January 14, 2009 Note No. 2008-018

December 2007 Status of Forces Survey of Active Duty Members: Permanent Change of Station (PCS) Moves and Details on Readiness Briefing

Introduction

The purpose of this paper is to introduce a briefing on two topics included in the *December 2007 Status of Forces Surveys of Active Duty Members*: permanent change of station (PCS) moves and details on readiness. Trend comparisons are made (when available) for Service members overall, by Service, and by paygrade, and results for an additional 34 demographic subgroups are also presented.

Summary of Topic Covered in Briefing

Permanent Change of Station (PCS) Moves

- 69% of members reported they had at least one PCS move in their military career—unchanged since July 2002. Members reported an average of 2.8 PCS moves during their career—unchanged since November 2003. Members who were married and/or had children reported their family had moved an average of 2.4 times in their career—0.6 times higher than the low of December 2005.
- More than one fourth of members who had at least one PCS move indicated a *change in cost* of living (31%—3 percentage points higher than the low of December 2005) and *costs of* setting up a new residence (26%—2 percentage points higher than the low of December 2005) were a large problem for their most recent PCS.
 - Other notable problems included *purchasing or renting their current residence* (17%—3 percentage points higher than the low of December 2005) and *selling or renting out their former residence* (11%—4 percentage points higher than the low of December 2005).
- About one third of married members indicated spouse employment (31%) and loss or decrease of spouse income (29%) were a large problem for their most recent PCS—unchanged since November 2003.
- About one fifth of members with children reported *dependents changing schools* (23%) and *availability of child care* (20%) were a large problem for their most recent PCS move—unchanged since November 2003.

Details on Readiness

• More than two fifths (43%—13 percentage points lower than the high of December 2005) indicated new equipment was fielded to their unit in the past 24 months.



December 2007 SOFS-A Permanent Change of Station (PCS) Moves and Detail on Readiness Briefing

- o 52% of these members were satisfied with the training they received for the new equipment—unchanged since December 2005.
- Almost three fourths (72%—4 percentage points higher than December 2005)
 indicated the new equipment was intended to improve organization's ability to operate
 in a joint environment.
- o 62% of these members reported satisfaction with the new equipment—unchanged from December 2005.
- 63% participated in a military-related course via the Internet in the past 12 months—22 percentage points higher than the low of December 2005.
 - Less than half of these members indicated increased personal readiness (44%—7 percentage points lower than the high of November 2003) and overall satisfaction with the course (46%—11 percentage points lower than the high of November 2003).
- 60% of members participated in unit training in the past 12—16 percentage points lower than the high of November 2003.
 - o More than half of these members indicated increased personal (61%) and unit readiness (68%) and overall satisfaction with the unit training (56%)—both unchanged since November 2003.
- On average, members exercised an average of 3.6 days per week for at least 30 minutes—unchanged since November 2003.
- 33% of members indicated they updated their emergency record data between October 2007 and January 2008 (month survey fielding closed), whereas 25% updated it between July 2007 and September 2007.
 - More than two thirds indicated they update emergency record data *before deployments* (80%), when there is a *change in personal information* (79%), as part of PCS moves (73%), or when there is a *change in marital status and/or other dependents* (73%).

Survey Methodology

Data Sources

The *Status of Forces Surveys* (SOFS) is a series of Web-based surveys of the total force that allows the Department of Defense to (1) evaluate existing programs/policies, (2) establish baselines before implementing new programs/policies, and (3) monitor progress of programs/policies and their effects on the total force. By design, each SOFS includes a series of leading indicators to track changes over time.

The first Web-based SOFS for active duty members was conducted in July 2002. Regular administrations, approximately every four months, commenced in March 2003. Table 1 provides



December 2007 SOFS-A Permanent Change of Station (PCS) Moves and Details on Readiness Briefing

detailed information (e.g., administration dates, sample size, and response rate) on active duty survey administrations, to include the *1999 Survey of Active Duty Personnel* (1999 ADS) that had similar content.

Table 1.

Details on Survey Administrations

Survey	Administration Dates	Sample Size	Response Rate	Margin of Error ^a
December 2007	19 Nov 07 – 10 Jan 08	63,076	33%	±1.2%
August 2007	6 Aug – 13 Sept 07	37,652	32%	±1.6%
April 2007	26 Mar – 3 May 07	65,965	32%	±1.1%
December 2006	20 Nov 06 – 5 Jan 07	37,061	32%	±1.4%
August 2006	24 July – 31 Aug 06	39,389	28%	±1.5%
April 2006	27 Feb – 6 Apr 06	39,313	33%	±1.3%
December 2005	28 Nov 05 – 5 Jan 06	36,567	36%	±1.3%
August 2005	22 Aug – 27 Sep 05	35,461	35%	$\pm 1.4\%$
March 2005	25 Feb – 11 Apr 05	30,939	37%	$\pm 1.4\%$
December 2004	22 Nov 04 – 6 Jan 05	35,044	39%	±2.6%
August 2004	26 Jul – 2 Sep 04	38,112	40%	$\pm 1.4\%$
April 2004	5 Apr – 13 May 04	33,414	39%	±1.3%
November 2003	3 Nov – 11 Dec 03	33,607	38%	±1.4%
July 2003	21 Jul – 28 Aug 03	32,844	35%	±1.5%
March 2003	10 Mar – 17 Apr 03	34,929	35%	±1.4%
July 2002	8 Jul – 13 Aug 02	37,918	32%	±1.5%
1999 Survey of Active	-			
Duty Personnel	17 Sep 99 – 4 Jan 00	66,040	51%	±0.8%

^aThis is the full sample margin of error for estimates of 50% and represents the overall margin of error for the study.

The target population for all active duty SOFS consists of active duty members of the Army, Navy, Marine Corps, and Air Force (1) who have at least six months service at the time the questionnaire is first fielded, (2) who are below flag rank when the sample is drawn six months before the survey, and (3) excluding National Guard and Reserve members in active duty programs. Weights are used so that estimates from the survey represent the population.

The 1999 ADS was a large-scale, paper-and-pencil survey. The target population for the 1999 ADS consisted of all active duty Army, Navy, Marine Corps, Air Force, and Coast Guard members below flag rank who had served at least six months of service at the time of survey mailings, as well as Reservists on active duty with the same rank and length of service requirements. In order to maximize comparability between the SOFS and the 1999 ADS, Coast Guard members and Reserve component members in full-time, active duty programs were excluded from the 1999 ADS data before analyses were conducted for this survey note.



1

December 2007 SOFS-A Permanent Change of Station (PCS) Moves and Detail on Readiness Briefing

Margins of Error

The complex sample designs used in SOFS and the 1999 ADS require weighting to produce population estimates such as percentages.¹ This means that the typical rules of thumb for interpreting the validity of an estimate, such as the number of respondents, will overstate the reliability of the estimate. For this report, variance estimates were calculated using SUDAAN[©] PROC DESCRIPT (Research Triangle Institute, 2004).

By definition, sample surveys are subject to sampling error. Standard errors are estimates of the variance around population parameters, such as percentages or means, and are used to construct margins of error (i.e., confidence interval half-widths). Margins of error reported for the surveys overall in Table 1, and elsewhere in this report, are based on 95% confidence intervals.²

Tests of Significance for Subgroups

When reporting current survey results, the mean (or proportion) of each subgroup is compared³ to its respective "all other" group. The "all other" group refers to the total population minus the group being assessed. For example, Army's "all other" group consists of Navy, Marine Corps, and Air Force members. Excluding the subject group from the total enables an accurate test of whether the group differs from those not in the group.

Tests of Significance for Trends

Trend analyses on leading indicator items from SOFS administered between July 2002 and December 2007 are presented with Service and paygrade group comparisons. Limited comparisons of deployment status are also presented. In addition, several leading indicator items also appeared in the 1999 ADS. When comparable data exist, the 1999 results are also provided for an additional historical perspective on these issues. When comparing results across survey administrations, statistical tests are used to compare current estimates with previous results based on unrounded estimates. Statistically significant changes of more than one percentage point for proportions and five percent for means are noted. Previous proportions and means that are statistically significant from the current results are highlighted in their respective tables; absolute differences between previous and current results are also shown in the summary of findings.

Prepared by: Kristin Williams

Program Evaluation Branch

Human Resources Strategic Assessment Program, DMDC

For further information see http://www.dmdc.osd.mil/surveys.

IOFS

1

¹ As a result of differential weighting, only certain statistical software procedures, such as SUDAAN PROC DESCRIPT, correctly calculate standard errors, variances, or tests of statistical significance for stratified samples.

Copyright 2004 by Research Triangle Institute, P.O. Box 12194, Research Triangle Park, NC 27709-2194

² The margin of error represents the degree of certainty that the percentage or mean would fall within the interval in repeated samples of the population. For example, if 55% of individuals selected an answer and the margin of error was ± 3 in repeated surveyed samples from the population, the percentage of individuals selecting the same answer would be between 52% (55 minus 3) and 58% (55 plus 3) in 95% of the samples.

³ DMDC used *t* tests in this survey note to test the difference between two means or proportions. This survey note highlights only differences significant at the $\alpha = .01$ level.