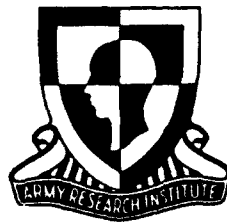


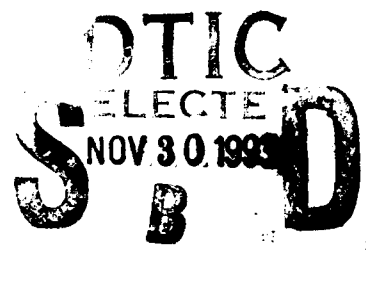
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Research Product 93-10

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**Longitudinal Research on Officer Careers:
Volume 1. Technical Manual for
1988-1992 Surveys**



93-29079

September 1993

**Leadership and Organizational Change Technical Area
Manpower and Personnel Research Division**

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

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EDGAR M. JOHNSON
Director

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**Longitudinal Research on Officer Careers:
Volume 1. Technical Manual for 1988–1992 Surveys**

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FOREWORD

The Leadership and Organizational Change Technical Area (LOCTA) of the Manpower and Personnel Research Division, U.S. Army Research Institute for the Behavioral and Social Sciences (ARI) conducts research on leadership, personnel, and organizational change. As part of this program, longitudinal research has been conducted on the attitudes, career experiences, and career decisions of company-grade officers in the U.S. Army. The major component of this research has been an annual survey that was administered from 1988 through 1992.

This survey, the Longitudinal Research on Officer Careers (LROC) Survey, focused on personal, family, and career issues, including questions on demographics, command assignments, career development and support, mentors, career orientations and intentions, job satisfaction, Army life expectations, Army versus civilian life, and spouse/family issues.

The LROC database contains data files for each year of the survey with approximately 5,000 respondents for each year. A total of 928 officers have responded to all 4 years of the survey and constitute the longitudinal respondents. Respondents are company-grade officers commissioned from 1980 through 1990. This research product describes the database and provides descriptive statistics for each year of the project.

The 4-year period of the LROC Survey has been a period of major change for the Army. Troops were deployed for Operation Desert Shield/Storm, and Congress mandated significant reductions in the size of the force. The data from the LROC Survey provide a unique opportunity to examine changes in the attitudes, career experiences, and perceptions of officers who have been in the Army during this time of change. In keeping with the mission of LOCTA, this information can also inform policymakers on the factors influencing officer career decisions, retention, and recruitment. Results from the LROC Surveys have been briefed to a number of Directorates and Commands throughout the Army since 1989. Information on the 4-year trends was briefed to the Chief of Staff, U.S. Army, early in 1993.


EDGAR M. JOHNSON
Director

LONGITUDINAL RESEARCH ON OFFICER CAREERS:
VOLUME 1. TECHNICAL MANUAL FOR 1988-1992 SURVEYS

EXECUTIVE SUMMARY

Requirement:

The Longitudinal Research on Officer Careers (LROC) tracks the changes in attitudes and career experiences of company-grade officers over time; identifies the individual, organizational, psychosocial, and family factors that influence officer career decisions; and investigates the effects of policy change and world events on the attitudes and career decisions of officers.

Procedure:

In the fall/winter of each year, beginning in 1988, the LROC Survey was mailed to a stratified random sample of company-grade officers commissioned from 1980 through the year preceding the survey year. The sampling plan called for stratification by gender, source of commission, and year of commissioning. Survey content centered on the attitudes, career experiences, satisfaction, and family experiences of officers from commissioning through mid-career (approximately 10 years). To obtain the maximum number of longitudinal respondents, officers were kept in the sample and resurveyed every year of the research unless they left the Army.

Findings:

The LROC Survey databases contain the results of the 1988, 1989, 1990, and 1992 surveys. Approximately 5,000 officers responded each year. Response rates were 63% for 1988; 51% for 1989; 52% for 1990; and 47% for 1992. Overall, the respondents are fairly representative of the total population of company-grade officers. However, some subgroups are underrepresented. Tables included in this technical manual provide information to guide researchers when subgroup analyses are of interest. Volumes 2 to 5, codebooks for each survey, provide the questions, variable names, response labels and codes, and descriptive statistics for the 1988-1992 databases, respectively. Volumes 2 to 5 also include a cross-reference of survey questions over the 4 years.

Utilization of Findings:

The LROC database provides a longitudinal tracking of Army officers over a crucial 4-year period. Beginning in 1989, results of the LROC surveys have been briefed to Army policy-makers providing information on branching issues; the impact of downsizing on the attitudes, career experiences, and career intentions of officers; and on attitudes about women in combat, to name a few. Combined with other personnel and survey databases, the LROC data provide a unique opportunity to investigate the actual trends and changes in attitudes over this 4-year period of change in the world and in the U.S. Army.

LONGITUDINAL RESEARCH ON OFFICER CAREERS:
VOLUME 1. TECHNICAL MANUAL FOR 1988-1992 SURVEYS

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LONGITUDINAL RESEARCH ON OFFICER CAREERS:
VOLUME 1. TECHNICAL MANUAL FOR 1988-1992 SURVEYS

INTRODUCTION

The U.S. Army Research Institute for the Behavioral and Social Sciences (ARI) began the Longitudinal Research on Officer Careers (LROC) project in 1988. The primary purpose of LROC was to identify factors that influenced officers' career decisions and to assess the implications of such factors on personnel policy.

The LROC evolved from two projects initiated by the U.S. Military Academy (USMA), Project Athena and Project Proteus. Project Athena investigated the individual and organizational changes that resulted from the decision to admit women into USMA. The project began in 1976, the first year that women were admitted, and ended in 1980 when this "first" class graduated. Project Proteus tracked the 1980 USMA class after graduation during its early career years using a combination of surveys, interviews, and field observations. The goal of Proteus was to identify the process of career commitment among USMA graduates and to identify shortcomings in the precommissioning training of these officers. Several USMA Technical Reports document the results of these two research projects (Adams, 1979, 1980, 1983, 1984a, 1984b, 1985, 1986a, 1986b, 1986c; Adams & Orend, 1986a, 1986b; Adams, Chao, Ilgen, DeGregorio, & Whitener, 1987; Adams, Chao, Ilgen, Whitener, & DeGregorio, 1987; Adams, DeGregorio, Chao, Whitener, & Ilgen, 1987a, 1987b; Adams, Ilgen, Chao, Whitener, & DeGregorio, 1987; Adams, Whitener, Ilgen, Chao, & DeGregorio, 1987; Vitters, 1978; Vitters & Kinzer, 1977). The 1986 and 1987 Project Proteus survey databases are documented in two codebooks (Harris and Wochinger, 1992a, 1992b).

In 1987, the Vice Chief of Staff, U.S. Army, transferred the Proteus Project to ARI as part of its research in the areas of retention and readiness. In 1988, Project Proteus was reviewed and a new survey was developed. This new survey, the LROC Survey, became the main component of the LROC research project. The LROC Survey was administered annually from 1988 through 1992. This report provides a technical manual for the LROC surveys, and Volumes 2 through 5 provide the codebooks for the 1988, 1989, 1990, and 1992 Surveys, respectively.

METHOD

The LROC research was a cohort, longitudinal design that tracked the same group of officers over the life of the research and maintained a large set of identical questions in the survey for comparison across time. This design allows researchers to investigate trends in attitudes and experiences over time, to examine the impact of institutional or environmental events on the attitudes and career experiences of officers, and to identify the complex factors that influence officers' career decisions.

Sampling Methodology

The goal of the original sampling plan was to obtain a representative sample of the total active component, company grade officer population (second lieutenants, first lieutenants, and captains) commissioned through USMA or the Reserve Officer Training Corps (ROTC). The sample was stratified by gender, source of commission, and year of commissioning. Officers were randomly selected within the strata. Females and USMA-commissioned males were oversampled in order to ensure a sufficient number of respondents for statistical analyses. The stratification plan called for sampling 100% of USMA females, 33% of USMA males, 33% of ROTC females, and 20% of ROTC males. In 1989, officers commissioned from both the Officer Candidate School (OCS) and Direct Commissioning (DC) were added to the sampling plan. The plan called for sampling 100% of OCS females, 10% of OCS males, and 10% of DC males and females.

The sampling plan called for approximately 1,000 officers from each year of commissioning, beginning with 1980 and ending with the commissioning year that immediately preceded the survey year. Thus, the 1988 sample included officers commissioned in 1980 through 1987. The 1989 sample included all the 1988 sample and added 1,000 officers commissioned in 1988; the 1990 sample included all the 1988/89 sample and added 1,000 officers commissioned in 1989; and, the 1992 sample included all the 1988/89/90 sample and added 1,000 officers commissioned in 1990. This plan ensured that all officers, whether they responded in any given year or not, remained in the sample for re-surveying for the life of the research project unless they left the Army.

Survey Development

The LROC Surveys were designed to investigate the attitudes and career experiences of company grade officers from commissioning through their early years of service to mid-career (approximately 10 years). Some of the research issues addressed included effectiveness of precommission training (USMA or ROTC); kinds of career and family experiences; conflicts between work and family; satisfaction with personal, job, Army, and family life; organizational and career commitment; attitudes about different aspects of Army life; and spouse/family satisfaction and experiences. The goal of this research was to identify the factors related to a successful officer's career; to provide feedback to the early career development process; to understand the factors associated with attrition; and to track the perceived impact of policy change or events on the careers and attitudes of officers.

The first survey included sections on background, current assignment, career, Army life, Army life expectations, spouse/fiance(e) information, and a full page for written comments. The 1989 survey added sections on economic issues and

organizational issues. The 1990 and 1992 surveys excluded the section on organizational issues and added a current events section. Within the current events section, questions were asked on the impact of downsizing on officers, on their careers, and on the Army; and, in 1992, questions to assess attitudes about women in combat were also included. Copies of each survey can be found as Appendix B in each volume of the codebook (Volumes 2-5 for 1988-1992, respectively).

Each survey was designed to include a core set of approximately 190 identical questions with flexibility to add sections or questions as events or issues changed over the life of the research. Each survey was produced as a machine-scannable booklet using a different color for each year.

General Procedure

The stratified random sample was drawn from the Officer Master File (OMF) and address labels were printed for mailing the surveys. Surveys were mailed in the fall/winter of each calendar year directly to the officers' home address in the continental United States (CONUS) or, indirectly, through the Total Army Personnel Command (PERSCOM) for distribution when the officer was located outside the Continental United States (OCONUS).

The initial survey mailings included a cover letter from the Deputy Chief of Staff for Personnel (DCSPER) and a stamped-addressed envelope for returning the completed survey. The letter explained the purpose of the survey, encouraged participation, and ensured the confidentiality of responses. A follow-up letter was mailed to nonrespondents a few months later in order to encourage participation in the survey. The specifics for each survey year follow.

Subjects

1988 LROC Survey. The 1988 LROC sample included company grade officers commissioned in year groups 1980 through 1987 from USMA and ROTC. From a population of 32,390 officers, 8,931 officers were randomly selected to receive the survey. Table 1 shows the total population of officers in the Army in 1988 by strata, and Table 2 shows the number of officers drawn for the 1988 sample by strata.

1989 LROC Survey. The 1989 LROC sample included officers commissioned in 1980 through 1988 from USMA, ROTC, OCS, and DC. Officers from the 1988 sample (regardless of whether they responded or not) were checked to confirm that they were still in the Army--those who had left were deleted from the list without replacement. An additional 1,000 officers commissioned in 1988 were randomly drawn based on the strata and added to the sample. This procedure resulted in a total of 10,966 officers in the 1989 LROC sample from a population of 43,682 company grade officers.

Table 1

1988 Active Component (AC) Officer Population by Gender, Source of Commission, and Commissioning Year.

Year	1980	1981	1982	1983	1984	1985	1986	1987	Total
------	------	------	------	------	------	------	------	------	-------

Males and Females

USMA	519	592	607	745	838	1043	977	1029	6350
ROTC	2309	2370	2438	3044	3561	4253	4112	3953	26040
Total	2828	2962	3045	3789	4399	5296	5089	4982	32390

Males

USMA	488	562	564	694	765	928	885	914	5800
ROTC	2031	2086	2131	2655	3060	3622	3376	3257	22218
Total	2519	2648	2695	3349	3825	4550	4261	4171	28018

Females

USMA	31	30	43	51	73	115	92	115	550
ROTC	278	284	307	389	501	631	736	696	3822
Total	309	314	350	440	574	746	828	811	4372

Note. All population and sample data were provided by Personnel Information Systems Command (PERSINSCOM).

Table 2

1988 IROC Sample by Gender, Source of Commission, and Commissioning Year.

Year	1980	1981	1982	1983	1984	1985	1986	1987	Total
------	------	------	------	------	------	------	------	------	-------

Males and Females

USMA	267	341	301	325	404	464	439	434	2975
ROTC	640	720	687	697	836	782	803	791	5956
Total	907	1061	988	1022	1240	1246	1242	1225	8931

Males

USMA	245	311	265	286	344	360	356	332	2499
ROTC	406	474	420	473	543	516	456	467	3755
Total	651	785	685	759	887	876	812	799	6254

Females

USMA	22	30	36	39	60	104	83	102	476
ROTC	234	246	267	224	293	266	347	324	2201
Total	256	276	303	263	353	370	430	426	2677

Table 3 shows the total population of officers in the Army in 1989, and Table 4 gives the number of officers drawn for the 1989 sample by strata.

1990 LROC Survey. The 1990 LROC sample included officers commissioned in 1980 through 1989 from USMA, ROTC, OCS, and DC. Officers in the sample in 1988 and 1989 were again checked to see if they remained in the Army. The list was updated and another 1,000 officers commissioned in 1989 were added. The final 1990 sample totaled 9,684 officers from a population of 44,115 company grade officers. Table 5 shows the number of officers in the population in 1990, and Table 6 gives the number of officers drawn for the sample by strata.

1992 LROC Survey¹. The 1992 LROC sample included officers commissioned in 1980 through 1990 from USMA, ROTC, OCS, and DC. The list of officers from the 1988, 1989, and 1990 sample was updated deleting those who had left the Army. Another 1,000 commissioned in 1990 were added to the list giving a total 1992 sample of 9,674 officers from a population of 45,740 company grade officers in the Army in 1992. See Table 7 for the 1992 total officer population and Table 8 for the 1992 sample by strata.

It is important to note that individual officers selected for the original sample and each successive year group thereafter were retained in the sample for the life of the research, whether they responded for any given year or not, unless they left the Army. This strategy maximized the potential for an officer to complete all 4 years of the survey.

RESULTS

1988 LROC Survey

The sample receiving the 1988 survey included 87% of the USMA females, 43% of USMA males, 56% of ROTC females, and 17% of ROTC males. A total of 5,598 officers completed surveys (3,932 males; 1,647 females²) for an overall response rate of 63%.

¹ Delays in returns of the 1990 LROC survey caused by deployments for Operation Desert Shield/Storm (ODS) and troop movements post-ODS necessitated a change in mailing date of the 1991 Survey from fall 1991 to February 1992. To avoid confusion, the name was changed to the 1992 LROC Survey reflecting the time of mailing.

² Sum of males and females may be less than total respondents due to missing gender data.

Table 3

1989 AC Officer Population by Gender, Source of Commission, and Commissioning Year.

Year	1980	1981	1982	1983	1984	1985	1986	1987	1988	Total
Males and Females										
USMA	494	556	557	588	668	945	983	1012	943	6746
ROTC	2276	2303	2401	2819	3159	3353	3752	3971	3790	27824
OCS	494	595	607	560	502	532	658	586	124	4658
DC	330	365	389	517	381	820	807	496	349	4454
Total	3594	3819	3954	4484	4710	5650	6200	6065	5206	43682

Males

USMA	465	525	517	554	617	844	890	896	854	6164
ROTC	1992	2025	2098	2455	2738	2853	3056	3246	3142	23605
OCS	424	506	533	511	465	469	591	537	105	4141
DC	249	289	303	385	192	561	550	262	142	2933
Total	3130	3345	3451	3905	4012	4727	5087	4943	4243	36843

Females

USMA	29	31	40	34	51	101	93	114	89	582
ROTC	284	278	303	364	421	500	696	725	648	4219
OCS	70	89	74	49	37	63	67	49	19	517
DC	81	76	86	132	189	259	257	234	207	1521
Total	464	474	503	579	698	923	1113	1122	963	6839

Table 4

1989 LROC Sample by Gender, Source of Commission, and Commissioning Year.

Year	1980	1981	1982	1983	1984	1985	1986	1987	1988	Total
------	------	------	------	------	------	------	------	------	------	-------

Males and Females

USMA	255	310	284	275	322	421	435	429	372	3103
ROTC	600	673	630	652	750	623	716	770	842	6256
OCS	49	63	61	58	51	52	69	63	13	479
DC	82	92	98	130	95	209	207	126	89	1128
Total	986	1138	1073	1115	1218	1305	1427	1388	1316	10966

Males

USMA	235	281	251	245	276	330	352	328	282	2580
ROTC	383	444	393	452	505	421	417	455	629	4099
OCS	42	54	54	52	47	46	61	58	11	425
DC	61	72	77	96	48	142	138	68	37	739
Total	721	851	775	845	876	939	968	909	959	7843

Females

USMA	20	29	33	30	46	91	83	101	90	523
ROTC	217	229	237	200	245	202	299	315	213	2157
OCS	7	9	7	6	4	6	8	5	2	54
DC	21	20	21	34	47	67	69	58	52	389
Total	265	287	298	270	342	366	459	479	357	3123

Table 5

1990 AC Officer Population by Gender, Source of Commission, and Commissioning Year.

Year	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	Total
------	------	------	------	------	------	------	------	------	------	------	-------

Males and Females

USMA	480	527	504	513	502	639	818	830	946	998	6757
ROTC	2211	2157	2226	2587	2851	2909	2878	3089	3752	3895	28555
OCS	468	575	561	529	476	498	541	435	336	59	4478
DC	320	319	353	483	377	797	720	399	360	197	4325
Total	3479	3578	3644	4112	4206	4843	4957	4753	5394	5149	44115

Males

USMA	449	498	469	486	458	568	736	738	855	902	6159
ROTC	1946	1899	1948	2256	2480	2515	2389	2522	3091	3232	24278
OCS	402	490	490	487	442	440	490	397	290	51	3979
DC	241	246	273	354	212	541	491	224	154	85	2821
Total	3038	3133	3180	3583	3592	4064	4106	3881	4390	4270	37237

Females

USMA	31	29	35	27	44	71	82	92	91	96	598
ROTC	265	258	278	331	371	394	489	567	661	663	4277
OCS	66	85	71	42	34	58	51	38	46	8	499
DC	79	73	80	129	165	256	229	175	206	112	1504
Total	441	445	464	529	614	779	851	872	1004	879	6878

Table 6

1990 IROC Sample by Gender, Source of Commission, and Commissioning Year.

Year	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	Total
Males and Females											
USMA	226	279	239	215	221	234	315	302	317	388	2736
ROTC	523	561	528	513	555	471	461	505	655	836	5608
OCS	42	52	50	53	44	48	54	41	10	7	401
DC	73	73	80	110	81	180	167	87	67	21	939
Total	864	965	897	891	901	933	997	935	1049	1252	9684

Males

USMA	208	253	212	197	194	181	253	243	246	294	2281
ROTC	337	366	333	367	376	331	286	304	481	622	3803
OCS	36	46	44	46	40	43	50	37	8	6	356
DC	55	54	62	82	42	120	111	53	24	12	615
Total	636	719	651	692	652	675	700	637	759	934	7055

Females

USMA	18	26	27	18	27	53	62	59	71	94	455
ROTC	186	195	195	146	179	140	175	201	174	214	1805
OCS	6	6	6	7	4	5	4	4	2	1	45
DC	18	19	18	28	39	60	56	34	43	9	324
Total	228	246	246	199	249	258	297	298	290	318	2629

Table 7

1992 AC Officer Population by Gender, Source of Commission, and Commissioning Year.

Year	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	Total
------	------	------	------	------	------	------	------	------	------	------	------	-------

Males and Females

USMA	464	518	486	471	456	532	584	683	731	986	910	6821
ROTC	2133	2067	2109	2346	2683	2694	2568	2661	3266	3900	3536	29963
OCS	442	552	530	502	455	472	503	409	396	273	166	4700
DC	289	287	321	421	361	732	676	417	333	232	187	4256
Total	3328	3424	3446	3740	3955	4430	4331	4170	4726	5391	4799	45740

Males

USMA	435	490	454	447	418	479	526	614	673	882	837	6255
ROTC	1885	1815	1848	2063	2362	2354	2188	2233	2698	3252	2928	25626
OCS	377	468	468	462	423	418	451	371	346	247	154	4185
DC	216	218	244	301	204	496	466	232	153	106	67	2703
Total	2913	2991	3014	3273	3407	3747	3631	3450	3870	4487	3986	38769

Females

USMA	29	28	32	24	38	53	58	69	58	104	73	566
ROTC	248	252	261	283	321	340	380	428	568	648	608	4337
OCS	65	84	62	40	32	54	52	38	50	26	12	515
DC	73	69	77	120	157	236	210	185	180	126	120	1553
Total	415	433	432	467	548	683	700	720	856	904	813	6971

Table 8

1992 LROC Sample by Gender, Source of Commission, and Commissioning Year.

Year	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	Total
------	------	------	------	------	------	------	------	------	------	------	------	-------

Males and Females

USMA	216	271	231	195	191	192	218	242	229	362	349	2696
ROTC	486	523	487	455	496	429	397	403	544	745	790	5755
OCS	38	50	47	52	41	42	48	38	9	6	27	398
DC	61	66	68	95	76	157	150	68	45	20	19	825
Total	801	910	833	797	804	820	813	751	827	1133	1185	9674

Males

USMA	199	246	205	179	168	156	174	196	186	276	279	2264
ROTC	316	335	310	326	341	309	262	257	400	557	587	4000
OCS	34	43	42	46	37	40	45	34	8	5	15	349
DC	47	48	55	71	38	107	105	45	15	11	4	546
Total	596	672	612	622	584	612	586	532	609	849	885	7159

Females

USMA	17	25	26	16	23	36	44	46	43	86	70	432
ROTC	170	188	177	129	155	120	135	146	144	188	203	1755
OCS	4	7	5	6	4	2	3	4	1	1	12	49
DC	14	18	13	24	38	50	45	23	30	9	15	279
Total	205	238	221	175	220	208	227	219	218	284	300	2515

Tables 9 and 10 give the breakdown of respondents and response rates by strata. There was some variation in response rates by strata (e.g., 43.9%, ROTC males commissioned in 1987; 80.6%, USMA females commissioned in 1982). The distribution of the 1988 population of company grade officers compared to the distribution of survey respondents is shown in Table 11.

1989 LROC Survey

In 1989, 90% of the USMA females, 42% of USMA males, 51% of ROTC females, 17% of ROTC males, 10% of OCS females, 10% of OCS males, 26% of DC females, and 25% of DC males received surveys. A total of 5,553 officers responded (3,976 males; 1,513 females²) for an overall response rate of 51%. Tables 12 and 13 give the breakdown of respondents and response rates by strata. Again, there was a wide variation in response rates by strata, particularly in OCS and DC. The distribution of the 1989 population of company grade officers compared to the distribution of survey respondents is shown in Table 14.

1990 LROC Survey

In 1990, the sample receiving surveys included 76% of the USMA females, 37% of USMA males, 42% of ROTC females, 16% of ROTC males, 9% of OCS females and males, and 22% of DC females and males. A total of 4,997 officers returned surveys in 1990 (3,608 males; 1,345 females²). The overall response rate was 52%. Tables 15 and 16 provide a breakdown of the number of respondents and response rates by strata. Note again that there is a wide variation in response rates in OCS and DC (e.g., OCS females commissioned in 1989, 0% response rate; OCS females commissioned in 1981, 100% response rate). The distribution of the 1990 population of company grade officers compared to the distribution of survey respondents is shown in Table 17.

1992 LROC Survey

The sample receiving surveys in 1992 included 76% of the USMA females, 36% of USMA males, 40% of ROTC females, 16% of ROTC males, 10% of OCS females, 8% of OCS males, 18% of DC females, and 20% of the DC males. A total of 4,563 officers responded in 1992 (3,380 males; 1,131 females²) for an overall response rate of 47%. Tables 18 and 19 give the breakdown of the number of respondents and response rates by strata. Wide variation in response rates was again noted in OCS and DC. The distribution of the 1992 population of company grade officers compared to the distribution of survey respondents is shown in Table 20.

Table 9

1988 LROC Respondents by Gender, Source of Commission, and Commissioning Year.

Year	1980	1981	1982	1983	1984	1985	1986	1987	Total
------	------	------	------	------	------	------	------	------	-------

Males and Females

USMA	172	218	205	205	236	259	312	265	1872
ROTC	410	450	440	453	444	440	567	361	3565
Total	582	668	645	658	680	699	879	626	5437*

Males

USMA	158	200	176	180	193	196	252	195	1550
ROTC	268	290	283	317	281	300	340	205	2284
Total	426	490	459	497	474	496	592	400	3834*

Females

USMA	14	18	29	25	43	63	60	70	322
ROTC	142	160	157	136	163	140	227	156	1281
Total	156	178	186	161	206	203	287	226	1603*

* Chart totals are less than the number of total respondents due to missing data on gender, source of commission, or commissioning year.

Table 10

1988 LROC Response Rates by Gender, Source of Commission, and Commissioning Year.

Year	1980	1981	1982	1983	1984	1985	1986	1987	Total
------	------	------	------	------	------	------	------	------	-------

Males and Females

USMA	64.4	63.9	68.1	63.1	58.4	55.8	71.1	61.1	63.0
ROTC	64.1	62.5	64.0	65.0	53.1	56.3	70.6	45.6	60.0
Total	64.2	63.0	65.3	64.4	54.8	56.1	70.8	51.1	61.0

Males

USMA	64.5	64.3	66.4	62.9	56.1	54.4	70.8	58.7	62.0
ROTC	66.0	61.2	67.4	67.0	51.7	58.1	74.6	43.9	60.9
Total	65.4	62.4	67.0	65.5	53.4	56.6	72.9	50.1	61.4

Females

USMA	63.6	60.0	80.6	64.1	71.7	60.6	72.3	68.6	67.9
ROTC	60.7	65.0	58.8	60.7	55.6	52.6	65.4	48.1	58.3
Total	60.9	64.5	61.4	61.2	58.4	54.9	66.7	53.1	60.0

Table 11

1988 Distribution of AC Officer Population Compared to Distribution of LROC Survey Respondents.

Year	1980	1981	1982	1983	1984	1985	1986	1987
------	------	------	------	------	------	------	------	------

Males and Females

USMA pop. resp.	08.2% 09.2	09.3 11.6	09.6 11.0	11.7 11.0	13.2 12.6	16.4 13.8	15.4 16.7	16.2 14.2
ROTC pop. resp.	08.9 11.5	09.1 12.6	09.4 12.3	11.7 12.7	13.7 12.5	16.3 12.3	15.8 15.9	15.2 10.1
Total	08.7 10.7	09.1 12.3	09.4 11.9	11.7 12.1	13.6 12.5	16.4 12.9	15.7 16.2	15.4 11.5

Males

USMA pop. resp.	08.4% 10.2	09.7 12.9	09.7 11.4	12.0 11.6	13.2 12.5	16.0 12.6	15.3 16.3	15.8 12.6
ROTC pop. resp.	09.1 11.7	09.4 12.7	09.6 12.4	11.9 13.9	13.8 12.3	16.3 13.1	15.2 14.9	14.7 09.0
Total	09.0 11.1	09.5 12.8	09.6 12.0	12.0 13.0	13.7 12.4	16.2 12.9	15.2 15.4	14.9 10.4

Females

USMA pop. resp.	05.6% 04.3	05.5 05.6	07.8 09.0	09.3 07.8	13.3 13.4	20.9 19.6	16.7 18.6	20.9 21.7
ROTC pop. resp.	07.3 11.1	07.4 12.5	08.0 12.3	10.2 10.6	13.1 12.7	16.5 10.9	19.3 17.7	18.2 12.2
Total	07.1 09.7	07.2 11.1	08.0 11.6	10.1 10.0	13.1 12.9	17.1 12.7	18.9 17.9	18.5 14.1

Table 12

1989 LROC Respondents by Gender, Source of Commission, and Commissioning Year.

Year	1980	1981	1982	1983	1984	1985	1986	1987	1988	Total
------	------	------	------	------	------	------	------	------	------	-------

Males and Females

USMA	167	197	181	147	165	193	181	189	183	1603
ROTC	334	388	327	336	342	291	338	358	302	3016
OCS	29	51	32	28	28	37	44	16	6	271
DC	22	34	54	48	35	82	65	52	30	422
Total	552	670	594	559	570	603	628	615	521	5312*

Males

USMA	152	181	159	128	135	139	148	137	142	1321
ROTC	232	249	213	238	229	199	204	223	210	1997
OCS	24	43	28	25	26	33	40	16	6	241
DC	18	30	44	32	14	52	42	32	17	281
Total	426	503	444	423	404	423	434	408	375	3840

Females

USMA	15	16	22	19	30	54	33	52	41	282
ROTC	102	139	114	98	113	92	134	135	92	1019
OCS	5	8	4	3	2	4	4	0	0	30
DC	4	4	10	16	21	30	23	20	13	141
Total	126	167	150	136	166	180	194	207	146	1472

* Chart totals are less than the number of total respondents due to missing data on gender, source of commission, or commissioning year.

Table 13

1989 LROC Response Rates by Gender, Source of Commission, and Commissioning Year.

Year	1980	1981	1982	1983	1984	1985	1986	1987	1988	Total
------	------	------	------	------	------	------	------	------	------	-------

Males and Females

USMA	65.5	63.5	63.7	53.5	51.2	45.8	41.6	44.1	49.2	51.7
ROTC	55.7	57.7	51.9	51.5	45.7	46.7	47.2	46.5	35.9	48.2
OCS	59.2	81.0	52.5	48.3	54.9	71.2	63.8	25.4	46.2	56.6
DC	26.8	37.0	55.1	36.9	36.8	39.2	31.4	41.3	33.7	37.4
Total	56.0	58.9	55.4	50.1	46.8	46.2	44.0	44.3	39.6	48.4

Males

USMA	64.7	64.4	63.3	52.2	48.9	42.1	42.0	41.8	50.4	51.2
ROTC	60.6	56.1	54.2	52.7	45.3	47.3	48.9	49.0	33.4	48.7
OCS	57.1	79.6	51.2	48.1	55.3	71.7	65.6	27.6	54.5	56.7
DC	29.5	41.7	57.1	33.3	29.2	36.6	30.4	47.1	45.9	38.0
Total	59.1	59.1	57.3	50.1	46.1	45.0	44.8	44.9	39.1	49.0

Females

USMA	75.0	55.2	66.7	63.3	65.2	59.3	39.8	51.5	45.6	53.9
ROTC	47.0	60.7	48.1	49.0	46.1	45.5	44.8	42.3	43.2	47.2
OCS	71.4	88.9	57.1	50.0	50.0	66.7	50.0	00.0	00.0	55.6
DC	19.0	20.0	47.6	47.1	44.7	44.8	33.3	34.5	25.0	36.2
Total	47.5	58.2	50.3	50.4	48.5	49.2	42.3	43.2	40.9	47.1

Table 14

1989 Distribution of AC Officer Population Compared to Distribution of LROC Survey Respondents.

Year	1980	1981	1982	1983	1984	1985	1986	1987	1988
Males and Females									
USMA pop. resp.	07.3%	08.2	08.3	08.7	09.9	14.0	14.6	15.0	14.0
	10.4	12.3	11.3	09.2	10.3	12.0	11.3	11.8	11.4
ROTC	08.2	08.3	08.6	10.1	11.4	12.1	13.5	14.3	13.6
	11.1	12.9	10.8	11.1	11.3	09.6	11.2	11.9	10.0
OCS	10.6	12.8	13.0	12.0	10.8	11.4	14.1	12.6	02.7
	10.7	18.8	11.8	10.3	10.3	13.7	16.2	05.9	02.2
DC	07.4	08.2	08.7	11.6	08.6	18.4	18.1	11.1	07.8
	05.2	08.1	12.8	11.4	08.3	19.4	15.4	12.3	07.1
Total	08.2	08.7	09.1	10.3	10.8	12.9	14.2	13.9	11.9
	10.4	12.6	11.2	10.5	10.7	11.4	11.8	11.6	09.8

(continued)

Table 14 (continued from previous page)

1989 Distribution of AC Officer Population Compared to Distribution of LROC Survey Respondents.

Year	1980	1981	1982	1983	1984	1985	1986	1987	1988
------	------	------	------	------	------	------	------	------	------

Males

USMA pop. resp.	07.5% 11.5	08.5 13.7	08.4 12.0	09.0 09.7	10.0 10.2	13.7 10.5	14.4 11.2	14.6 10.4	13.9 10.7
ROTC	08.4 11.6	08.6 12.5	08.9 10.7	10.4 11.9	11.6 11.4	12.1 10.0	12.9 10.2	13.8 11.2	13.3 10.5
OCS	10.2 10.0	12.2 17.8	12.9 11.6	12.3 10.4	11.2 10.8	11.3 13.7	14.3 16.6	13.0 06.6	02.5 02.5
DC	08.5 06.4	09.9 10.7	10.3 15.7	13.1 11.4	06.5 05.0	19.1 18.5	18.8 14.9	08.9 11.4	04.8 06.0
Total	08.5 11.1	09.1 13.1	09.4 11.6	10.6 11.0	10.9 10.5	12.8 11.0	13.8 11.3	13.4 10.6	11.5 09.8

Females

USMA pop. resp.	05.0% 05.3	05.3 05.7	06.9 07.8	05.8 06.7	08.8 10.6	17.4 19.1	16.0 11.7	19.6 18.4	15.3 14.5
ROTC	06.7 10.0	06.6 13.6	07.2 11.2	08.6 09.6	10.0 11.1	11.9 09.0	16.5 13.2	17.2 13.2	15.4 09.0
OCS	13.5 16.7	17.2 26.7	14.3 13.3	09.5 10.0	07.2 06.7	12.2 13.3	13.0 13.3	09.5 00.0	03.7 00.0
DC	05.3 02.8	05.0 02.8	05.7 07.1	08.7 11.3	12.4 14.9	17.0 21.3	16.9 16.3	15.4 14.2	13.6 09.2
Total	06.8 08.6	06.9 11.3	07.4 10.2	08.5 09.2	10.2 11.3	13.5 12.2	16.3 13.2	16.4 14.1	14.1 09.9

Table 15

1990 LROC Respondents by Gender, Source of Commission, and Commissioning Year.

Year	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	Total
------	------	------	------	------	------	------	------	------	------	------	-------

Males and Females

USMA	126	137	119	106	130	109	146	139	150	197	1359
ROTC	276	313	301	263	272	236	231	245	296	393	2826
OCS	29	36	25	25	29	25	28	10	6	4	217
DC	19	36	34	36	38	75	60	43	25	16	382
Total	450	522	479	430	469	445	465	437	477	610	4784*

Males

USMA	118	125	108	95	112	75	118	110	115	143	1119
ROTC	197	191	195	197	182	157	145	158	212	294	1928
OCS	24	30	20	21	27	23	26	10	5	3	189
DC	13	27	27	23	14	49	39	27	13	10	242
Total	352	373	350	336	335	304	328	305	345	450	3478

Females

USMA	8	12	11	11	18	34	28	29	35	54	240
ROTC	79	122	106	66	90	79	86	87	84	99	898
OCS	5	6	5	4	2	2	2	0	1	1	28
DC	6	9	7	13	24	26	21	16	12	6	140
Total	98	149	129	94	134	141	137	132	132	160	1306

* Chart totals are less than the number of total respondents due to missing data on gender, source of commission, or commissioning year.

Table 16

1990 IROC Response Rates by Gender, Source of Commission, and Commissioning Year.

Year	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	Total
------	------	------	------	------	------	------	------	------	------	------	-------

Males and Females

USMA	55.8	49.1	49.8	49.3	58.8	46.6	46.3	46.0	47.3	50.8	42.5
ROTC	52.8	55.8	57.0	51.3	49.0	50.1	50.1	48.5	45.2	47.0	43.4
OCS	69.0	69.2	50.0	47.2	65.9	52.1	51.9	24.4	60.0	57.1	53.1
DC	26.0	49.3	42.5	32.7	46.9	41.7	35.9	49.4	37.3	76.2	39.0
Total	52.1	54.1	53.4	48.3	52.1	47.7	46.6	46.7	45.5	48.7	43.1

Males

USMA	56.7	49.4	50.9	48.2	57.7	41.4	46.6	45.3	46.7	48.6	42.8
ROTC	58.5	52.2	58.6	53.7	48.4	47.4	50.7	52.0	44.1	47.3	43.0
OCS	66.7	65.2	45.5	45.7	67.5	53.5	52.0	27.0	62.5	50.0	52.2
DC	23.6	50.0	43.5	28.0	33.3	40.8	35.1	50.9	54.2	83.3	37.7
Total	55.3	51.9	53.8	48.6	51.4	45.0	46.9	47.9	45.5	48.2	42.98

Females

USMA	44.4	46.2	40.7	61.1	66.7	64.2	45.2	49.2	49.3	57.4	40.9
ROTC	42.5	62.6	54.4	45.2	50.3	56.4	49.1	43.3	48.3	46.3	44.3
OCS	83.3	100	83.3	57.1	50.0	40.0	50.0	00.0	50.0	100	60.0
DC	33.3	47.4	38.9	46.4	61.5	43.3	37.5	47.1	27.9	66.7	41.4
Total	43.0	60.6	52.4	47.2	53.8	54.7	46.1	44.3	45.5	50.3	43.6

Table 17

1990 Distribution of AC Officer Population Compared to Distribution of LROC Survey Respondents.

Year	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Males and Females										
USMA pop. resp.	07.1x	07.8	07.5	07.6	07.4	09.5	12.1	12.3	14.0	14.8
	09.3	10.1	08.8	07.8	09.6	08.0	10.7	10.2	11.0	14.5
ROTC	07.7	07.6	07.8	09.1	10.0	10.2	10.1	10.8	13.1	13.6
	09.8	11.1	10.7	09.3	09.6	08.4	08.2	08.7	10.5	13.9
OCS	10.5	12.8	12.5	11.8	10.6	11.1	12.1	09.7	07.5	01.3
	13.4	16.6	11.5	11.5	13.4	11.5	12.9	04.6	02.8	01.8
DC	07.4	07.4	08.2	11.2	08.7	18.4	16.6	09.2	08.3	04.6
	05.0	09.4	08.9	09.4	09.9	19.6	15.7	11.3	06.5	04.2
Total	07.9	08.1	08.3	09.3	09.5	11.0	11.2	10.8	12.2	11.7
	09.4	10.9	10.1	09.0	09.8	09.3	09.7	09.1	10.0	12.8

(continued)

Table 17 (continued from previous page)

1990 Distribution of AC Officer Population Compared to Distribution of LROC Survey Respondents.

Year	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
------	------	------	------	------	------	------	------	------	------	------

Males

USMA pop. resp.	07.3x 10.5	08.1 11.2	07.6 09.7	07.9 08.5	07.4 10.0	09.2 06.7	11.9 10.5	12.0 09.8	13.9 10.3	14.6 12.8
ROTC	08.0 10.2	07.8 09.9	08.0 10.1	09.3 10.2	10.2 09.4	10.4 08.1	09.8 07.5	10.4 08.2	12.7 11.0	13.3 15.2
OCS	10.1 12.7	12.3 15.9	12.3 10.6	12.2 11.1	11.1 14.3	11.1 12.2	12.3 13.8	10.0 05.3	07.3 02.6	01.3 01.6
DC	08.5 05.4	08.7 11.2	09.7 11.2	12.5 09.5	07.5 05.8	19.2 20.2	17.4 16.1	07.9 11.2	05.5 05.4	03.0 04.1
Total	08.2 10.1	08.4 10.7	08.5 10.1	09.6 09.7	09.6 09.6	10.9 08.7	11.0 09.4	10.4 08.8	11.8 09.9	11.5 12.9

Females

USMA pop. resp.	05.2x 03.3	04.8 05.0	05.9 04.6	04.5 04.6	07.4 07.5	11.9 14.2	13.7 11.7	15.4 12.1	15.2 14.6	16.1 22.5
ROTC	06.2 08.8	06.0 13.6	06.5 11.8	07.7 07.3	08.7 10.0	09.2 08.8	11.4 09.6	13.3 09.7	15.5 09.4	15.5 11.0
OCS	13.2 17.9	17.0 21.4	14.2 17.9	08.4 14.3	06.8 07.1	11.6 07.1	10.2 07.1	07.6 00.0	09.2 03.6	01.6 03.6
DC	05.3 04.3	04.9 06.4	05.3 05.0	08.6 09.3	11.0 17.1	17.0 18.6	15.2 15.0	11.6 11.4	13.7 08.6	07.4 04.3
Total	06.4 07.5	06.5 11.4	06.7 09.9	07.7 07.2	08.9 10.3	11.3 10.8	12.4 10.5	12.7 10.1	14.6 10.1	12.8 12.3

Table 18

1992 LROC Respondents by Gender, Source of Commission, and Commissioning Year.

Year	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	Total
Males and Females												
USMA	112	160	136	106	125	100	116	109	103	153	159	1379
ROTC	240	248	234	221	237	210	196	168	191	327	282	2554
OCS	22	30	22	25	21	21	21	6	5	1	9	183
DC	17	24	28	25	33	39	49	35	17	20	6	293
Total	391	462	420	377	416	370	382	318	316	501	456	4409*

Males

USMA	106	145	120	98	108	77	93	89	84	116	127	1163
ROTC	167	158	156	162	165	142	122	121	144	253	204	1794
OCS	20	24	18	22	20	20	20	6	4	0	7	161
DC	12	21	24	16	13	21	34	20	7	11	3	182
Total	305	348	318	298	306	260	269	236	239	380	341	3300

Females

USMA	6	15	16	8	17	23	23	20	19	37	32	216
ROTC	73	90	78	59	72	68	74	47	47	74	78	760
OCS	2	6	4	3	1	1	1	0	1	1	2	22
DC	5	3	4	9	20	18	15	15	10	9	3	111
Total	86	114	102	79	110	110	113	82	77	121	115	1109

* Chart totals are less than the number of total respondents due to missing data on gender, source of commission, or commissioning year.

Table 19

1992 LROC Response Rates by Gender, Source of Commission, and Commissioning Year.

Year	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	Total
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Males and Females

USMA	51.9	59.0	58.9	54.4	65.4	52.1	53.2	45.0	45.0	42.3	45.6	51.1
ROTC	49.4	47.4	48.0	48.6	47.8	28.0	49.4	41.7	35.1	43.9	35.7	44.4
OCS	57.9	60.0	46.8	48.1	51.2	50.0	43.8	15.8	55.6	16.7	33.3	46.0
DC	27.9	36.4	41.2	26.3	43.4	24.8	32.7	51.5	37.8	100	31.6	35.5
Total	48.8	50.8	50.4	47.3	51.7	45.1	47.0	42.3	38.2	44.2	38.5	45.6

Males

USMA	53.3	58.9	58.5	54.7	64.3	49.4	53.4	45.4	45.2	42.0	45.5	51.4
ROTC	52.8	47.2	50.3	49.7	48.4	46.0	46.6	47.1	36.0	45.4	34.8	44.9
OCS	58.8	55.8	42.9	47.8	54.1	50.0	44.4	17.6	50.0	00.0	46.7	46.1
DC	25.5	43.8	43.6	22.5	34.2	19.6	32.4	44.4	46.7	100	75.0	33.3
Total	51.2	51.8	52.0	47.9	52.4	42.5	45.9	44.4	39.2	44.8	38.5	46.1

Females

USMA	35.3	60.0	61.5	50.0	73.9	63.9	52.3	43.5	44.2	43.0	45.7	50.0
ROTC	42.9	47.9	44.1	45.7	46.5	56.7	54.8	32.2	32.6	39.4	38.4	43.3
OCS	50.0	85.7	80.0	50.0	25.0	50.0	33.3	00.0	100	100	16.7	44.9
DC	35.7	16.7	30.8	37.5	52.6	36.0	33.3	65.2	33.3	100	20.0	39.8
Total	42.0	47.9	46.2	45.1	50.0	52.9	49.8	37.4	35.3	42.6	38.3	44.1

Table 20

1992 Distribution of AC Officer Population Compared to Distribution of LROC Survey Respondents.

Year	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
Males and Females											
USMA pop. resp.	06.8x 08.1	07.6 11.6	07.1 09.9	06.9 07.7	06.7 09.1	07.8 07.3	08.6 08.4	10.0 07.9	10.7 07.5	14.5 11.1	13.3 11.5
ROTC	07.1 09.4	06.9 09.7	07.0 09.2	07.8 08.7	09.0 09.3	09.0 08.2	08.6 07.7	08.9 06.6	10.9 07.5	13.0 12.8	11.8 11.0
OCS	09.4 12.0	11.7 16.4	11.3 12.0	10.7 13.7	09.7 11.5	10.0 11.5	10.7 11.5	08.7 03.3	08.4 02.7	05.8 00.5	03.5 04.9
DC	06.8 05.8	06.7 08.2	07.5 09.6	09.9 08.5	08.5 11.3	17.2 13.3	15.9 06.7	09.8 11.9	07.8 05.8	05.5 06.8	04.4 02.0
Total	07.3 08.9	07.5 10.5	07.5 09.5	08.2 08.6	08.6 09.4	09.7 08.4	09.5 08.7	09.1 07.2	10.3 07.2	11.8 11.4	10.5 10.3

(continued)

Table 20 (continued from previous page)

1992 Distribution of AC Officer Population Compared to Distribution of LROC Survey Respondents.

Year	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
------	------	------	------	------	------	------	------	------	------	------	------

Males

USMA pop. resp.	07.0x 09.1	07.8 12.5	07.3 10.3	07.1 08.4	06.7 09.3	07.7 06.6	08.4 08.0	09.8 07.7	10.8 07.2	14.1 10.0	13.4 10.9
ROTC	07.4 09.3	07.1 08.8	07.2 08.7	08.1 09.0	09.2 09.2	09.2 07.9	08.5 06.8	08.7 06.7	10.5 08.0	12.7 14.1	11.4 11.4
OCS	09.0 12.4	11.2 14.9	11.2 11.2	11.0 13.7	10.1 12.4	10.0 12.4	10.8 12.4	08.9 03.7	08.3 02.5	05.9 00.0	03.7 04.3
DC	08.0 06.6	08.1 11.5	09.0 13.2	11.1 08.8	07.5 07.1	18.3 11.5	17.2 18.7	08.6 11.0	05.7 03.8	03.9 06.0	02.5 01.6
Total	07.5 09.2	07.7 10.5	07.8 09.6	08.4 09.0	08.8 09.3	09.7 07.9	09.4 08.2	08.9 07.2	10.0 07.2	11.6 11.5	10.3 10.3

Females

USMA pop. resp.	05.1 02.8	04.9 06.9	05.7 07.4	04.2 03.7	06.7 07.9	09.4 10.6	10.2 10.6	12.2 09.3	10.2 08.8	18.4 17.1	12.9 14.8
ROTC	05.7 09.6	05.8 11.8	06.0 10.3	06.5 07.8	07.4 09.5	07.8 08.9	08.8 09.7	09.9 06.2	13.1 06.2	14.9 09.7	14.0 10.3
OCS	12.6 09.1	16.3 27.3	12.0 18.2	07.8 13.6	06.2 04.5	10.5 04.5	10.1 04.5	07.4 00.0	09.7 04.5	05.0 04.5	02.3 09.1
DC	04.7 04.5	04.4 02.7	05.0 03.6	07.7 08.1	10.1 18.0	15.2 16.2	13.5 13.5	11.9 13.5	11.6 09.0	08.1 08.1	07.7 02.7
Total	06.0 07.8	06.2 10.3	06.2 09.2	06.7 07.1	07.9 09.9	09.8 09.9	10.0 10.2	10.3 07.4	12.3 06.9	13.0 10.9	11.7 10.4

Longitudinal Respondents

Because of the design of the LROC research, the database contains officers who have responded to only one survey or to multiple consecutive and non-consecutive surveys. Table 21 provides the number of officers who responded for each combination of survey years. A total of 928 officers responded to all four surveys and are considered the longitudinal group.

Table 21

Number of Officers Who Responded to One or More Years of the LROC Survey

SURVEY YEARS	N	SURVEY YEARS	N
In 1 year only: 1988	1,652	In 2 years (cont): 1989-1992	308
1989	1,033	1990-1992	617
1990	907		
1992	943		
In 2 years only: 1988-1989	944	In 3 years only: 1988-1989-1990	527
1988-1990	361	1988-1989-1992	413
1988-1992	218	1988-1990-1992	306
1989-1990	501	1989-1990-1992	688
		In all 4 years: 1988-1989-1990-1992	928

Database Development

Each survey was scanned into a file and edited using a Sentry 3000 Scanner and the National Computer System's software SCANTOOLS. The raw data file was combined with the variable names, values, and value labels file to create a Statistical Package for Social Sciences (SPSS) system file. Missing values were coded as the system missing value (SYSMIS) in SPSS.

Weighting factors were calculated for each year based on the strata to compensate for the oversampling of female and USMA officers called for in the sampling plan. These weighting factors should be used when analyzing the total group of officers for any one survey year. If analyzing the data by gender, weights are not necessary.

A SPSS system file for each year of the survey is currently on file and a longitudinal SPSS system file has also been created matching the respondents across all 4 survey years. Information on accessing this data for research purposes can be obtained from the first author or from the Chief, Leadership and Organizational Change Technical Area, U.S. Army Research Institute, 5001 Eisenhower Avenue, Alexandria, VA 22333-5600.

Codebooks

Volumes 2-5 are the separate codebooks for the 1988-1992 LROC databases, respectively. Each codebook includes Appendices A-D. Appendix A gives the question and its location in the survey, frequencies, variable name, column position, and value labels for the question. The questions are in the same order as they appear in the survey and in the computer file. Appendix B contains the cover letter and survey booklet for each year. Appendix C provides a cross-reference for the 4 years of the survey so users can easily track the questions. Appendix D gives additional descriptive statistics for each question in the survey including the mean, standard deviation, range, and median.

Discussion

The 1988-1992 LROC Survey database is part of ARI's continuing effort to provide accurate, timely information on the impact of policy change and world events on the career experiences and decisions of the officer corps. Overall, the data appear to be fairly representative of the company grade officer population as a whole. LROC findings have already contributed to a change in the branching procedure used by the ROTC Branching Board which now gives additional weight to cadet branch choice. ROTC Cadet Command reported a subsequent increased percentage of cadets receiving their choice of branch.

Two technical reports from the LROC project (Teplitzky, 1991; Guthrie, 1992) have provided insights into the predictors of career intentions. The first used the 1989 LROC data to predict career intentions; the second used the 1988 LROC data to predict career intentions and actual attrition.

With the downsizing of the Army, the emphasis has turned to effective strategies for decreasing the force. The longitudinal nature of the LROC project has allowed ARI to respond to the downsizing issues by reporting the trends and changes that have taken place in the officer corps related to attitudes and concerns about their career prospects, promotion opportunities, and the work-related stress and demands resulting from the downsizing.

The data have been collected over a particularly chaotic period for the Army and provide an opportunity to look at actual trends and changes in attitudes and career experiences previously

unavailable with one-time survey research. As part of a major database development program at ARI, the LROC database can also be linked to personnel information and other survey data. This data integration expands our capability to provide meaningful information to manpower planners and policymakers in order to facilitate effective decision making as the Army continues to downsize and restructure the force.

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