

## THE USE OF JOB SATISFACTION DATA IN THE OCCUPATIONAL SURVEY PROGRAM

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Each year the USAF Occupational Measurement Center conducts occupational analyses of 51 USAF airmen career ladders. The career ladders analyzed during any calendar year vary from flight engineer to still photographer to dental technician. The data from these various career ladders are collected using a survey instrument which is divided into three parts: 1) specific biographical information about the survey respondent; 2) questions concerning the individual's job; and 3) a detailed listing of tasks. This paper will deal with the job satisfaction data collected in part two of the survey instrument. The four indices used to collect the job satisfaction data will be discussed first, followed by a brief review of the procedures used to compile the 1977 data. Next, uses of the data and trends noted from the 1977 data will be discussed. Finally, some applications of the data both within occupational surveys and also in training and management areas will be reviewed.

Four indices are used in a USAF job inventory to collect data concerning job satisfaction. The first is perceived job interest. Here the respondent is asked to rate how interesting he or she perceives his or her job on a seven point scale ranging from Extremely Dull to Extremely Interesting. The next two indices are perceived utilization of talents and training. A seven point scale which ranges from Not At All to Perfectly is used for these two indices. The final index of job satisfaction on the inventory is reenlistment intentions. Here the respondent is asked if he or she plans to reenlist. A four point scale ranging from No to Uncertain to Yes is used for this question.

This is the third year in which job satisfaction data has been compiled and used for comparison purposes with on-going surveys. Each year the format used to report the data has been changed. The 1975 data on survey respondents were combined with no divisions by time-in-service or career area group. The 1976 survey data were separated into two time-in-service groups, 1 to 48 months total active federal military service (TAFMS) and 49 plus months TAFMS. However, the 1977 data were sorted both by time-in-service and by career area groups. The three time-in-service groups used in 1977 summary statistics were 1-48 months TAFMS, 49-96 months TAFMS, and 97+ months TAFMS. This appeared to give the user sufficient distinction between the various time-in-service groups.

The problem of grouping the various Air Force specialties into career area groups was more difficult to resolve. An authoritative source document on which to base the groupings was necessary. It was decided to use AFM 26-3, Air Force Manpower Standards, (Vols II-V) as a basis for grouping the various career fields. The 67 enlisted specialties used for the 1977 summary were divided into seven groups. These were: Aircrew; Mission Equipment Operations; Mission Equipment Maintenance; Command Support; Medical; and Special Duty Identifiers. The list of the various Air Force Specialties comprising each of the seven groups is attached at the end of this paper.

The data are presented in a series of tables. Tables 1-3 present composite pictures of each of the three TAFMS groups by career area. This allows for easy identification of differences in each of the four job satisfaction indices from career area to career area for each of the three time-in-service groups.

The job satisfaction data presented in these tables has routinely been included as part of the occupational survey report (OSR). Although analyses of the data or plausible explanations for the data are not part of the report. The data are also presented for each of the job groups identified within the career ladder or career field being surveyed for time-in-service groups. Results from a particular field are then compared to the USAF average for the previous year to see if any large deviations exist. Large variations are highlighted in occupational survey reports.

In previous years the data had been arranged so that little direct comparison could be made. Having arranged the 1977 job satisfaction data to reflect time-in-service and career area groups has allowed more direct comparisons be made between current and previous surveys. For example, personnel with 49 to 96 months TAFMS in the administration career ladder, a specialty in the direct support career area, can be compared directly to other personnel with the same time-in-service from the direct support career area surveyed the previous year.

Several interesting trends were noted within the 1977 data. It had been assumed that when the data were organized by career area groups there would be some variance in each of the indices from career area to career area. The assumption had been that clerical administrative personnel would not find their job as satisfying as would the dental technicians. The data, however, showed that across the career area groups the level of job satisfaction, perceived utilization of talents and training, and reenlistment intentions were fairly consistent. The major differences that occurred were between time-in-service groups, not career field groups. There typically was a slight (less than five percent) increase in job satisfaction from the 1 to 48 months TAFMS respondents to the 49 to 96 months TAFMS respondents. However, the increase between the 49 to 96 months TAFMS respondents and those with 97+ months TAFMS was fairly large, generally about ten percent. Again, the implications of these differences are not discussed in the OSR. Force managers, however, might and do find such data invaluable, and the Occupational Measurement Center is always ready to assist in interpreting and using these data.

There also appeared to be little connection between reenlistment intentions and the other three job satisfaction indicies. For survey respondents with 1 to 48 months TAFMS approximately two-thirds of the respondents in each career area group found their job interesting and felt their talents and training were being used fairly well or better; yet, less than half (46 percent) planned to reenlist. A good example were operating room personnel (AFS 902X2). While 80 percent or more of the first enlistment personnel found their job interesting and felt their talents and training were being used fairly well or better, only 35 percent planned to reenlist. This trend continued with the second term groups. Only among personnel with 97+ months TAFMS were the responses to the four indicies fairly consistent.

Another trend noted was that across all career area groups the level of job satisfaction was fairly consistent except for aircrew personnel. The level of job satisfaction among these personnel in each of the three time-in-service groups was well above that reported by incumbents in any other career area group. Unlike other career area groups, however, the aircrew personnel showed little, if any, increase in job satisfaction from one time-in-service group to the next. The only index that did increase markedly was the reenlistment intention.

Currently there are several agencies which use the job satisfaction data collected in occupational surveys. The Air Force Human Resources Laboratory at Brooks AFB, TX has continually used this data for a number of research projects. Headquarters Air Training Command at Randolph AFB, TX is attempting to develop some correlation between job satisfaction data and reenlistment rates to determine training effectiveness. Within the occupational survey program this data is primarily collected and reported for each individual specialty being surveyed. Occupational analysts sometimes find job groups within specialties which have consistently different ratings on the job satisfaction indices than other career ladder job groups. This might serve as another indicator for indentifying job type groups. In addition, analysts also report differences for particular specialty when compared to the other specialties within that career area group.

The job satisfaction data offers several areas for further research. One area would be to compare job satisfaction data among each year group within the 1-48 TAFMS group. Along this same line, personnel with 192 to 240 months TAFMS (the 16 to 20 year group) could be grouped individually and then compared to personnel with 97 to 191 months TAFMS. A second area of consideration would be a statistical analysis to determine whether in fact there are significant differences in job satisfaction data among the various career areas. Also, the relationship between Airmen Qualification Examination (AQE) scores and job satisfaction data should be further explored; if a relationship does exist, it would provide another piece of information that would help understand the complex work motivation issue.

### Summary

The job satisfaction data collected from surveys conducted in 1977 were reported for time-in-service and career area groups. These data are routinely reported as part of the occupational survey report. While no detailed examination of the data is made, large deviations from other groups within the study or from the averages of the previous year are reported. These large deviations can sometimes be an aid in job typing. One consistent result is a low relationship between reenlistment intentions and the other three job satisfaction indices. In addition to OMC, the job satisfaction data is used by HQ/ATC, AFHRL, and force managers at AFMPC and the Air Staff. Finally this data provides areas for future research into such issues as changing patterns in job satisfaction among year groups in the first four years of an air force career, determining the level of significance in job satisfaction among the various career areas, and the relationship between AQE scores and job satisfaction.

TABLE 1

EXPRESSION OF JOB INTEREST, PERCEIVED UTILIZATION OF TALENTS AND TRAINING AND REENLISTMENT INTENTIONS  
BY PERSONNEL WITH 1-48 MONTHS TAFMS SURVEYED DURING 1977\*

	TOTAL SAMPLE	AIRCREW	MISSION EQUIPMENT OPERATIONS	MISSION EQUIPMENT MAINTENANCE	COMMAND SUPPORT	DIRECT SUPPORT	MEDICAL
I FIND MY JOB:							
DULL	16	3	25	17	12	14	15
SO-SO	19	6	25	21	15	14	15
INTERESTING	65	91	50	62	73	72	70
MY JOB UTILIZES MY TALENTS:							
NOT AT ALL OR VERY LITTLE	31	14	44	32	25	28	30
FAIRLY WELL TO VERY WELL	63	76	53	64	64	63	62
EXCELLENTLY OR PERFECTLY	6	10	3	4	11	9	8
MY JOB UTILIZES MY TRAINING:							
NOT AT ALL OR VERY LITTLE	26	14	26	26	20	25	17
FAIRLY WELL TO VERY WELL	66	64	67	67	67	64	69
EXCELLENTLY OR PERFECTLY	8	22	7	7	13	11	14
DO YOU PLAN TO REENLIST:							
NO OR PROBABLY NO	59	44	51	61	57	58	62
YES OR PROBABLY YES	41	56	49	39	43	42	48

\* TO OBTAIN A REPRESENTATIVE SAMPLE, THE COMMAND SUPPORT AND MEDICAL AREAS CONTAIN RESPONSES COLLECTED DURING 1976 AND 1977

TABLE 2

EXPRESSION OF JOB INTEREST, PERCEIVED UTILIZATION OF TALENTS AND TRAINING AND REENLISTMENT INTENTIONS  
BY PERSONNEL WITH 49-96 MONTHS TAFMS SURVEYED DURING 1977\*

	<u>TOTAL SAMPLE</u>	<u>AIRCREW</u>	<u>MISSION EQUIPMENT OPERATIONS</u>	<u>MISSION EQUIPMENT MAINTENANCE</u>	<u>COMMAND SUPPORT</u>	<u>DIRECT SUPPORT</u>	<u>MEDICAL</u>
I FIND MY JOB:							
DULL	13	3	27	12	11	16	14
SO-SO	16	8	19	16	15	16	11
INTERESTING	71	89	54	72	74	68	75
MY JOB UTILIZES MY TALENTS:							
NOT AT ALL OR VERY LITTLE	23	14	38	21	19	28	23
FAIRLY WELL TO VERY WELL	68	70	57	71	70	62	66
EXCELLENTLY OR PERFECTLY	9	16	5	8	11	10	11
MY JOB UTILIZES MY TRAINING:							
NOT AT ALL OR VERY LITTLE	24	11	28	22	18	28	18
FAIRLY WELL TO VERY WELL	66	63	64	68	71	63	67
EXCELLENTLY OR PERFECTLY	10	26	8	10	11	9	15
DO YOU PLAN TO REENLIST:							
NO OR PROBABLY NO	35	24	25	35	39	34	32
YES OR PROBABLY YES	65	76	75	65	61	66	68

\* TO OBTAIN A REPRESENTATIVE SAMPLE, THE COMMAND SUPPORT AND MEDICAL AREAS CONTAIN RESPONSES COLLECTED DURING 1976 AND 1977

TABLE 3

EXPRESSION OF JOB INTEREST, PERCEIVED UTILIZATION OF TALENTS AND TRAINING AND REENLISTMENT INTENTIONS  
BY PERSONNEL WITH 97+ MONTHS TAFMS SURVEYED DURING 1977\*

	TOTAL SAMPLE	AIRCREW	MISSION EQUIPMENT OPERATIONS	MISSION EQUIPMENT MAINTENANCE	COMMAND SUPPORT	DIRECT SUPPORT	MEDICAL
<b>I FIND MY JOB:</b>							
DULL	9	4	14	9	10	10	8
SO-SO	10	7	13	11	8	10	9
INTERESTING	81	89	73	80	82	80	83
<b>MY JOB UTILIZES MY TALENTS:</b>							
NOT AT ALL OR VERY LITTLE	15	8	23	14	16	17	12
FAIRLY WELL TO VERY WELL	65	65	64	68	57	62	66
EXCELLENTLY OR PERFECTLY	20	27	13	18	27	21	22
<b>MY JOB UTILIZES MY TRAINING:</b>							
NOT AT ALL OR VERY LITTLE	19	8	25	18	18	22	12
FAIRLY WELL TO VERY WELL	61	62	60	63	57	60	63
EXCELLENTLY OR PERFECTLY	20	30	15	19	25	18	25
<b>DO YOU PLAN TO REENLIST:</b>							
NO OR PROBABLY NO	27	20	31	28	27	27	23
YES OR PROBABLY YES	73	80	69	72	73	73	77

\* TO OBTAIN A REPRESENTATIVE SAMPLE, THE COMMAND SUPPORT AND MEDICAL AREAS CONTAIN RESPONSES COLLECTED DURING 1976 AND 1977

## LISTING OF MAJOR GROUPING AFSs

### AIRCREW

1. 111X0 Defense Aerial Gunner
2. 112X0 In-Flight Refueling Operator
3. 113X0 A/C Flight Engineer
4. 114X0 Aircraft Loadmaster
5. 115X0 Pararescue Recovery

### MISSION EQUIPMENT OPERATIONS

1. 20XXX Intelligence
2. 27XXX Command Control Systems Operations
3. 29XXX Communications Operations

### MISSION EQUIPMENT MAINTENANCE

1. 30XXX Communications Electronics Systems
2. 31XXX Missile Electronic Maintenance
3. 32XXX Avionics Systems
4. 34XXX Training Devices
5. 36XXX Wire Communications Systems Maintenance
6. 40XXX Intricate Equipment Maintenance
7. 42XXX Aircraft Systems Maintenance
8. 43XXX Aircraft Maintenance
9. 44XXX Missile Maintenance
10. 46XXX Munitions and Weapons Maintenance

### COMMAND SUPPORT

1. 10XXX First Sergeant
2. 24XXX Safety
3. 65XXX Procurement
4. 66XXX Logistics Plans
5. 67XXX Accounting and Finance
6. 69XXX Management Analysis
7. 70XXX Administration
8. 71XXX Printing
9. 73XXX Personnel
10. 74XXX Morale, Welfare, and Recreation
11. 79XXX Information
12. 87XXX Band

## LISTING OF MAJOR GROUPING AFSCs (CONT)

### DIRECT SUPPORT

- |     |       |                                                             |
|-----|-------|-------------------------------------------------------------|
| 1.  | 22XXX | Photomapping                                                |
| 2.  | 23XXX | Audiovisual                                                 |
| 3.  | 25XXX | Weather                                                     |
| 4.  | 39XXX | Maintenance Management Systems                              |
| 5.  | 47XXX | Vehicle Maintenance                                         |
| 6.  | 51XXX | Computer Systems                                            |
| 7.  | 54XXX | Mechanical/Electrical                                       |
| 8.  | 55XXX | Structural/Pavements                                        |
| 9.  | 56XXX | Sanitation                                                  |
| 10. | 57XXX | Fire Protection                                             |
| 11. | 59XXX | Marine                                                      |
| 12. | 60XXX | Transportation                                              |
| 13. | 61XXX | Supply Services                                             |
| 14. | 62XXX | Food Services                                               |
| 15. | 63XXX | Fuels                                                       |
| 16. | 64XXX | Supply                                                      |
| 17. | 75XXX | Education and Training                                      |
| 18. | 81XXX | Security Police                                             |
| 19. | 82XXX | Office of Special Investigations and<br>Counterintelligence |
| 20. | 92XXX | Aircrew Protection                                          |

### MEDICAL

- |    |       |         |
|----|-------|---------|
| 1. | 90XXX | Medical |
| 2. | 91XXX | Medical |
| 3. | 98XXX | Dental  |

### SPECIAL DUTY IDENTIFIERS (SDIs)

- |     |       |                                               |
|-----|-------|-----------------------------------------------|
| 1.  | 99500 | Recruiter                                     |
| 2.  | 99501 | Engineering or Scientific Assistant           |
| 3.  | 99502 | Military Training Instructor                  |
| 4.  | 99503 | United States Air Force Honor Guard           |
| 5.  | 99504 | LCM-30 Facility Manager                       |
| 6.  | 99505 | Courier                                       |
| 7.  | 99506 | Combat Information Monitor                    |
| 8.  | 99508 | Scatter Communications Maintenance Technician |
| 9.  | 99509 | Data Formatting Equipment Operator            |
| 10. | 99600 | Student Training Advisor                      |
| 11. | 99601 | ICBM Maintenance Manager                      |
| 12. | 99602 | Sensor Operator                               |
| 13. | 99603 | Minuteman NCO Code Controller                 |
| 14. | 99604 | Postal Specialist                             |