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VETERANS ATTITUDE TRACKING STUDY -- 1983 CALL RECORD
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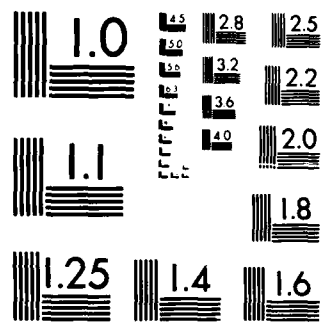
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VETERANS ATTITUDE TRACKING STUDY

CALL RECORD ANALYSIS AND
RELATED TECHNICAL ANALYSES

ARBOR, Inc.
PHILADELPHIA, PENNSYLVANIA

ML 00 1984

ARBOR, Inc.

The Science Center, 3401 Market Street
Philadelphia, Pennsylvania 19104
215-387-5300

VETERANS ATTITUDE TRACKING STUDY

**CALL RECORD ANALYSIS AND
RELATED TECHNICAL ANALYSES**

January, 1984

Prepared by:

ARBOR, INC.
University City • Science Center
Philadelphia, Pennsylvania

Prepared for:

Office of Assistant Secretary of Defense
Defense Manpower Data Center
Rosslyn, Virginia

Contract Number:

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1.0 OVERVIEW

1.1 Purpose

The purpose of the call record analysis and other related analyses discussed in this report are to determine:

- The difficulty of finding eligible respondents and of obtaining completed interviews,
- The representativeness of the obtained sample, and
- Veterans' degree of geographic mobility/stability.

1.2 Sample

Relevant data on the entire female population and on 37 percent of the male veteran sample packets were obtained.

1.3 Method

The Difficulty of Finding Eligible Respondents and Obtaining Completed Interviews. This issue was examined by analyzing the final disposition of attempts to reach target respondents. "Response Rates," which take into account both refusals by potentially eligible respondents and the number of completed interviews, were also computed and examined.

Representativeness of the Obtained Sample. This was examined in two ways. First, "Completion Rates" were calculated. Completion rates take into account not only those individuals who were contacted, but individuals who could not be contacted as well as those who refused to participate in the survey. Second, selected demographic characteristics of the obtained sample and of all members of the initial sampling frame were compared.¹⁾

1) The sample definition and specifications can be found in Appendix A. Included in this Appendix are a cover letter from DMDC describing contents of the data file, the file development sheet, the file description, and screening specifications for the prior military service sample. The screening specifications are included in the Appendix. Other materials referenced in the letter are not included because they are not directly relevant to the sample specifications.

The Degree of Geographic Mobility/Stability of the Relevant Veteran Population. This topic was explored by analyzing the telephone numbers and area codes of contacted individuals. To accomplish this, three groups were defined. Those in which the original and final telephone calls were: 1) to the same area code and telephone number, 2) to the same area code but to a different telephone number, and 3) to a different area code and telephone number.

All analyses were performed separately for men and women. Analyses by branch of prior service have also been included where appropriate.

1.4 Results

Difficulty of Finding Eligible Respondents and Completing Sample Interviews. The target respondent or someone in his or her household was contacted in 48 percent of the unique telephone numbers dialed for men, and in 50 percent of the cases for women. Seventy-seven percent (77%) of all male veterans contacted and 83 percent of all female veterans contacted were eligible to be interviewed.

Among those eligible to be interviewed, 89 percent of the male veterans and 90 percent of the female veterans granted completed interviews. It may be noted that the overall distribution of call results for male and female veterans are highly similar.

Representativeness of the Obtained Sample. The completion rate among male veterans was 86 percent, and among female veterans was 80 percent.

Both the male and female obtained samples differ somewhat from the initial sampling frames in that the former:

- Have more formal education,
- Are more likely to be white,
- Are older, and
- Had a higher pay grade upon separation.

Degree of Geographic Mobility/Stability of the Veteran Population. Eight percent (8%) of the male sample and 12 percent of the female sample were found at a telephone number with a different area code than that associated with the address on the data tape provided by DMDC. Slightly over 75 percent of both the male and female sample were reached at the telephone number associated with the address provided by DMDC.

The results regarding difficulty of finding target respondents, response rates, and representativeness of the obtained sample are highly similar to the results of similar analyses performed in the Reserve Component Attitude Study series. (Data on area codes and telephone numbers were analyzed for the first time this year.)

2.0 CALL RECORD ANALYSIS

2.1 Sampling and Analysis

The call record analysis is an analysis of the final call results of telephone calls made in the process of collecting data for the 1983 Veterans Attitude Tracking Study.

For this series of analyses, ARBOR, Inc. sampled 37 percent of all male sample packets. Data on the entire population of female veterans were obtained.

Men and women were analyzed separately. (It should be noted, however, that the distributions of call results for the men and women sampled are highly similar.) Men and women from different branches of service were also analyzed separately.¹⁾

1) Because results of this series of analyses are based on a sample, the results are subject to sampling fluctuation. Appendix B contains the maximum standard deviation of percentages based on the total number of unique telephone numbers dialed for each of the subsamples analyzed.

2.2 Male Veteran Sample

The final call dispositions of the male veterans sampled can be found on the following page. Several highlights of the analysis are listed below:

- Forty-eight percent (48%) of the unique telephone numbers dialed resulted in contact of the target person or someone in his household.
- Of those individuals contacted, 77 percent were eligible to be interviewed. (Individuals who served actively for less than two years, were currently in the Guard/Reserve or Coast Guard, or who had re-enlisted in the Active Military were not eligible to be interviewed.)
- Eighty-nine percent (89%) of the eligible male veterans contacted granted a completed interview.
- Of those respondents contacted, less than one percent initially refused to grant an interview or to complete an interview and completed the survey after a supervisor from the field service interceded.

CALL RECORD ANALYSIS -- MALE VETERANS SAMPLE
VATS 1983

	<u>N</u>	<u>% OF NUMBERS DIALED</u>	<u>% OF CONTACTS</u>	<u>% OF POTENTIALLY ELIGIBLE CONTACTS</u>
Blocks analyzed	1,560	--	--	--
Potential respondents ¹⁾	36,558	--	--	--
Potential respondents not looked up or not called	19,996	--	--	--
Numbers with a specified disposition²⁾	16,562	--	--	--
Numbers not listed	12,218	--	--	--
Unique telephone numbers diald	4,344	100.0%		
(Total dialings)	(9,026)	(2.1 calls per number)		
Unusable numbers	290	6.7	--	--
Moved	701	16.1	--	--
No answer	713	16.4	--	--
Other (busy signal, language barrier, etc.)	575	13.2	--	--
Number of contacts	2,065	47.5	100.0%	--
Respondent not eligible	204	4.7	9.9	--
Initial hangup	199	4.6	9.6	--
Refusal by someone other than potential respondent	79	1.8	3.8	--
Number of contacts of eligible respondents	1,583	36.4	76.7	100.0%
Refusal by potential respondent	135	3.1	6.5	8.5
Incompleted interviews	34	0.8	1.6	2.1
Completed interviews	1,414	32.6	68.5	89.3
Regular completes	1,396	32.1	67.6	88.2
Converted completes	18	0.4	0.9	1.1

1) Estimate based on the ratio of blocks analyzed to available blocks and the number of names in the available blocks.

2) Definitions of response categories are found in Appendix C.

2.3 Male Veteran Sample by Branch

A comparison of the dispositions of final attempts to reach men from different branches of the service is found on the following page. A more detailed analysis, such as that presented on page 5, of attempts to reach individuals from each branch of the service is available in Appendix D.

As can be seen in the table on the following page, the distributions of final call results for male veterans are highly similar across different service branches.

Some differences may be noted, however. For example, higher percentage of Navy men (49.7 percent) than Army men (44.7 percent) could be contacted. Although several such differences between branches are statistically significant, given the large sample sizes involved, branch of previous service accounts for less than one percent of the variance in even the example cited.

CALL RECORD ANALYSIS -- VETERAN MALE SAMPLE BY BRANCH
VATS 1983

	BRANCH			
	<u>ARMY</u>	<u>NAVY</u>	<u>MARINE CORPS</u>	<u>AIR FORCE</u>
(BASE)	(1388)	(1152)	(646)	(1158)
Unique telephone numbers dialed¹⁾	100.0%	100.0%	100.0%	100.0%
(Calls per number)	(2.2)	(1.9)	(2.1)	(2.1)
Unusable numbers	7.4	6.3	5.6	6.8
Moved	17.8	14.6	17.3	15.0
No answer	14.9	17.5	16.4	17.1
Other (busy signal, language barrier, etc.)	15.2	12.0	11.8	13.0
Number of contacts	44.7	49.7	48.9	48.1
Respondent not eligible	6.6	3.7	4.3	3.5
Initial hangup	3.5	4.0	5.7	5.9
Refusal by someone other than potential respondent	1.6	1.6	2.2	2.2
Number of contacts of potentially eligible respondents	33.0	40.4	36.7	36.5
Refusal by potential respondent	3.7	2.6	2.6	3.1
Incompleted interviews	0.6	1.0	0.9	0.6
Completed interviews	28.6	36.7	33.1	32.8
Regular completes	28.4	36.1	32.5	32.5
Converted completes	0.2	0.6	0.6	0.3

1) Definitions of response categories are found in Appendix C.

2.4 Female Veteran Population

The call results for the female veteran population can be found on the following pages. Some of the key results are summarized below:

- 50 percent of the unique telephone numbers dialed resulted in a contact of the target person or someone in her household.
- Of those female veterans contacted, 83 percent were eligible to be interviewed. (The same eligibility criteria were applied to both men and women.)
- 90 percent of the eligible respondents completed interviews.
- Of those respondents contacted, only one percent initially refused to grant an interview or did not complete interviews and completed the survey after intercession from a supervisor from the field service.

CALL RECORD ANALYSIS -- FEMALE VETERANS POPULATION
VATS 1983

	<u>N</u>	<u>% OF NUMBERS DIALED</u>	<u>% OF CONTACTS</u>	<u>% OF POTENTIALLY ELIGIBLE CONTACTS</u>
Numbers looked up¹⁾	9,983	--	--	--
Numbers not listed or not called	6,634	66.52)	--	--
Unique telephone numbers dialed³⁾	3,349	100.0%		
(Total dialings)	(7,451)	(2.2 calls per number)		
Unusable numbers	209	6.2	--	--
Moved	512	15.3	--	--
No answer	248	7.4	--	--
Other (busy signal, language barrier, etc.)	701	20.9	--	--
Number of contacts	1,679	50.1	100.0%	--
Respondent not eligible	141	4.2	8.4	--
Initial hangup	97	2.9	5.8	--
Refusal by someone other than potential respondent	50	1.5	3.0	--
Number of contacts of potentially eligible respondents	1,391	41.5	82.8	100.0%
Refusal by potential respondent	98	2.9	5.8	7.0
Incompleted interviews	35	1.0	2.1	2.5
Completed interviews	1,258	37.6	74.9	90.4
Regular completes	1,237	36.9	73.7	88.9
Converted completes	21	0.6	1.3	1.5

- 1) The disposition of 87 additional call records could not be determined because of misspecified service or sex codes on the original data tape or because of clerical problems.
- 2) Percentage of numbers looked up.
- 3) Definitions of response categories are found in Appendix C.

2.5 Female Veteran Population by Branch

The distributions of final attempts to reach veteran women from different branches of service are highly similar, as were the distributions for veteran men. A comparison of the disposition of unique telephone numbers dialed for women from different branches of the service is found in the table on the following page. A more detailed breakdown of attempts to reach women from each branch of service is available in Appendix D.

CALL RECORD ANALYSIS -- VETERAN FEMALE SAMPLE BY BRANCH
VATS 1983

	BRANCH		
	<u>ARMY</u>	<u>NAVY</u>	<u>AIR FORCE</u>
(BASE)	(1269)	(857)	(1223)
Unique telephone numbers dialed¹⁾	100.0%	100.0%	100.0%
(Calls per number)	(2.2)	(2.3)	(2.2)
Unusable numbers	6.5	6.4	5.9
Moved	16.0	14.8	14.9
No answer	5.7	5.8	10.3
Other (busy signal, language barrier, etc.)	23.1	23.7	16.8
Number of contacts	48.8	49.2	52.2
Respondent not eligible	5.0	5.1	2.7
Initial hangup	3.0	2.9	2.8
Refusal by someone other than potential respondent	1.2	1.8	1.6
Number of contacts of potentially eligible respondents	39.6	39.4	45.1
Refusal by potential respondent	2.9	2.8	3.0
Incompleted interviews	0.9	0.7	1.4
Completed interviews	35.7	35.9	40.6
Regular completes	35.4	35.1	39.8
Converted completes	0.3	0.8	0.8

1) Definitions of response categories are found in Appendix C.

3.0 RESPONSE RATES

The response rate provides an indication of the probability of successful completion of the interview upon reaching an eligible respondent. The formula used to calculate response rates¹⁾ can be found in Appendix E. The overall response rate was 90 percent. Indeed, the response rate of each and every subsample exceeded 86 percent. Response rates for all males and for all females, as well as those for males and females from different branches of the service, are shown below.

<u>SAMPLE</u>	<u>RESPONSE RATES BY SEX AND BRANCH OF PRIOR SERVICE</u>	
	<u>(BASE)²⁾</u>	<u>RESPONSE RATE (IN PERCENT)</u>
Men	1,583	89.3
Army	458	86.7
Navy	465	91.0
Marine Corps	237	90.3
Air Force	423	89.8
 <u>POPULATION</u>		
Women	1,391	90.4
Army	502	90.2
Navy	338	91.1
Air Force	551	90.2

1) The response rate is calculated using the CASRO (Council of American Survey Research Organizations, June, 1982) standard.

2) Based on number of eligible respondents contacted.

4.0 COMPLETION RATES

Completion rates were calculated to determine the degree to which results from a representative sample of veterans had been obtained. The completion rate takes into account potential respondents who are selected for the survey but who cannot be contacted or who refuse to participate before eligibility is determined. The eligibility rate and the probable refusal/incomplete rates are estimated for those not contacted by applying the rates determined for that segment actually contacted. The detailed formula for computing completion rates is found in Appendix E.

Completion rates for males and females and for individuals from different branches of prior service are found in the table below.

- The overall completion rate for male veterans was 66 percent.
- The overall completion rate for female veterans was 80 percent.

COMPLETION RATES BY SEX AND BRANCH OF PRIOR SERVICE

COMPLETION RATES
(IN PERCENT)

SAMPLE

Men	66
Army	67
Navy	66
Marine Corps	65
Air Force	64

POPULATION

Women	80
Army	84
Navy	83
Air Force	74

5.0 COMPARISON OF DEMOGRAPHIC CHARACTERISTICS OF THE OBTAINED SAMPLE AND THE ORIGINAL SAMPLING FRAME

The representativeness of the VATS sample was also assessed by comparing the profile of the obtained sample with that of the original sampling frame provided by DMDC. The following characteristics were used in the comparison:

- Total Active Military service (TAFMS),
- Highest year of education (HYEC),
- Pay grade upon separation (PG),
- Race,
- Mental category (MC),
- Age at separation
- Separation date, and
- Time in highest pay grade (TIG).

An analysis of these profiles indicated that the obtained sample does differ from the original sampling frame. The results of the relevant analysis are found on the following page. For both men and women, the obtained sample:

- Has more years of formal education (and has a higher mental category for men),¹⁾
- Is more likely to be white,
- Is older, and
- Had a higher pay grade upon separation.

1) Female veterans are not given mental category codes.

OBTAINED SAMPLE VERSUS THE ORIGINAL SAMPLING FRAME

DEMOGRAPHIC VARIABLE	MALE VETERANS ¹⁾	FEMALE VETERANS ¹⁾
Total Active Military Service	No significant difference ($\chi^2 = 8.5$ df = 7)	Longer ($\chi^2 = 20.8$ df = 5)
Highest Year of Education	Higher ($\chi^2 = 32.5$ df = 5)	Higher ($\chi^2 = 14.3$ df = 3)
Pay grade	Higher ($\chi^2 = 36.2$ df = 3)	Higher ($\chi^2 = 18.4$ df = 2)
Race	More white ($\chi^2 = 78.1$ df = 2)	More white ($\chi^2 = 33.9$ df = 1)
Mental Category	Higher ($\chi^2 = 66.6$ df = 4)	NA
Age	Older ($\chi^2 = 40.7$ df = 6)	Older ($\chi^2 = 14.7$ df = 5)
Separation Date	No significant difference ($\chi^2 = 15.5$ df = 11)	No significant difference ($\chi^2 = 16.9$ df = 11)
Time in Pay Grade	No significant difference ($\chi^2 = 6.0$ df = 9)	No significant difference ($\chi^2 = 7.7$ df = 8)

1) Groupings of variables used in the computation of χ^2 for male and female veterans can be found in Appendix F.

Among women, but not among men, the obtained sample also served longer actively in the Active Military.

The male and female obtained samples do not differ significantly from the original sampling frames with regard to the length of time separated from active duty or the time spent in highest pay grade.

6.0 AREA CODE ANALYSIS

The geographic stability/mobility of the veteran population was estimated by comparing the area codes and telephone numbers at which respondents were actually interviewed with those obtained initially, based on addresses supplied by DMDC. To analyze area codes and telephone numbers, three categories were defined. These categories are shown in the table below.

ORIGINAL CALL VERSUS FINAL CALL

	<u>AREA CODE</u>		<u>TELEPHONE NUMBER</u>	
	<u>SAME</u>	<u>DIFFERENT</u>	<u>SAME</u>	<u>DIFFERENT</u>
Category 1	X		X	
Category 2	X			X
Category 3		X		X

The distributions of the area code/telephone numbers by categories for all male and all female veterans, and for veterans from different service branches are found on the following page.

DISPOSITIONS OF AREA CODES AND TELEPHONE NUMBERS

MALE SAMPLE

<u>INITIAL VS. FINAL AREA CODE/ TELEPHONE NUMBER</u>	<u>TOTAL MALE SAMPLE</u>	<u>BRANCH OF SERVICE</u>			
		<u>ARMY</u>	<u>NAVY</u>	<u>MARINE CORPS</u>	<u>AIR FORCE</u>
(BASE)	(1761)	(534)	(503)	(265)	(459)
Same area code and number	76.5%	77.5%	72.6%	83.0%	76.0%
Same area code, different number	15.5	16.5	17.3	12.5	14.2
Different area code	8.0	6.0	10.1	4.5	9.8

FEMALE SAMPLE

<u>INITIAL VS. FINAL AREA CODE/ TELEPHONE NUMBER</u>	<u>TOTAL FEMALE SAMPLE</u>	<u>BRANCH OF SERVICE</u>		
		<u>ARMY</u>	<u>NAVY</u>	<u>AIR FORCE</u>
(BASE)	(1506)	(555)	(372)	(579)
Same area code and number	78.3%	76.8%	79.8%	78.8%
Same area code, different number	9.6	10.6	10.0	8.3
Different area code	12.1	12.6	10.2	12.9

Among veteran men:

- Eight percent (8%) were interviewed at a different area code than that associated with the address on the data tape provided by DMDC.
- More than 76 percent of those contacted were found at the same area code and number where they were originally attempted.
- Individuals from the Marine Corps compared to those from the Navy and Air Force were more likely to be found at the same area code and number originally attempted.

Among veteran women:

- Approximately 12 percent were interviewed at a different area code than that associated with the address on the data tape provided by DMDC.
- More than 78 percent were located at the same area code and number where they were originally attempted.
- Women interviewed from different branches of the service did not differ in mobility as estimated from these data.

APPENDIX A

SAMPLE DEFINITION AND SPECIFICATIONS



DEPARTMENT OF DEFENSE
MANPOWER DATA CENTER

Ser: 83E-383
14 September 1983

REPLY TO DMDC

- 4TH FLOOR
1600 N WILSON BOULEVARD
ARLINGTON, VIRGINIA 22209
- 550 CAMINO EL ESTERO SUITE 200
MONTEREY, CA 93940

Dr. Shel Feldman
Associates for Research in
Behavior, Inc.
The Science Center
34th & Market Streets
Philadelphia, PA 19104

Dear Dr. Feldman:

Enclosed is the file development sheet, file description, and screening specifications for the prior military service sample. This sample was drawn from the DoD Enlisted Prior Military Service Address File for the 1983 Wave of the Veterans Attitude Tracking Study (VATS).

The data tape was sent to you from our Monterey, California office on 13 September 1983. You will receive one tape (number 001923, 9 track 1600 BPI) containing seven subfiles. Contents of the file are described below:

	Sample N	% of Eligible Population
Males	99,673	66.06%
Army	27,567	56.79
Navy	27,486	58.02
Marines	17,041	83.50
Air Force	27,579	79.25
Females	10,070	100.00%
Army	3,825	100.00
Navy	2,243	100.00
Air Force	4,002	100.00
Total	109,743	68.19%

In view of our concerns about the small number of female veterans available for interviewing, please note that the female subfiles are not samples at all, but rather reflect the entire eligible female veteran population. As in previous waves of RCAS, female veterans of the Marine Corps have been excluded due to their rarity in the population.

As we discussed, each subfile is sorted by zip code (in ascending order). Simple random sampling was used to generate samples which are representative of the U.S. veteran population which is eligible for re-enlistment in the Active duty Forces or for service in the Reserves/National Guard. This data tape has been matched to the 1981 and 1982 RCAS data tapes so that replications from previous years' samples could be eliminated from the 1983 sample. In addition, the sample was restricted to those records containing complete name and address information.

Please call me if you have any questions about these data files.

Sincerely,

Vonda L. Kiplinger

Vonda L. Kiplinger
Survey and Market Analysis Division

Enclosures

VATS FIRST STAGE SAMPLE SELECTION SPECIFICATIONS

1. Select all PS individuals, by sex and Service who meet the following criteria:
 - a. Service component = 1 (pos. 49) and
 - b. Reenlistment eligibility = 1 (pos. 54-55) and
 - c. Interservice separation code GE 01 and LE 08 (pos. 39-40) and
 - d. Total active service GE 24 mo. (pos. 10-12) and
 - e. Date of separation 04/80 or later (pos. 41-44) and
 - f. For males only, mental category GT 1 (pos. 26) and
 - g. Individual not included in RCAS samples sent to ARBOR in 1981 or 1982 and
 - h. Record contains complete name and address information in either the primary or secondary fields (pos. 58-156 or pos. 171-235).
2. The sampling procedure to be used is simple random sampling by Service for males. Sampling will not be necessary for the female population. Due to their small numbers, the entire eligible PS female population, by Service, is to be selected.
3. The sample sizes for males are:
 - Army - 27,500
 - Navy - 27,500
 - USMC - 17,000
 - Air Force - 27,500
4. No geographic stratification is required during (or prior to) the selection.
5. After the sample selection is completed, the sample will be sorted by zip code.
6. The tape format and information content should be exactly the same as that of the 1982 RCAS tape.

APPENDIX B

MAXIMUM STANDARD DEVIATIONS OF PERCENTAGES
BASED ON UNIQUE NUMBERS DIALED

MAXIMUM STANDARD DEVIATION OF A PERCENTAGE
BASED ON THE NUMBER OF UNIQUE NUMBERS DIALED

	<u>UNIQUE NUMBERS</u> <u>DIALED</u>	<u>MAXIMUM</u> <u>STANDARD DEVIATION</u> <u>(IN PERCENT)</u>
Males	4344	0.3
Army	1388	1.3
Navy	1152	1.5
Marine Corps	646	2.0
Air Force	1158	1.5
Females	3349	0.9
Army	1269	1.4
Navy	857	1.7
Air Force	1223	1.4

APPENDIX C

DEFINITIONS OF CALL RECORD CATEGORIES

DEFINITIONS OF CALL RECORD CATEGORIES

<u>CATEGORY</u>	<u>ELEMENTS COMPRISING THE CATEGORY</u>
Numbers within specified dispositions	<ul style="list-style-type: none"> . Not listed numbers . Unique telephone numbers dialed, regardless of final disposition
Unusable numbers	<ul style="list-style-type: none"> . Non-working numbers . Disconnected numbers . Business numbers
Moved	<ul style="list-style-type: none"> . Person on phone says respondent moved and does not have a forwarding number
No answer	<ul style="list-style-type: none"> . No answer
Other	<ul style="list-style-type: none"> . Busy signal . Fast busy signal . Respondent not at number given . Other (language barrier, etc.) . Callback . Referred to other effective number
Respondent not eligible	<ul style="list-style-type: none"> . Never in military . Currently in military . Currently in paid drill status . Length of time in military (less than two years) . Currently in Coast Guard
Initial hangup	<ul style="list-style-type: none"> . Individual hangs up before identification can be made
Refusal by someone other than the potential respondent	<ul style="list-style-type: none"> . Someone other than the potential respondent will not allow interviewer to speak with the potential respondent
Refusal by potential respondent	<ul style="list-style-type: none"> . Potential respondent terminates interview at some point in the screener
Incompleted interview	<ul style="list-style-type: none"> . Potential respondent completes the screener but terminates at some point in the questionnaire itself
Completed interview	<ul style="list-style-type: none"> . Respondent completes the interview without incident
Converted completed	<ul style="list-style-type: none"> . Intercession by a supervisor was required to obtain a completed interview

APPENDIX D

DETAILED CALL RESULTS
BY SEX AND BRANCH OF SERVICE

CALL RECORD ANALYSIS -- ARMY MALE SAMPLE
VATS 1983

	<u>N</u>	<u>% OF NUMBERS DIALED</u>	<u>% OF CONTACTS</u>	<u>% OF POTENTIALLY ELIGIBLE CONTACTS</u>
Blocks analyzed	438	--	--	--
Potential respondents ¹⁾	10,282	--	--	--
Potential respondents not looked up or not called	4,619	--	--	--
Numbers with a specified disposition²⁾	5,663	--	--	--
Numbers not listed	4,275	--	--	--
Unique telephone numbers dialed	1,388	100.0%		
(Total dialings)	(3,025)	(2.2 calls per number)		
Unusable numbers	103	7.4	--	--
Moved	247	17.8	--	--
No answer	207	14.9	--	--
Other (busy signal, language barrier, etc.)	211	15.2	--	--
Number of contacts	620	44.7	100.0%	--
Respondent not eligible	92	6.6	14.8	--
Initial hangup	48	3.5	7.7	--
Refusal by someone other than potential respondent	22	1.6	3.5	--
Number of contacts of eligible respondents	458	33.0	73.9	100.0%
Refusal by potential respondent	52	3.7	8.4	11.4
Incompleted interviews	9	0.6	1.5	2.0
Completed interviews	397	28.6	64.0	86.7
Regular completes	394	28.4	63.5	86.0
Converted completes	3	0.2	0.5	0.7

- 1) Estimate based on the ratio of blocks analyzed to available blocks and the number of names in the available blocks.
- 2) Definitions of response categories are found in Appendix C.

CALL RECORD ANALYSIS -- NAVY MALE SAMPLEVATS 1983

	<u>N</u>	<u>% OF NUMBERS DIALED</u>	<u>% OF CONTACTS</u>	<u>% OF POTENTIALLY ELIGIBLE CONTACTS</u>
Blocks analyzed	461	--	--	--
Potential respondents ¹⁾	10,821	--	--	--
Potential respondents not looked up or not called	6,197	--	--	--
Numbers with a specified disposition²⁾	4,624	--	--	--
Numbers not listed	3,472	--	--	--
Unique telephone numbers diald	1,152	100.0%		
(Total dialings)	(2,173)	(1.9 calls per number)		
Unusable numbers	72	6.3	--	--
Moved	168	14.6	--	--
No answer	202	17.5	--	--
Other (busy signal, language barrier, etc.)	138	12.0	--	--
Number of contacts	572	49.7	100.0%	--
Respondent not eligible	43	3.7	7.5	--
Initial hangup	46	4.0	8.0	--
Refusal by someone other than potential respondent	18	1.6	3.1	--
Number of contacts of eligible respondents	465	40.4	81.3	100.0%
Refusal by potential respondent	30	2.6	5.2	6.5
Incompleted interviews	12	1.0	2.1	2.6
Completed interviews	423	36.7	74.0	91.0
Regular completes	416	36.1	72.7	89.5
Converted completes	7	0.6	1.2	1.5

1) Estimate based on the ratio of blocks analyzed to available blocks and the number of names in the available blocks.

2) Definitions of response categories are found in Appendix C.

CALL RECORD ANALYSIS -- MARINE CORPS MALE SAMPLE
VATS 1983

	<u>N</u>	<u>% OF NUMBERS DIALED</u>	<u>% OF CONTACTS</u>	<u>% OF POTENTIALLY ELIGIBLE CONTACTS</u>
Blocks analyzed	257	--	--	--
Potential respondents ¹⁾	5,964	--	--	--
Potential respondents not looked up or not called	3,621	--	--	--
Numbers with a specified disposition²⁾	2,343	--	--	--
Numbers not listed	1,697	--	--	--
Unique telephone numbers dialed	646	100.0%		
(Total dialings)	(1,368)	(2.1 calls per number)		
Unusable numbers	36	5.6	--	--
Moved	112	17.3	--	--
No answer	106	16.4	--	--
Other (busy signal, language barrier, etc.)	76	11.8	--	--
Number of contacts	316	48.9	100.0%	--
Respondent not eligible	28	4.3	8.9	--
Initial hangup	37	5.7	11.7	--
Refusal by someone other than potential respondent	14	2.2	4.4	--
Number of contacts of eligible respondents	237	36.7	75.0	100.0%
Refusal by potential respondent	17	2.6	5.4	7.2
Incompleted interviews	6	0.9	1.9	2.5
Completed interviews	214	33.1	67.7	90.3
Regular completes	210	32.5	66.5	88.6
Converted completes	4	0.6	1.3	1.7

1) Estimate based on the ratio of blocks analyzed to available blocks and the number of names in the available blocks.

2) Definitions of response categories are found in Appendix C.

CALL RECORD ANALYSIS -- AIR FORCE MALE SAMPLE
VATS 1983

	<u>N</u>	<u>% OF NUMBERS DIALED</u>	<u>% OF CONTACTS</u>	<u>% OF POTENTIALLY ELIGIBLE CONTACTS</u>
Blocks analyzed	404	--	--	--
Potential respondents ¹⁾	9,491	--	--	--
Potential respondents not looked up or not called	5,559	--	--	--
Numbers with a specified disposition²⁾	3,932	--	--	--
Numbers not listed	2,774	--	--	--
Unique telephone numbers diald	1,158	100.0%		
(Total dialings)	(2,460)	(2.1 calls per number)		
Unusable numbers	79	6.8	--	--
Moved	174	15.0	--	--
No answer	198	17.1	--	--
Other (busy signal, language barrier, etc.)	150	13.0	--	--
Number of contacts	557	48.1	100.0%	--
Respondent not eligible	41	3.5	7.4	--
Initial hangup	68	5.9	12.2	--
Refusal by someone other than potential respondent	25	2.2	4.5	--
Number of contacts of eligible respondents	423	36.5	75.9	100.0%
Refusal by potential respondent	36	3.1	6.5	8.5
Incompleted interviews	7	0.6	1.3	1.7
Completed interviews	380	32.8	68.2	89.8
Regular completes	376	32.5	67.5	88.9
Converted completes	4	0.3	0.7	0.9

- 1) Estimate based on the ratio of blocks analyzed to available blocks and the number of names in the available blocks.
- 2) Definitions of response categories are found in Appendix C.

CALL RECORD ANALYSIS -- FEMALE ARMY POPULATIONVATS 1983

	<u>N</u>	<u>% OF NUMBERS DIALED</u>	<u>% OF CONTACTS</u>	<u>% OF POTENTIALLY ELIGIBLE CONTACTS</u>
Numbers looked up¹⁾	3,785	--	--	--
Numbers not listed or not called	2,516	66.5 ²⁾	--	--
Unique telephone numbers dialed³⁾	1,269	100.0%		
(Total dialings)	(2,761)	(2.2 calls per number)		
Unusable numbers	82	6.5	--	--
Moved	203	16.0	--	--
No answer	72	5.7	--	--
Other (busy signal, language barrier, etc.)	293	23.1	--	--
Number of contacts	619	48.8	100.0%	--
Respondent not eligible	64	5.0	10.3	--
Initial hangup	38	3.0	6.1	--
Refusal by someone other than potential respondent	15	1.2	2.4	--
Number of contacts of potentially eligible respondents	502	39.6	81.1	100.0%
Refusal by potential respondent	37	2.9	6.0	7.4
Incompleted interviews	12	0.9	1.9	2.4
Completed interviews	453	35.7	73.2	90.2
Regular completes	449	35.4	72.5	89.4
Converted completes	4	0.3	0.6	0.8

- 1) The disposition of 40 additional call records could not be determined because of misspecified service or sex codes on the original data tape or because of clerical problems.
- 2) Percentage of numbers looked up.
- 3) Definition of response categories are found in Appendix C.

CALL RECORD ANALYSIS -- FEMALE NAVY POPULATION
VATS 1983

	<u>N</u>	<u>% OF NUMBERS DIALED</u>	<u>% OF CONTACTS</u>	<u>% OF POTENTIALLY ELIGIBLE CONTACTS</u>
Numbers looked up¹⁾	2,240	--	--	--
Numbers not listed or not called	1,383	61.72)	--	--
Unique telephone numbers dialed³⁾	857	100.0%		
(Total dialings)	(1,973)	(2.3 calls per number)		
Unusable numbers	55	6.4	--	--
Moved	127	14.8	--	--
No answer	50	5.8	--	--
Other (busy signal, language barrier, etc.)	203	23.7	--	--
Number of contacts	422	49.2	100.0%	--
Respondent not eligible	44	5.1	10.4	--
Initial hangup	25	2.9	5.9	--
Refusal by someone other than potential respondent	15	1.8	3.6	--
Number of contacts of potentially eligible respondents	338	39.4	80.1	100.0%
Refusal by potential respondent	24	2.8	5.7	7.1
Incompleted interviews	6	0.7	1.4	1.8
Completed interviews	308	35.9	73.0	91.1
Regular completes	301	35.1	71.3	89.1
Converted completes	7	0.8	1.7	2.1

- 1) The disposition of 3 additional call records could not be determined because of misspecified service or sex codes on the original data tape or because of clerical problems.
- 2) Percentage of numbers looked up.
- 3) Definitions of response categories are found in Appendix C.

CALL RECORD ANALYSIS -- FEMALE AIR FORCE POPULATION
VATS 1983

	<u>N</u>	<u>% OF NUMBERS DIALED</u>	<u>% OF CONTACTS</u>	<u>% OF POTENTIALLY ELIGIBLE CONTACTS</u>
Numbers looked up¹⁾	3,958	--	--	--
Numbers not listed or not called	2,735	69.12)	--	--
Unique telephone numbers dialed³⁾	1,223	100.0%		
(Total dialings)	(2,717)	(2.2 calls per number)		
Unusable numbers	72	5.9	--	--
Moved	182	14.9	--	--
No answer	126	10.3	--	--
Other (busy signal, language barrier, etc.)	205	16.8	--	--
Number of contacts	638	52.2	100.0%	--
Respondent not eligible	33	2.7	5.2	--
Initial hangup	34	2.8	5.3	--
Refusal by someone other than potential respondent	20	1.6	3.1	--
Number of contacts of potentially eligible respondents	551	45.1	86.4	100.0%
Refusal by potential respondent	37	3.0	5.8	6.7
Incompleted interviews	17	1.4	2.7	3.1
Completed interviews	497	40.6	77.9	90.2
Regular completes	487	39.8	76.3	88.4
Converted completes	10	0.8	1.6	1.8

- 1) The disposition of 44 additional call records could not be determined because of misspecified service or sex codes on the original data tape or because of clerical problems.
- 2) Percentage of numbers looked up.
- 3) Definition of response categories are found in Appendix C.

APPENDIX E

DEFINITION OF RESPONSE AND COMPLETION RATES

RESPONSE RATE DEFINED

The formula used to calculate the response rate is the same formula used to analyze the 1980, 1981 and 1982 call record data for the Reserve Component Attitude Study. The formula is:

Response Rate =

$$\frac{\text{Number of Completed Interviews}}{\text{Number of Eligible or Potentially Eligible Individuals Screened}}$$

This can be operationalized as:

$$RR = \frac{U}{U + V}$$

where,

U = number of completed interviews, and

V = number of incompleted interviews and refusals by potentially qualified respondents.

In addition to the number of completed and incompleted interviews, the denominator includes the number of potentially qualified individuals who refused to participate in the study. Although these individuals terminated the interview before it was determined whether they were fully qualified to participate in the study, they have been included as eligible respondents because they had entered the screening process. Their inclusion in the denominator produces a conservative estimate of the actual response rate.

COMPLETION RATE DEFINED

The formula employed for calculation of the completion rate is:

$$\frac{\text{Number of Completed Interviews}}{\text{Number of Eligible or Potentially Eligible Individuals in the Sample}}$$

This definition can be operationalized as:

$$CR = \frac{U}{U + V + W + X}, \text{ where}$$

U = number of completed interviews

V = number of incomplete interviews and refusals by qualified respondents (determined by the screening)

W = estimate of the number of qualified respondents who were not contacted

X = estimate of the number of qualified respondents who refused the screen

The estimate of W is defined as the number of non-contacts multiplied by the ratio of the number of eligible to the number of potential respondents for whom eligibility was determined.

The estimate X is defined as the number of potential respondents contacted but who refused to screen multiplied by the ratio of the number of eligibles to the number of potential respondents for whom eligibility was determined.

APPENDIX F

GROUPINGS OF VARIABLES USED IN THE
COMPUTATIONS FOR COMPARING THE
OBTAINED SAMPLES AND THE ORIGINAL SAMPLING FRAME

GROUPINGS OF VARIABLES USED IN THE
CHI SQUARE COMPUTATION FOR COMPARING THE
OBTAINED SAMPLE AND THE ORIGINAL SAMPLING FRAME

<u>VARIABLE</u>	<u>SAMPLE</u>	
	<u>MEN</u>	<u>WOMEN</u>
Total Active Military service (in months)	24-47 48-59 60-71 72-83 84-95 96-107 108-119 120+	24-47 48-59 60-71 72-83 84-95 96+
Highest year of education		
Two years of high school or less	0-4	0-5 (omitted)
Three or four years of high school with no diploma	5	6
High school graduate or GED	6	7
One year of college	7	8
Two years of college	8	9-12
Three years of college or more	9-12	
Pay grade	1-3 4 5 6-9	1-4 5 6-9
Race		
Caucasian	1	1
Negro	2	2 & 3
Other	3	
Mental Category	2-4 5 6 7 8	NOT APPLICABLE

(Cont'd)

**GROUPINGS OF VARIABLES USED IN THE
CHI SQUARE COMPUTATION FOR COMPARING THE
OBTAINED SAMPLE AND THE ORIGINAL SAMPLING FRAME (CONT'D)**

<u>VARIABLE</u>	<u>SAMPLE</u>	
	<u>MEN</u>	<u>WOMEN</u>
Age at separation ¹⁾ (years)	19-20	19-22
	21-22	23-24
	23-24	25-26
	25-26	27-28
	27-28	29-30
	29-30	31+
	31+	
Separation date (quarters)	8004-8006	8004-8006
	8007-8009	8007-8009
	8010-8012	8010-8012
	8101-8103	8101-8103
	8104-8106	8104-8106
	8107-8109	8107-8109
	8110-8112	8110-8112
	8201-8203	8201-8203
	8204-8206	8204-8206
	8207-8209	8207-8209
	8210-8212	8210-8212
8301-8303	8301-8303	
Time in pay grade (in months)	1-6	1-6
	7-12	7-12
	13-18	13-18
	19-24	19-24
	25-30	25-30
	31-36	31-36
	37-42	37-42
	43-48	43-48
	49-54	49+
55+		

1) Age at separation was estimated for the obtained sample by adjusting the respondents' age when interviewed by the time since separation from the service.

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