

Air Education and Training Command



Occupational Survey Report AFSC 1C4X1 Tactical Air Command And Control

U.S. AIR FORCE

Lt Troy Guthrie
May 02

Integrity - Service - Excellence

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Air Force Occupational Measurement SQ



AFOMS/OMYO
1550 Fifth Street East
Randolph AFB, TX 78150
DSN 487 – 6811
<https://www.omsq.af.mil>

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Overview



AETC

- Work performed
- Survey background
- Current training program
- Survey sample characteristics
- Job structure
- Career ladder progression
- First-enlistment analysis
- STS and POI analysis
- Job satisfaction analysis
- Predictive retention analysis
- Summary of results



Work Performed



AETC

- Perform and manage tactical air control party (TACP) operations
- Provide Air Force assistance and expertise in planning and controlling combat air resources
- Operate and supervise communications nets to support army ground maneuver units

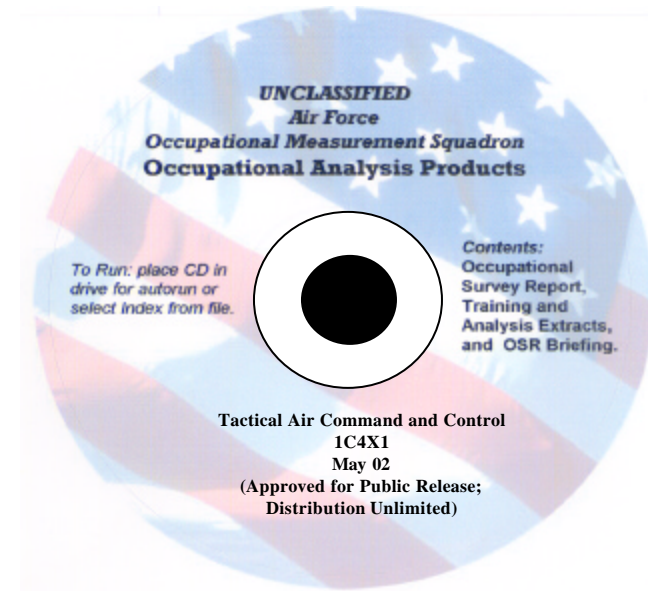


Survey Background



AETC

- Survey Initiated to Obtain Current Data to:
 - Support Promotion Test Development
 - Evaluate Current Classification and Training Documents
- Last Occupational Survey Report (OSR) -August 1999
- Current survey data collected
 - Nov 01-Mar 02
- Active Duty
 - 3-, 5-, and 7-Skill Levels
- Air National Guard
 - 5- and 7-Skill Levels





Current Training Program



AETC

- AFSC Awarding Course

- 334 TRS, Hurlbert Field, FL
- E3ABP1C431, Tactical Air Command and Control Apprentices Course, 70 academic days
- 29 Semester hours for CCAF

- Programmed TPR

- FY02: 240 students

Programmed Elimination Rate

FY02: 15%



Component Characteristics



DET

	<u>AD</u>	<u>ANG</u>
Total assigned *	930	201
Total surveyed	762	189
Total sample	247	44
% of surveyed	32%	23%

- Average time in career field for AD: 7 yrs
- Average TAFMS for AD: 8 yrs 5 months
- Percent of AD in first enlistment: 35%

* Assigned as of November 01



Skill & Paygrade Characteristics



DET

Skill Level Percentage

	Assigned*	Sample
3-Level -	25%	27%
5-Level -	45%	47%
7-Level -	27%	26%
9-Level -	3%	0%

Paygrade Percentage

	Assigned*	Sample
E-1 - E-3 -	22%	21%
E-4 -	26%	27%
E-5 -	25%	25%
E-6 -	15%	16%
E-7 -	10%	11%
E-8 -	1%	0%
F-9 -	1%	0%

* Assigned as of November 01

Survey Sample



Command	% of Assigned*	% of Sample
ACC	54	63
PACAF	12	17
USAFE	10	0
AETC	3	5
OTHERS	2	0
ANG	19	15



•Assigned as of November 01

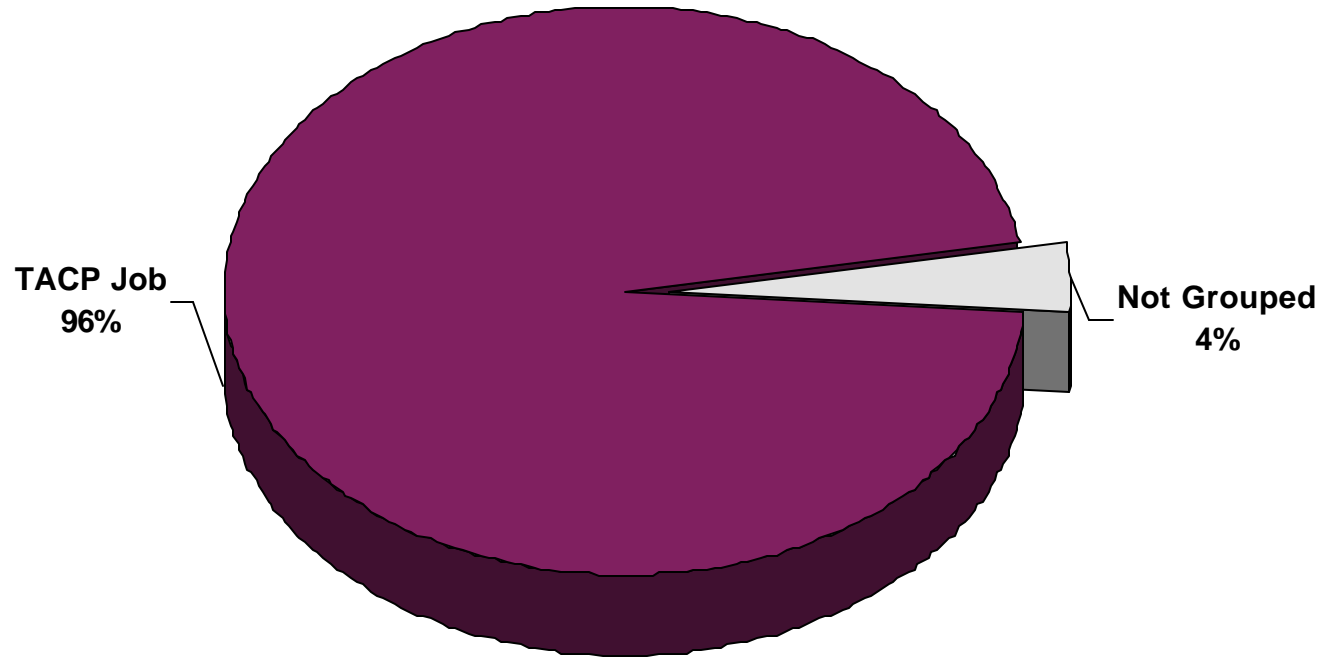


Job Structure



DET

Sample size: 291



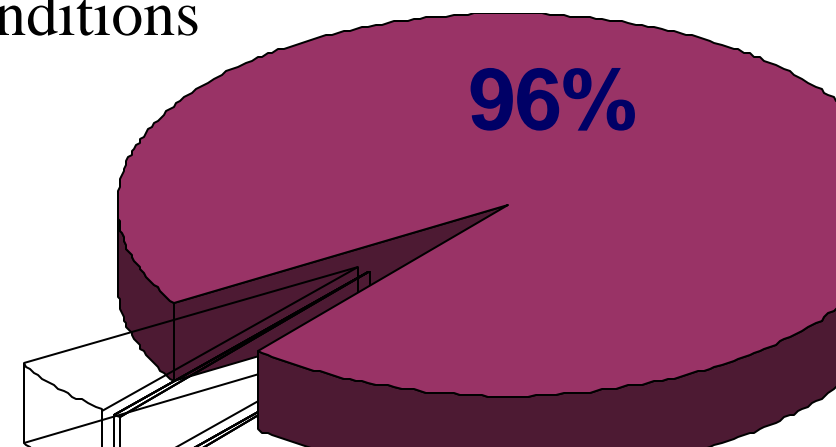


TACT JOB (N=278)



AETC

- Navigate by vehicle during day operations using maps and compasses
- Navigate by vehicle using GPSs
- Navigate by vehicle during night operations using maps and compasses
- Participate in physical training (PT)
- Perform camouflage procedures
- Perform day or night convoy operations
- Perform operational checks of portable radios
- Perform emergency operations on AN/GRC-206 communications pallets
- Perform personal hygiene under field conditions
- Authenticate communications





Career Ladder Progression



DET

- 3- and 5-skill level personnel
 - Work in the most technical jobs in the career field
 - Spend most of their time on technical tasks
- 7- skill level personnel
 - Continue to perform technical tasks
 - However, take on supervisory, training, and administrative duties





Career Ladder Progression

Percent Time Spent on Duties



AFSC

	DAFSC 1C432 (N=79)	DAFSC 1C452 (N=137)	DAFSC 1C472 (N=74)
performing field activities	27	24	19
performing vehicle operator maintenance	11	8	4
setting up, operating, or troubleshooting mobile comm. systems	28	21	13
liaison, air strike control, or airspace management activities	22	26	28
performing airborne or air assault activities	3	3	2
performing general admin. and tech order system activities	2	3	5
performing general supply and equipment activities	3	3	2
performing mobility and contingency activities	*	1	3
performing training activities	2	6	10
performing management and supervisory activities	2	7	14

* Indicates less than one percent

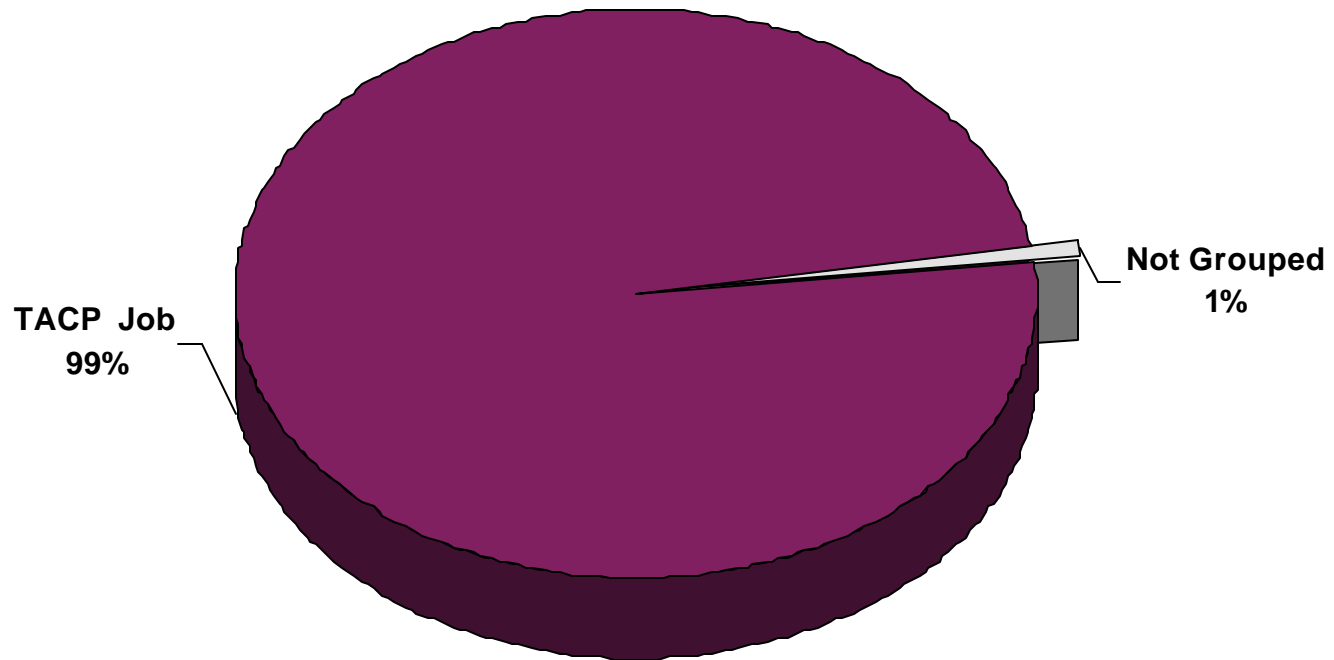


First Enlistment Job Structure



DET

Sample size: 101





Representative Tasks



AETC

Tasks	Percent Members Performing (N=101)
Wash vehicles	98
Extract time-of-day (TOD) messages from GPSs	97
Navigate by vehicle using GPSs	97
Check vehicle fluid levels, such as transmission fluid levels or oil levels	96
Perform emergency operations on AN/GRC-206 communications pallets	96
Navigate by vehicle during day operations using maps and compasses	96
Perform camouflage procedures	96
Participate in physical training (PT)	95
Perform operational checks of portable radios	95
Perform operational checks of HAVE-QUICK systems	95
Perform personal hygiene under field conditions	95
Navigate by vehicle during night operations using maps and compasses	95
Perform day or night convoy operations	95
Set up or tear down portable radios	94
Navigate by foot during day operations using maps and compasses	94



First-Enlistment Personnel: Tools & Equipment



DET

Equipment	1st Enl (N=101)
Generator	99%
Global positioning system (GPS)	99%
AN/GRC 206	99%
KY 99	98%
KY 57	98%
AN/PRC 119	97%
AN/PRC 113	95%
Night vision goggles	94%
AN/PRC 104	91%
CYZ 10, Automated network control devices	91%
KYK 13	91%
GAU 5 Assault Rifle	87%
KOI 18	87%
Highly mobile multipurpose wheeled vehicles (HMMWVs)	84%
Infrared marking device	74%



Specialty Training Standards (STS) Analysis



DET

- STS is well supported by survey data
- Some STS items may need proficiency code review
 - Six uncoded STS items matched to JI tasks performed by more than 20 percent of members
- Some tasks performed by 20 percent or more of members were not referenced to STS
 - These should be reviewed for possible inclusion in STS





Proficiency Levels Requiring Review



DET

Unit	Learning Objective	Prof Code	Percent Members Performing		Tng Emp	Tsk Diff	ATI
			1st Job	1st Enl			
7.2.2 Task	Conduct training I0371. Conduct on the job training (OJT)	--	50	54	4.48	5.23	17
9.4.6.1 Tasks	Field expedient techniques B0077. Perform field expedient maintenance on vehicles	--	56	64	4.97	4.54	17
	B0081. Perform vehicle recovery operations	--	41	46	3.84	4.29	15

Mean TE Rating is 3.65, Standard Deviation is 1.87 (HIGH TE= 5.52)
 Mean TD Rating is 5.00, Standard Deviation is 1.00 (HIGH TD= 6.00)



Tasks not Referenced to STS



DET

TASKS	Tng Emp	1st Job (N=34)	1st Enl (N=101)	Tsk Dif
A0035 Perform chemical warfare agent decontamination procedures	6.00	62	69	5.3
A0040 Perform ECM procedures during HAVE QUICK operations	7.00	94	90	4.9
A0042 Perform field duties in chemical protective equip.	5.71	53	67	5.4
A0049 Perform personal hygiene under field conditions	5.61	97	95	2.7

TE MEAN = 3.65; S.D. = 1.87; HIGH = 5.52
TD MEAN = 5.00; S.D. = 1.00; HIGH = 6.00





Plan of Instruction (POI) Analysis



AETC

- POI is generally well-supported by survey data
- Tasks not referenced to any POI learning objective should be reviewed for possible inclusion in POI



Tasks not Referenced to POI



Examples

<u>Tasks</u>	Percent Members <u>Performing</u>		<u>Tng</u> <u>Emp</u>	<u>Tsk</u> <u>Diff</u>	<u>ATI</u>
	1 st	1 st			
	<u>Job</u>	<u>Enl</u>			
A0015 Fire 9mm handguns	85	91	6.68	3.30	13
A0016 Fire M-16 assault rifles	74	83	7.39	3.17	13
A0035 Perform chemical warfare agent decontamination procedures	62	69	6.00	5.34	18
A0036 Perform combat lifesaver procedures	41	50	3.94	6.15	17
A0056 Perform survival, evasion, resistance, and escape (SERE) activities	44	57	5.55	5.81	18

TE MEAN = 3.65; S.D. = 1.87; HIGH = 5.52

TD MEAN = 5.00; S.D. = 1.00; HIGH = 6.00



Job Satisfaction Indicators (AD) (Current vs. Previous Study)



DET

	1-48 Months		49-96 Months		97+ Months	
	2002 1C4X2 (N=101)	1999 1C4X2 (N=178)	2002 1C4X2 (N=45)	1999 1C4X2 (N=82)	2002 1C4X2 (N=101)	1999 1C4X2 (N=276)
Job interesting	80	72	87	83	93	91
Talents well utilized	72	59	78	81	78	81
Training well utilized	83	73	87	83	78	84
Sense of accomplishment	63	54	82	62	78	81
Willing to reenlist	52	37	76	66	98	93



Job Satisfaction Indicators (For Specialty Job)



AETC

	TACP Job (N=278)
Job interesting	90
Talents well utilized	79
Training well utilized	84
Sense of accomplishment	76
Willing to reenlist	76



Predictive Retention Analysis First-Term Airmen (N=101)



AETC

		Percent Responding	Average
Planning to Reenlist N=53			
Bonus or special pay		64	2.38
Medical/ dental care for ad member		53	2.46
Military-related edu & trng opportunities		51	2.11
Pay and allowances		47	2.32
Retirement benefits		45	2.71
Planning to Separate N=48			
Leadership at unit level		50	2.75
Recognition of efforts		50	2.38
Pay and allowances		50	2.00
Military lifestyle		46	2.00
Esprit de corps/morale		44	2.76

Scale: 1 = slight influence, 2 = moderate influence, 3 = strong influence





Perceived Retention Analysis Second-Term Airmen (N=44)



AETC

		Percent Responding	Average
Planning to Reenlist	N=33		
Military lifestyle		70	2.52
Bonus or special pay		55	2.44
Medical or dental care for AD member		55	2.44
Retirement benefits		52	2.59
Job security		48	2.75
Planning to Separate	N=11		
Esprit de corps/moral		45	2.60
Civilian job opportunities		45	1.60
Unit resources		36	2.75
Recognition of efforts		36	2.50
Training/experience of unit		27	3.00

Scale: 1 = slight influence, 2 = moderate influence, 3 = strong influence





Perceived Retention Analysis Career Airmen (N=101)



Planning to Reenlist	N=99	Percent	
		Responding	Average
Retirement benefits		62	2.64
Military lifestyle		59	2.35
Pay and allowances		57	2.41
Job Security		50	2.47
Bonus or special pay		49	2.21
Planning to Separate			
	N=2		
Recognition of efforts		100	3.00
Esprit de corps/moral		100	3.00
Promotion Opportunities		100	3.00
Off-duty education or training		100	3.00
Bonus or special pay		100	2.50

Scale: 1 = slight influence, 2 = moderate influence, 3 = strong influence





Summary of Results



AFCEA

- Career ladder progression is typical
- STS and POI provides comprehensive coverage of work performed by career ladder
 - Review of some items warranted
- Job satisfaction indicators are mostly stable
 - Reenlistment rates have risen across every TAFMS group



Way Ahead



AETC

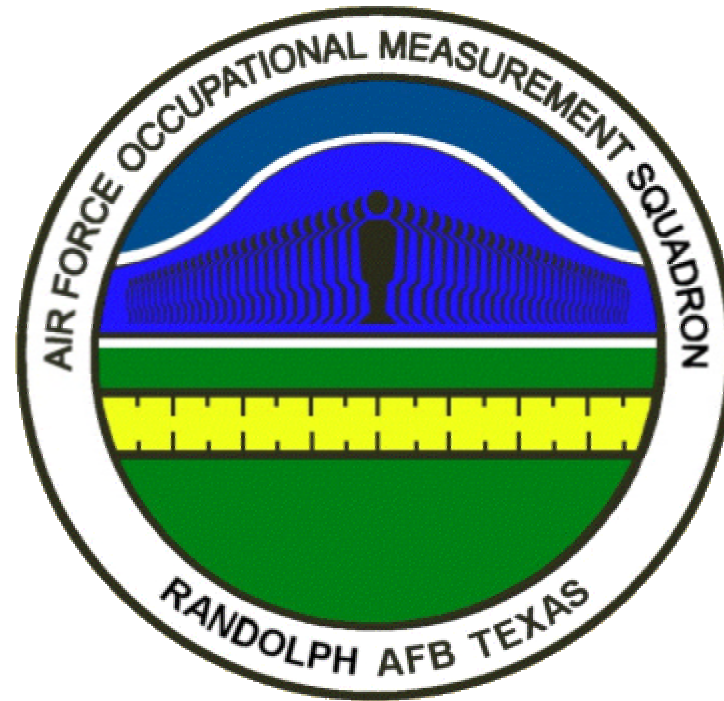
- OSR Delivery Trip and Utilization and Training Workshop (U&TW) was held May 02
- Data was useful in establishing new core tasks
- Next SKT rewrite (major rewrite) is scheduled for 19 Nov 02



Questions?



AETC



Visit our web site at:
<https://www.omsq.af.mil>

E-Mail: troy.guthrie@randolph.af.mil



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Back-Up Slides



Job Structure Glossary



AETC

- **Job:** A group of similar *positions* where incumbents perform many of the same tasks and spend relatively the same amount of time performing these tasks
- **Cluster:** A series or group of related *jobs* which are distinguishable from each other on some variable (weapon system maintained, ratio of supervisory to technical tasks, etc.)
- **Independent Job:** A job that does not fall within any cluster
- **N:** Number in sample





Career Ladder Progression



DET

- “Typical” career ladder progression
 - **3-Skill-Level** apprentices perform a very technical job which include very few administrative/supervisory tasks
 - **5-Skill-Level** journeymen still primarily perform a technical job, but acquire a mix of administrative/supervisory tasks
 - **7-Skill-Level** managers, and above, primarily perform supervisory, managerial, and administrative tasks, with relatively few technical tasks
- “Atypical” career ladder progression
 - **7-Skill-Level** personnel are still spending a significant amount of their total job time performing technical duties, with relatively few administrative/supervisory tasks





Training Document Analysis



AETCI

- Tasks from job inventory are matched to items in the STS and POI
 - Match is usually conducted with technical school personnel
- Final product provides technical school with data indicating applicability of training documents to work performed in the field in terms of:
 - Percent members performing (PMP) from AETCI 36-2601
 - » 20% PMP for STS
 - » 30% PMP for POI
 - TE and TD ratings
- Listing of tasks not referenced to training document also provided
 - May indicate areas where training coverage is lacking





Task Factor Definitions



AETC

- **Training Emphasis (TE):** Task list completed by senior NCOs identifying those tasks that should be emphasized for structured training of first-term airmen
- **Task Difficulty (TD):** Task list completed by senior NCOs which rates the relative difficulty of each task to learn
- **Automated Training Indicators (ATI):** Indicators derived from comparing percent performing data with TE and TD data to assist in making training decisions





Predictive Retention Indicators



- Military lifestyle
- Pay and allowances
- Bonus or special pay
- Retirement Benefits
- Military related education/Training opportunities
- Off-duty education and training opportunities
- Medical or dental care for active duty member
- Medical or dental care for family members
- Base housing
- Base services
- Childcare needs
- Spouse's career
- Civilian job opportunities
- Equal employment opportunities
- Number of PCS moves
- Location of present assignment
- Number/Duration of TDY's or deployments
- Work schedule
- Additional duties
- Job security
- Enlisted Evaluation System
- Promotion opportunities
- Training/Experience of unit personnel
- Unit manning
- Unit resources
- Unit readiness
- Recognition of efforts
- Esprit de corps/Morale
- Leadership of immediate supervisor
- Senior Air Force leadership



Job Survey Background



AETC

- Previous JI and OSR
 - JI: 1C4X1-Nov 01, Lt Abel
 - Programming Support- Mr. Hill
 - Issues from Last Post-Analysis Review
 - None





Predictive Retention Analysis

First-Term Airmen (N=101)



	Percent		
	Responding	Average	S.D.
Planning to Reenlist – 52%			
Bonus or special pay	64	2.38	.77
Medical/ dental care for ad member	53	2.46	.68
Military-related edu & trng opportunities	51	2.11	.79
Pay and allowances	47	2.32	.61
Retirement benefits	45	2.71	.54
Planning to Separate – 48%			
Leadership at unit level	50	2.75	.43
Recognition of efforts	50	2.38	.70
Pay and allowances	50	2.00	.65
Military lifestyle	46	2.00	.95
Esprit de corps/morale	44	2.76	.43

Scale: 1 = slight influence, 2 = moderate influence, 3 = strong influence



Perceived Retention Analysis Second-Term Airmen (N=44)



AEIC

	Percent		
	Responding	Average	S.D.
Planning to Reenlist – 73%			
Military lifestyle	70	2.52	.58
Bonus or special pay	55	2.44	.68
Medical or dental care for AD member	55	2.44	.68
Retirement benefits	52	2.59	.60
Job security	48	2.75	.43
Planning to Separate – 27%			
Esprit de corps/moral	45	2.60	.49
Civilian job opportunities	45	1.60	.61
Unit resources	36	2.75	.48
Recognition of efforts	36	2.50	.70
Training/experience of unit	27	3.00	.78

Scale: 1 = slight influence, 2 = moderate influence, 3 = strong influence



Perceived Retention Analysis Career Airmen (N=101)



	Percent		
	Responding	Average	S.D.
Planning to Reenlist – 98%			
Retirement benefits	62	2.64	.57
Military lifestyle	59	2.35	.76
Pay and allowances	57	2.41	.63
Job Security	50	2.47	.70
Bonus or special pay	49	2.21	.81
Planning to Separate – 2%			
Recognition of efforts	100	3.00	.00
Esprit de corps/moral	100	3.00	.00
Promotion Opportunities	100	3.00	.00
Off-duty education or training	100	3.00	.00
Bonus or special pay	100	2.50	.50

Scale: 1 = slight influence, 2 = moderate influence, 3 = strong influence



Bases visited during JI Development 29 Interviewed)



AETC

- Pope AFB, NC (6) 8 Jul
- Hurlburt Field, FL (7) 10 Jul
- Ft. Drum, NY (8) 15 Jul
- Ft. Hood, TX (8) 25 Jul

