	Male	CONUS	100.0%	51.7%	51.7%	100.0%	51.7%	51.7%
211	Joint Service Married	Air Force	O1 - O3	Male	OCONUS	100.0%	50.0%	50.0%	100.0%	50.0%	50.0%
212	Joint Service Married	Air Force	O1 - O3	Female	CONUS	100.0%	57.1%	57.1%	100.0%	57.1%	57.1%
213	Joint Service Married	Air Force	O1 - O3	Female	OCONUS	100.0%	33.3%	33.3%	100.0%	33.3%	33.3%
214	Joint Service Married	Air Force	O4 - O6	Male	CONUS	100.0%	71.6%	71.6%	100.0%	71.6%	71.6%
215	Joint Service Married	Air Force	O4 - O6	Male	OCONUS	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%
216	Joint Service Married	Air Force	O4 - O6	Female	CONUS	100.0%	75.0%	75.0%	100.0%	75.0%	75.0%
217	Joint Service Married	Air Force	O4 - O6	Female	OCONUS	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
218	Joint Service Married	Coast Guard	E1 - E3	Male+Female	CONUS and OCONUS	98.0%	22.0%	21.6%	98.0%	22.0%	21.6%
219	Joint Service Married	Coast Guard	E4	Male	CONUS and OCONUS	100.0%	30.9%	30.9%	100.0%	30.9%	30.9%
220	Joint Service Married	Coast Guard	E4	Female	CONUS and OCONUS	100.0%	34.4%	34.4%	100.0%	34.4%	34.4%
221	Joint Service Married	Coast Guard	E5 - E6	Male	CONUS and OCONUS	100.0%	43.1%	43.1%	100.0%	43.1%	43.1%
222	Joint Service Married	Coast Guard	E5 - E6	Female	CONUS and OCONUS	100.0%	39.1%	39.1%	100.0%	39.1%	39.1%
223	Joint Service Married	Coast Guard	E7 - E9	Male+Female	CONUS and OCONUS	100.0%	54.5%	54.5%	100.0%	54.5%	54.5%
224	Joint Service Married	Coast Guard	W1 - W5	Male+Female	CONUS and OCONUS	100.0%	54.1%	54.1%	100.0%	54.1%	54.1%
225	Joint Service Married	Coast Guard	O1 - O3	Female	CONUS and OCONUS	100.0%	61.1%	61.1%	100.0%	61.1%	61.1%
226	Joint Service Married	Coast Guard	O4 - O6	Male+Female	CONUS and OCONUS	100.0%	55.6%	55.6%	100.0%	55.6%	55.6%
348						98.3%	47.1%	46.3%	98.3%	47.1%	46.3%

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1. REPORT DATE *(DD-MM-YYYY)*	2. REPORT TYPE	3. DATES COVERED *(From - To)*
03-01-2001	Final	November 1999-April 2000

4. TITLE AND SUBTITLE
1999 Survey of Spouses of Active Duty Personnel: Statistical Methodology Report

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5b. GRANT NUMBER

5c. PROGRAM ELEMENT NUMBER

6. AUTHOR(S)
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5d. PROJECT NUMBER

5e. TASK NUMBER

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12. DISTRIBUTION/AVAILABILITY STATEMENT
approved for public release; distribution is unlimited

13. SUPPLEMENTARY NOTES

14. ABSTRACT
The 1999 Active Duty Surveys (ADS) gather information on current location, spouse's military assignment, military life, programs and services, spouse employment, family information, economic issues, and background. This report provides an overview of the sampling design and documentation of the weighting.

15. SUBJECT TERMS
sampling design and weighting

16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT	18. NUMBER OF PAGES	19a. NAME OF RESPONSIBLE PERSON
a. REPORT	b. ABSTRACT	c. THIS PAGE			Kristin H. Williams
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