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Data Driven Solutions For Decision Makers

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DACOWITS RESPONSE

Retention Items: Status of Forces Surveys of Active Duty and Reserve Component Members

Top-Line Findings

Included in this survey note are results from the 2018 Status of Forces Survey of Active Duty Members (SOFS-A), the 2018 Status of Forces Survey of Reserve Component Members (SOFS-R), and trend results with data from 2007-2017. Results are presented for Total DoD active duty (Army, Navy, Marine Corps, and Air Force) men and women; and Total DoD Reserve component (Army National Guard, Army Reserve, Navy Reserve, Marine Corps Reserve, Air National Guard, and Air Force Reserve) men and women.

- Based on retention items from the 2018 SOFS-A:
 - Results for women's *intent to stay* and *support to stay* by spouse/significant other and family are <u>consistent</u> with percentages over the past five years.
 - When looking at 21 specific reasons why active duty members stay, there are few statistically significant differences by gender: women were <u>more likely</u> than men to indicate *amount of personal and family time you have* as a reason to stay, while men were <u>more likely</u> than women to indicate *military retirement system* and *pride in* serving your country
- Based on retention items from the 2018 SOFS-R:
 - Results for women's *intent to stay* and *favorable views of participation* in the National Guard/Reserve by spouse/significant other, families, supervisor at the principle civilian job, and coworkers at the principle civilian job are <u>consistent</u> with percentages over the past ten years.
 - When looking at eight specific reasons why Reserve component members continue to participate in the National Guard/Reserve, there are six statistically significant differences by gender: women were more likely than men to indicate opportunities for training and professional development; quality of the work environment based on unit morale, camaraderie, and professionalism; and educational assistance as a reason to stay, while men were more likely than women to indicate military retirement system, health care, and pride in serving your country.

Status of Forces Surveys of Active Duty Members

Since 2002, the *Status of Forces Surveys of Active Duty Members (SOFS-A)* have included a set of three retention items that measure the member's *intent to stay*, whether the member's spouse/significant other *supports him/her staying or leaving*, and whether the member's family *supports him/her staying or leaving* (Figure 1).

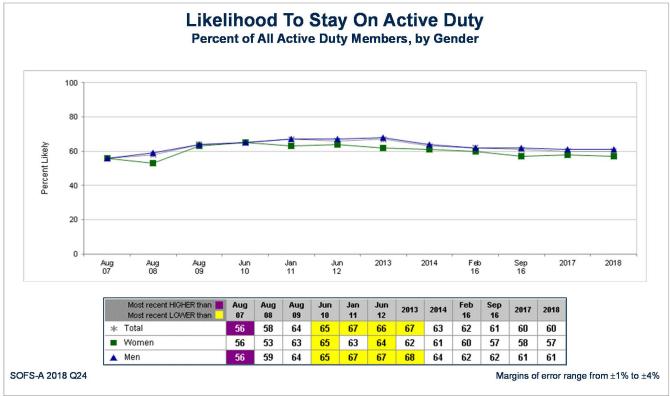
Figure 1. SOFS-A Retention Items

Suppose that you have to decide whether to stay on active duty. Assuming you could stay, how likely is it that you would choose to do so?
Very likely
Neither likely nor unlikely
□ Unlikely
Very unlikely
Does your <u>spouse or significant other</u> think you should stay on or leave active duty?
Strongly favors staying
Somewhat favors staying
Has no opinion one way or the other
Somewhat favors leaving
Strongly favors leaving
Does your <u>family</u> think you should stay on or leave active duty?
Strongly favors staying
Somewhat favors staying
Has no opinion one way or the other
Somewhat favors leaving
Strongly favors leaving

2018 SOFS-A trend results for each of these measures are presented in Figures 2-4. Overall, 2018 percentages across all three retention items, by gender, are <u>statistically comparable</u> to percentages from 2016 and 2017. Detailed results for women are presented below.

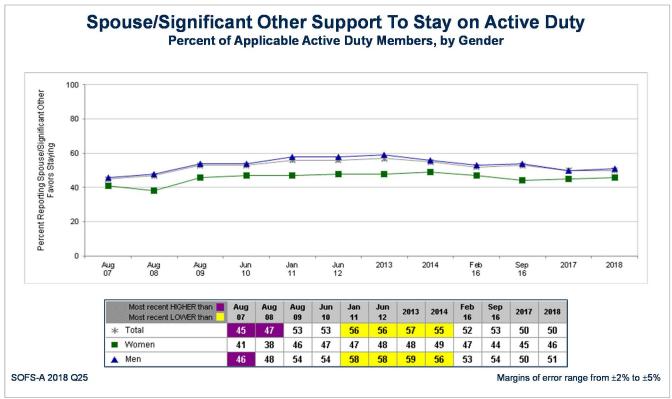
As shown in Figure 2, the 2018 percentage for female members' *intent to stay* on active duty (57%) is <u>statistically consistent</u> compared to 2007-2009, 2011, and 2013-2017 (53%-63%); however, the percentage for women in 2018 (57%) is <u>statistically lower</u> than in 2010 (65%) and 2012 (64%).

Figure 2. 2007-2008 Member's Likelihood to Stay on Active Duty, by Gender



As shown in Figure 3, the 2018 percentage for female members' spouse/significant other *support to stay* on active duty (46%) is <u>statistically consistent</u> compared to 2007-2017 (38%-49%).

Figure 3. 2007-2018 Spouse/Significant Other Support to Stay on Active Duty, by Gender



As shown in Figure 4, the 2018 result for female members' family *support to stay* on active duty (44%) is <u>statistically consistent</u> compared to 2007-2011 and 2013-2017 (39%-50%); however, the percentage for women in 2018 (44%) is <u>statistically lower</u> than in 2012 (51%).

Family Support To Stay on Active Duty Percent of Applicable Active Duty Members, by Gender Percent Reporting Their Family Favors Staying Total Women Men SOFS-A 2018 Q26 Margins of error range from ±2% to ±4%

Figure 4. 2007-2018 Family Support to Stay on Active Duty, by Gender

As shown in Table 1, when comparing 2018 SOFS-A results between women and men across all three retention items, there are no statistically significant differences between a member's intent to stay, a member's spouse/significant other favoring him/her to stay, and a member's family favoring him/her to stay. However, 28% of female members indicated their family favors them leaving, which is statistically higher than male members (22%).

Table 1. 2018 Retention Items, by Gender

Higher response Higher response		Male	Female
How likely is it that you would choose to stay on	Likely	61	57
active duty?	Unlikely	26	30
Spouse/Significant other support	Favors staying	51	46
	Favors leaving	30	33
Family support	Favors staying	46	44
	Favors leaving	22	28

Note. Statistical tests are used to compare each subgroup to its respective "all other" group (i.e., to all others not in the subgroup). Results of statistical tests shown by color coding significant differences among reporting categories.

The *February 2016 SOFS-A* included a list of 21 reasons members could select as one of the top three reasons they stay on active duty (Figure 5).

Figure 5. February 2016 SOFS-A Reasons to Stay

	pose that you have to decide whether to stay on active duty. Which of the owing would be the most important/second most important/third most important
	or in this decision?
\times	Pay and allowances
\boxtimes	Job security
\boxtimes	Military retirement system
\boxtimes	Family financial stability
\boxtimes	Opportunities for career advancement (e.g., pace of promotions)
\boxtimes	Opportunities to be assigned to station of choice
\boxtimes	Health care for family
\boxtimes	Quality of the work environment based on unit morale, camaraderie, and professionalism
\bowtie	Quality of leadership
\boxtimes	Pride in serving your country
\boxtimes	Amount of personal and family time you have
\boxtimes	Sense of accomplishment from doing your job
	Personal choice/freedoms
\boxtimes	Spouse/family attitudes
\boxtimes	Opportunities for training and professional development
\boxtimes	Military values, lifestyle, and tradition
	Choice of jobs
	Family concerns
	Special pays
\boxtimes	Amount of time you spend away from your home station
\boxtimes	Off-duty education opportunities

As shown in Table 2, male members (21%) were <u>more likely</u> to indicate <u>military retirement system</u> as a reason to stay, while female members (13%) were <u>less likely</u>. Male members (12%) were also <u>more likely</u> to indicate <u>pride in serving your country</u> as a reason to stay, while female members (6%) were <u>less likely</u>. Female members (16%) were <u>more likely</u> to indicate <u>amount of personal and family time</u> you have as a reason to stay, while male members (10%) were <u>less likely</u>.

Table 2. February 2016 SOFS-A Reasons to Stay, by Gender

More likely to mark Less likely to mark	Male	Female
Pay and allowances	25	24
Job security	22	21
Military retirement system	21	13
Family financial stability	17	20
Opportunities for career advancement	15	17
Opportunities to be assigned to station of choice	13	15
Health care for family	14	12
Quality of the work environment based on unit morale, camaraderie, and professionalism	12	10
Amount of personal and family time you have	10	16
Pride in serving your country	12	6
Quality of leadership	11	12
Sense of accomplishment from doing your job	11	10
Personal choice/freedoms	9	10
Choice of jobs	9	8
Military values, lifestyle, and tradition	9	8
Spouse/family attitudes	9	8
Opportunities for training and professional development	9	8
Family concerns	8	9
Special pays	7	6
Amount of time you spend away from your home station	6	8
Off-duty education opportunities	5	8

Note. Statistical tests are used to compare each subgroup to its respective "all other" group (i.e., to all others not in the subgroup). Results of statistical tests shown by color coding significant differences among reporting categories.

Status of Forces Surveys of Reserve Component Members

The *Status of Forces Surveys of Reserve Component Members (SOFS-R)* have included a set of five retention items since 2002 that measure the member's *intent to stay* and whether the member's spouse/significant other, family, employer at his/her principle civilian job, and coworkers at his/her principle civilian job *favorably views his/her participation* in the National Guard/Reserve (Figure 6).

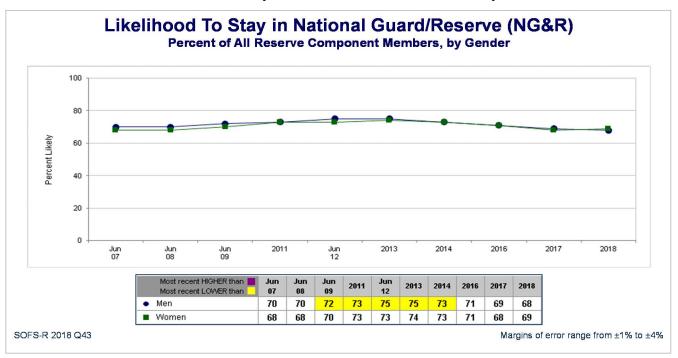
Figure 6. SOFS-R Retention Items

Suppose that you have to decide whether to continue to participate in the National
Guard/Reserve. Assuming you could stay, how likely is it that you would choose to
do so?
Very likely
Likely
Neither likely nor unlikely
Unlikely
Very unlikely
In your opinion, how does your <u>spouse or significant other</u> view your participation in
the National Guard/Reserve?
Very favorably
Somewhat favorably
Neither favorably nor unfavorably
Somewhat favorably
Very unfavorably
In your opinion, how does your <u>family</u> view your participation in the National
Guard/Reserve?
Very favorably
Somewhat favorably
Neither favorably nor unfavorably
Somewhat favorably
Very unfavorably
In your opinion, how does your <u>supervisor at your principal civilian job</u> view your
participation in the National Guard/Reserve?
Does not apply; I do not have a supervisor at my principal civilian job
Very favorably
Somewhat favorably
Neither favorably nor unfavorably
Somewhat favorably
Very unfavorably
In your opinion, how do your <u>coworkers at your principal civilian job</u> view your
participation in the National Guard/Reserve?
Does not apply; I do not work with others at my principal civilian job
Very favorably
Somewhat favorably
Neither favorably nor unfavorably
Somewhat favorably
Very unfavorably

2018 SOFS-R trend results are presented in Figures 7-11. Overall, 2018 percentages across all five retention items, by gender, are <u>statistically comparable</u> to percentages from 2016 and 2017. Detailed results for women are provided below.

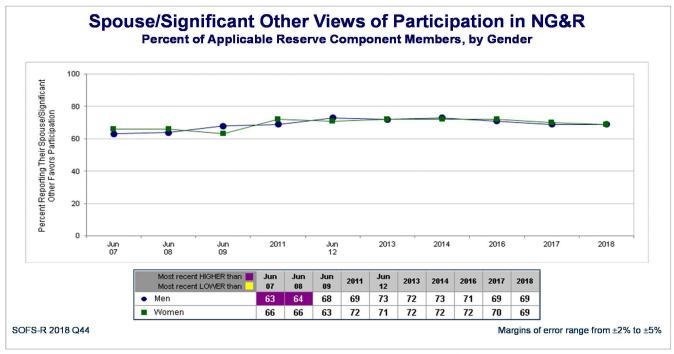
As shown in Figure 7, the 2018 result for female members' *intent to stay* in the National Guard/Reserve (69%) is <u>statistically consistent</u> compared to 2007-2017 (68%-74%).

Figure 7. 2007-2018 Member's Likelihood to Stay in the National Guard/Reserve, by Gender



As shown in Figure 8, the 2018 percentage for female members' spouse/significant other *favorably* viewing his/her participation in the National Guard/Reserve (69%) is <u>statistically consistent</u> compared to 2007-2017 (63%-72%).

Figure 8. 2007-2018 Spouse/Significant Other Favors Participation in the NG&R, by Gender

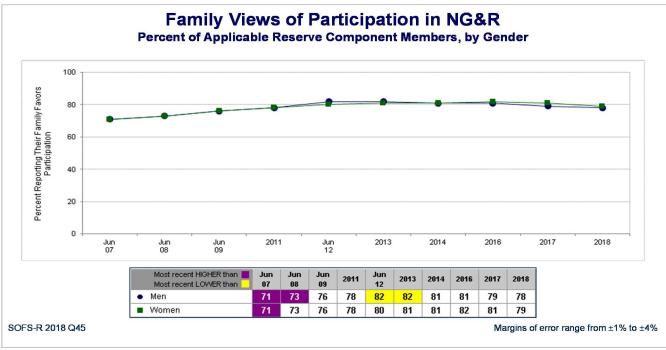


Note. Trends are shown as estimated percentages. Statistical tests used to compare current results with all previous survey administrations. Purple cells indicate current survey result is HIGHER and Yellow cells indicate current survey result is LOWER.

As shown in Figure 9, the 2018 percentage for female members' family *favorably viewing his/her* participation in the National Guard/Reserve (79%) is statistically consistent compared to 2008-2017

(73%-82%); however, the percentage for women in 2018 (79%) is <u>statistically higher</u> than in 2007 (71%).

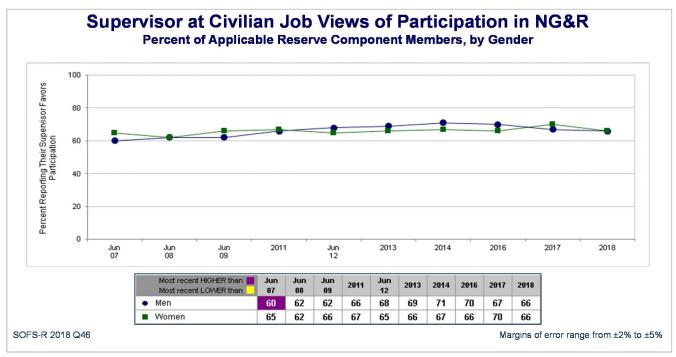
Figure 9. 2007-2018 Family Favors Participation in the NG&R, by Gender



Note. Trends are shown as estimated percentages. Statistical tests used to compare current results with all previous survey administrations. Purple cells indicate current survey result is HIGHER and Yellow cells indicate current survey result is LOWER.

As shown in Figure 10, the 2018 percentage for female members' supervisor at their civilian job favorably viewing his/her participation in the National Guard/Reserve (66%) is statistically consistent compared to 2007-2017 (62%-70%).

Figure 10. 2007-2018 Supervisor at Civilian Job Favors Participation in the NG&R, by Gender



Note. Trends are shown as estimated percentages. Statistical tests used to compare current results with all previous survey administrations. Purple cells indicate current survey result is HIGHER and Yellow cells indicate current survey result is LOWER.

As shown in Figure 11, the 2018 percentage for female members' coworkers at their civilian job favorably viewing his/her participation in the National Guard/Reserve (72%) is statistically consistent compared to 2007-2017 (68%-72%).

Coworkers at Civilian Job Views of Participation in NG&R Percent of Applicable Reserve Component Members, by Gender Percent Reporting Their Coworkers Favor Participation Jun 07 Jun 12 Jun Women

Figure 11. 2007-2018 Coworkers at Civilian Job Favors Participation in the NG&R, by Gender

Margins of error range from ±2% to ±5%

As shown in Table 3, when comparing 2018 SOFS-R results between women and men across all of the retention items, there are no statistically significant differences between them.

Table 3. 2018 Retention Items, by Gender

SOFS-R 2018 Q47

Higher response Higher response		Male	Female
Assuming you could stay, how likely is it that	Likely	68	69
you would choose to do so?	Unlikely	19	20
Family	Favorably	78	79
	Unfavorably	8	8
Coworkers at principal civilian job	Favorably	70	72
	Unfavorably	8	7
Spouse/significant other	Favorably	69	69
	Unfavorably	16	15
Supervisor at principal civilian job	Favorably	66	66
	Unfavorably	14	10

Note. Statistical tests are used to compare each subgroup to its respective "all other" group (i.e., to all others not in the subgroup). Results of statistical tests shown by color coding significant differences among reporting categories.

The 2017 SOFS-R included a list of eight reasons members could select as one of the top three reasons members would continue their participation in the National Guard/Reserves (Figure 12).

Figure 12. 2017 SOFS-R Reasons to Continue Participation in the National Guard/Reserves

	ose that you have to decide whether to continue to participate in the National d/Reserve. Which of the following would be the most important factor in this ion?
⊠ I	Pay and allowances
	Military retirement system
⊠ I	Health care
⊠ I	Educational assistance
	Opportunities for training and professional development
	Quality of the work environment based on unit norale, camaraderie, and professionalism
⊠ I	Pride in serving your country
	Other factor

As shown in Table 4, male members (57%) were more likely to indicate military retirement system as a reason to stay, while female members (50%) were less likely. Male members (43%) were also more likely to indicate health care as a reason to stay, while female members (38%) were less likely. Male members (43%) were also more likely to indicate pride in serving your country as a reason to stay, while female members (34%) were less likely. Female members (40%) were more likely to indicate opportunities for training and professional development as a reason to stay, while male members (35%) were less likely. Female members (36%) were also more likely to indicate quality of the work environment based on unit morale, camaraderie, and professionalism as a reason to stay, while male members (29%) were less likely. Female members (32%) were also more likely to indicate educational assistance as a reason to stay, while male members (24%) were less likely.

Table 4. 2017 SOFS-R Reasons to Continue Participation, by Gender

More likely to mark Less likely to mark	Male	Female
Pay and allowances	57	59
Military retirement system	57	50
Health care	43	38
Pride in serving your country	43	34
Opportunities for training and professional development	35	40
Quality of the work environment based on unit morale, camaraderie, and professionalism	29	36
Educational assistance	24	32
Other factor	10	9

Note. Statistical tests are used to compare each subgroup to its respective "all other" group (i.e., to all others not in the subgroup). Results of statistical tests shown by color coding significant differences among reporting categories.

Survey Methodology

Data Sources

The Status of Force Survey (SOFS) program 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.

The target population for active duty SOFS consists of members from the Army, Navy, Marie Corps, and Air Force who are below flag rank. The sample consisted of approximately 122,000 members. The overall weighted response rate was 15%.

The target population for Reserve component SOFS consists of members from the Selected Reserve (SelRes) who are in Reserve Unit, Active Guard/Reserve (AGR/FTS/AR; Title 10 Title 32), or Individual Mobilization Augmentee (IMA) programs from the Army National Guard (ARNG), U.S. Army Reserve (USAR), U.S. Navy Reserve (USNR), U.S. Marine Corps Reserve (USMCR), Air National Guard (ANG), and U.S. Air Force Reserve (USAFR) who are below flag rank. The sample consisted of approximately 108,000 members. The overall weighted response rate was 13%.

Survey Methodology

The complex sample designs used in SOFS require weighting to produce population estimates such as percentages.¹ Data were weighted using an industry standard process. This form of weighting reduces bias and produces estimates of population totals, proportions, and means (as well as other statistics) that are representative of their respective populations. Unweighted survey data, in contrast, are likely to produce biased estimates of population statistics. For this report, variance estimates were calculated using SUDAAN® PROC DESCRIPT (Research Triangle Institute, 2013).

Margins of Error

By definition, sample surveys are subject to error from nonresponse (eligibility and completion). 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). Estimated percentages and means are reported with margins of error based on 95% confidence intervals.² The margin of error represents the precision and accuracy of the estimate, and the confidence interval coincides with how confident one is that the interval contains the true value being estimated.

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¹As 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.

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. In repeated sampling in which a 95 percent confidence interval is constructed, you would expect 95 percent of the intervals to contain the "true" population parameter being estimated. For an individual sample, if 55% of individuals selected an answer and the margin of error was $\pm 3\%$, you would conclude, based on the sample, that the "true" value being estimated is between 52% and 58%.