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PREFACE

This report represents the results of a detailed Air Force occupational survey of common aircrew tasks from AFSs 111X0, 112X0, 113X0B, 113X0C, 114X0, and 115X0. Authority for conducting occupational surveys is contained in AFR 35-2. Computer products from which this report was produced are available for use by operations and training officials.

The data used in this project was from a common aircrew duty extracted from survey instruments used for AFSs 111X0, 112X0, 113X0B, 113X0C, 114X0, and 115X0. The common aircrew duty was developed by Captain Clint Thatcher, Inventory Development Specialist. Second Lieutenant Mary Thomasson, Occupational Analyst, analyzed the survey data and wrote the final report. Computer support for the project was provided by Ms. Elvira Frechel. This report has been reviewed and approved by Lieutenant Colonel Jimmy L. Mitchell, Chief Airman Career Ladders Analysis Section, Occupational Measurement Center, Randolph AFB, Texas 78150.

Copies of this report are distributed to Air Staff sections, major commands, and other interested training and management personnel. Additional copies are available upon request to the USAF Occupational Measurement Center, attention of the Chief, Occupational Analysis Branch (OMY), Randolph AFB, Texas 78150.

PAUL T. RINGENBACH, Col, USAF Commander USAF Occupational Measurement Center WALTER E. DRISKILL, Ph.D. Chief, Occupational Analysis Branch USAF Occupational Measurement Center

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SUMMARY OF RESULTS

<u>Survey Objective</u>: The purpose of this report is to provide occupational survey data to use in assessing the feasibility of establishing a centralized undergraduate enlisted aircrew technical school.

Survey Coverage: Fifty-eight percent (4,226) of aircrew specialties 111X0, 112X0, 113X0B, 113X0C, 114X0, and 115X0 were surveyed to determine commonality of tasks performed. The final sample included representative command groups. Training emphasis and task difficulty ratings were collected from senior aircraft members to help identify common training requirements.

Implications: Survey data highlighted some common tasks appropriate for an enlisted undergraduate aircrew course. Data also indicated 115X0 personnel have different training requirements than the other aircrew specialties. Further, survey results indicated a large amount of overlap between the common aircrew tasks performed by the aircrew AFSs surveyed. Task factor data indicated that tasks with higher percentage of members performing also received high training emphasis rankings and warrant inclusion in a common aircrew school. Some areas of the proposed course outline are well supported by survey data. However, many of the areas are knowledge areas and cannot be evaluated.

OCCUPATIONAL SURVEY REPORT AFS 11XXX

INTRODUCTION

This is a report of an occupational survey of the common aircrew tasks performed by members of the Defensive Aerial Gunner career ladder (AFS 111X0), the Inflight Refueling Operations career ladder (AFS 112X0), the Flight Engineer (Helicopter Qualified) career ladder (AFS 113X0B), the Flight Engineer career ladder (AFS 113X0C), the Aircraft Loadmaster career ladder (AFS 114X0), and the Pararescue/Recovery career ladder (AFS 115X0). This study was completed by the Occupational Analysis Branch, USAF Occupational Measurement Center in September 1983. The survey was requested by HQ SAC/DOTP to assess the feasibility of establishing a centralized undergraduate enlisted aircrew technical school. The occupational surveys used to complete this report were conducted from February 1982 to July 1983.

Personnel assigned to the Defensive Aerial Gunner career ladder (111X0) are assigned to the Strategic Air Command (SAC) and are qualified as crew members on B-52 aircraft. Since they are responsible for the defensive fire control systems on the B-52 aircraft, defensive aerial gunners spend a large amount of time in preflight, inflight, and postflight gunner activity. Initial training is received from Combat Crew Training Squadrons (CCTSs) at Carswell AFB and at Castle AFB.

Inflight Refueling operators (112X0) are assigned primarily to SAC and most are qualified on the KC-135A aircraft. The inflight refueling operator's primary job is assisting the pilot in conducting air refueling. Commonly referred to as the "boom operator", the inflight refueling operator visually or verbally directs the receiver aircraft into the refueling envelope and then uses the boom or the drogue to conduct refueling. Additionally, the boom operator serves as a loadmaster when the aircraft is carrying cargo or passengers. Personnel attend two schools before becoming qualified as an Inflight Refueling Operator. First, they attend the Enlisted Aviation Undergraduate School (EAUS) at Castle AFB. Upon successful completion of EAUS, airmen progress to the 4017 Combat Crew Training School at Carswell AFB.

Personnel assigned to the Flight Engineer (Helicopter Qualified) career ladder (113X0B) are assigned primarily to MAC and are responsible for preflight, inflight, and postflight inspections of the aircraft. During flight, they monitor various aircraft fuel and engine system controls, panels, and indicators. Other duties include nonscheduled maintenance; computing aircraft weight and balance or aircraft performance data; and gunner, hoist operator or cargo sling operator tasks. Helicopter Qualified Flight Engineers receive training at Sheppard AFB TX. This course is 6 weeks and 3 days in length. Follow-on flight training is then conducted for all members at Kirtland AFB, New Mexico, and lasts approximately 78 days.

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Personnel assigned to the Flight Engineer, Performance Qualified, career ladder (113X0C) are assigned primarily to MAC and are responsible for operation and monitoring of engine and aircraft systems control panels and indicators; preflight, thru-flight, and postflight inspections; and flight duties described in applicable flight manuals. Initial training for flight engineers is conducted by Military Airlift Command (MAC) personnel at Altus AFB, Oklahoma. The course lasts 8 weeks and 2 days. Upon completion of their initial training, each flight engineer attends qualification training for the particular aircraft assigned.

Personnel assigned to the Aircraft Loadmaster (114X0) career field are assigned primarily to MAC. Their responsibilities include load planning the aircraft, inspecting and preparing aircraft and aircraft systems for flight, scheduling and supervising the loading and offloading of the aircraft, ensuring safety and security of cargo during flight, providing for safety and comfort of passengers during flight, and conducting airdrops. Initial training takes place at Sheppard Technical Training Center and lasts 28 days. To become a line-qualified aircraft loadmaster, an airman must also attend an initial qualification course for a specific weapon system. This training lasts from 20 to 40 days, depending on the aircraft assigned.

The basic job of the Pararescue/Recovery career ladder (115X0) is to conduct day and night rescue and recovery operations within friendly or hostile territory, to provide emergency medical treatment and means of survival, evasion, resistance, escape, and recovery of personnel, and to support recovery operations of aerospace hardware and personnel. They are assigned primarily to MAC. Personnel entering the pararescue career field are put through a rigorous 10-month training program which includes five distinct formal training courses.

SURVEY METHODOLOGY

Inventory Development

Job Inventories, AFPTs 90-111-432, 90-112-454, 90-113-455, USAF 90-114-456, and 90-115-457 were the data collection instruments constructed Data were collected in six separate studies. Each invenfor this survey. tory contained the same common aircrew duty, as well as AFSC-specific tasks. Initially, the inventory development specialists prepared tentative task lists after reviewing previous occupational survey reports of the 111X0, 112X0, 113X0B, 113X0C, 114X0, and 115X0 specialties and pertinent career ladder publications and directives. The new task lists were further reviewed and validated through interviews with subject-matter specialists at the tech schools and operational units. Finally, draft inventories were sent to all interviewees and several subject-matter specialists not previously interviewed for final validation. The resulting inventories contained a comprehensive listing of tasks grouped under duty headings. Also included was an extensive background section that asked for such information as:

- (A) Job Title
- (B) Organizational level
- (C) Type of flying mission
- (D) Aircraft previously qualified in
- (E) Aircraft currently qualified in

Data for each specialty are reported in separate studies. Only the data on the common aircrew duty are reported here.

Survey Administration

From February 1982 through July 1983, Consolidated Base Personnel Offices (CBPOs) in operational units worldwide administered the inventories to job incumbents holding DAFSs 111X0, 112X0, 113X0B, 113X0C, 114X0, and 115X0. Those incumbents were selected from a computer-generated mailing list obtained from personnel data tapes maintained by the Air Force Human Resources Laboratory (AFHRL).

Each respondent who completed an inventory first completed an identification and biographical information section, then checked all tasks performed in their present job. Those tasks checked were then rated on a nine-point scale, showing the relative amount of time spent on that task, as compared to all other tasks checked. The ratings ranged from one (very small amount of time spent) to nine (very large amount of time spent), with a rating of five representing an average amount of time spent.

Survey Sample

Incumbents were selected to participate in the survey to ensure an accurate representation across major commands (MAJCOMs). Table 1 reflects the percentage distribution by MAJCOM of the assigned personnel in each aircrew AFSC. Also listed in this table is the percent distribution of respondents in the final samples by MAJCOM. As demonstrated by this table, the survey sample provides a good representation, by MAJCOM, of the career ladder populations.

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COMMAND REPRESENTATION OF SURVEY SAMPLE

X0	PERCENT 0F SAMPLE 5 92 92 1 1
115	PERCENT OF ASGD (N=282) - - - 8 8 0
0	PERCENT OF SAMPLE SAMPLE (N=892) - - - - - - -
1143	PERCENT OF ASGD ASGD (N=2,466) - - - - 1 1 1 - -
oc	PERCENT OF SAMPLE SAMPLE 5 (N=1,690) 2 89 2 2 2 2 2 2 2 2 2 2 2 2
113X	PERCENT OF ASGD ASGD (N=2,525) 6 6 89 89 - 3 3 - 1 1
XOB	PERCENT OF SAMPLE (N=232) 20 20 2 64 5 5 5
113	PERCENT OF ASGD 20 20 28 58 1 1 10 5 5 6
0X0	PERCENT OF SAMPLE (<u>(N=765)</u> 96 - - - -
11	PERCENT OF ASGD (<u>N=1,024)</u> 95 - - - - -
0X	PERCENT OF SAMPLE - - - - - - - -
111	PERCENT OF ASGD - - - - - - -
	COMMAND TAC SAC MAC ATC AFSC USAFE OTHER

- LESS THAN ONE PERCENT

TOTAL ASSIGNED - 7,224 TOTAL SAMPLED - 4,226 PERCENT OF ASSIGNED SAMPLED - 58%

DATA ANALYSIS

A primary concern for managers of any specialty involves developing the most efficient and cost-effective training programs where career ladder incumbents learn to perform the jobs required of them. Information provided in this report which can be used to assess training requirements includes percent of respondents performing tasks, training emphasis data, and task difficulty ratings. This report begins with a description of the percentage of members performing each task in the 1-48 months time in career field group.

Analysis of Tasks by 1-48 Months TICF Groups

Analysis of the common aircrew duty by 1-48 months time in career field groups reveals similarities between the AFSCs in relation to the ks they perform and the relative percentage of members performing partic r tasks. This information is useful in evaluating potential training needs.

Table 2 lists the 48 tasks included in the common aircrew ity and demonstrates that there is much commonality across all AFSCs mmon aircrew tasks. More than 50 percent of the members perform 3t the 48 tasks.

Further analysis reveals many of the tasks performed by more than 30 percent of the members are similar in function. These functions are administrative tasks; using emergency equipment or procedures; and preflight, inflight, and postflight tasks.

Tasks which are administrative in function are:

Annotate AFTO Forms 781A (Maintenance Discrepancy and Work Document) Maintain flight manuals, safety and operational supplements, and flight crew checklists Perform crew information file checks Post changes to personal aircrew publications Review AFTO Forms 781 series for aircraft discrepancies

As can be seen in Table 2, these tasks have a very high percentage of members performing and should be considered for formal training.

Tasks which involve using emergency equipment or procedures include:

Instruct extra crew members or passengers on inflight or ground emergency procedures Operate emergency escape hatches Operate fire extinguishers Participate in life support training seminars Perform or practice emergency aircraft egress procedures Perform personal equipment inspection Study technical orders for abnormal and emergency inflight procedures

Examples of preflight, inflight, and postflight tasks with a high percentage of members performing include:

> Inspect ramp for foreign object damage (FOD) matter Install or remove aircraft wheel chocks Load crew gear on aircraft Open or close crew entrance doors Order aircrew transportation

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When considering other factors, such as training emphasis and task difficulty data (see Tables 3 and 7), it can be seen that many of these tasks rated low on those factors. Therefore, these tasks are more suitable for on-the-job training and should not be included in a common aircrew technical school.

ANALYSIS OF COMMON AIRCREW TASKS BY 1-48 MONTHS TIME IN CAREER FIELD GROUPS (PERCENT MEMBERS PERFORMING)

TAS	S	11XXX	111X0	112X0	113X0B	113X0C	114X0	115X0
1	ADVISE MAINTENANCE PERSONNEL IN IDENTIFYING AIRCRAFT SYSTEM MAIFINCTIONS	84	87	81	88	03	67	s S
2	ANNOTATE AFTO FORMS 781A (MAINTENANCE DISCREPANCY AND WORK	5	5		2			2
	DOCUMENT)	92	93	16	92	97	89	40
ო	APPLY EXTERNAL ALTERNATING CURRENT (AC) AND DIRECT CURRENT		1					
	(DC) POWER TO AIRCRAFT	74	80	77	78	96	35	15
4	COORDINATE CORRECTION OF AIRCRAFT DISCREPANCIES OR	ä	1	i	;			
ŝ	MALFUNCTIONS WITH AIRCRAFT COMMANDER Demonstrate to passrngers the proper lise of lift preservers.	81	75	84	78	64	6 6	38
•	PARACHUTES, OR OXYGEN MASKS	60	55	98	67	28	16	32
9	INSPECT OR PREPARE CREW AREAS	37	13	39	6	40	56	1
7	INSPECT RAMP AREA FOR FOREIGN OBJECT DAMAGE (FOD) MATTER	73	60	53	61	88	61	53
œ	INSTALL OR REMOVE AIRCRAFT WHEEL CHOCKS	65	42	61	45	72	74	58
6	INSTRUCT EXTRA CREW MEMBERS OR PASSENGERS ON INFLIGHT OR							•
	GROUND EMERGENCY PROCEDURES	74	65	92	76	59	92	38
2	LOAD CREW GEAR ON AIRCRAFT	89	89	96	88	86	88	82
11	MAINTAIN FLIGHT MANUALS, SAFETY, AND OPERATIONAL SUPPLEMENTS,							
	AND FLIGHT CREW CHECKLISTS	93	93	95	88	95	92	79
12	MONITOR RADIO COMMUNICATION TRANSMISSIONS	85	93	95	91	95	48	77
13	OPEN OR CLOSE CREW ENTRANCE DOORS	92	81	98	95	96	85	86
14	OPERATE EMERGENCY ESCAPE HATCHES	81	30	92	72	16	90	63
15	OPERATE FIRE EXTINGUISHERS	63	35	56	70	73	72	34
16	OPERATE FLIGHTLINE MOTOR VEHICLES	63	78	85	67	54	43	86
17	OPERATE GALLEY EQUIPMENT, SUCH AS OVEN OR COFFEE MAKERS	82	75	95	10	86	98	49
18	OPERATE HIGH FREQUENCY (HF) RADIOS	45	66	49	23	57	18	26
19	OPERATE ULTRAHIGH FREQUENCY (UHF) RADIOS	68	75	63	48	90	39	36
50	ORDER AIRCREW FLIGHT LUNCHES	69	97	98	42	50	82	32
21	ORDER AIRCREW TRANSPORTATION	77	57	74	38	16	85	36
22	PARTICIPATE IN CREW MAINTENANCE DEBRIEFINGS	11	97	98	76	97	16	16
23	PARTICIPATE IN CREW OPERATION DEBRIEFINGS	64	60	92	92	56	29	62
74	PARTICIPATE IN GENERAL OR SPECIALIZED MISSION BRIEFINGS	81	94	93	89	75	70	78

TABLE 2 (CONTINUED)

ANALYSIS OF COMMON AIRCREW TASKS BY 1-48 MONTHS TIME IN CAREER FIELD GROUPS (PERCENT MEMBERS PERFORMING)

TASKS

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N I	SKS	XXXII	111X0	112X0	113X0B	113X0C	114X0	115X0
25	PARTICIPATE IN LIFE SUPPORT TRAINING SEMINARS	70	82	00	07	67	07	66
26	PARTICIPATE IN POSTFLIGHT INTELLIGENCE REFEINCS	90				5		2 L
11	DADTITIDATE IN DEPICTAN TIMOT OF AND DATE INCO			2	20	30	77	1
1 0	CONTRICTION IN FUELISSION INTELLIGINGE BRIEFINGS	56	80	58	62	51	43	67
0 0	PARILICIPATE IN PREMISSION WEATHER BRIEFINGS	59	60	95	75	52	10	73
57	PERFORM CREW INFORMATION FILE CHECKS	64	79	69	61	65	51	58
80	PERFORM FLIGHT TEST FOR NEW EQUIPHENT VALIDATION	18	29	25	28	16		
31	PERFORM FLIGHT TEST FOR NEW FLIGHT PROCEDURES	11	20	1 1	00	9 0	~ 4	2 2
32	PERFORM HIGH ALTITUDE PROCEDURES IN ALTITUDE CHAMBER	48	57	54	36	50	41	47
33	PERFORM OR PRACTICE EMERGENCY AIRCRAFT EGRESS PROCEDURES	61	54	63	82	61	: 22	62
34	PERFORM PERSONAL EQUIPMENT INSPECTION	81	92	85	86	78	75	88
83	PERFORM SMALL ARMS QUALIFICATION	77	92	23	83	16	92	78
36	PERFORM WING WALKING	36	27	30	40	5	13	34
37	PICK UP AIRCRAFT LIFE SUPPORT EQUIPMENT	3	82	82	63	16	13	25
8	PICK UP AND INSPECT FLIGHT LUNCHES	51	95	96	34	19	55	21
66	PICK UP COFFEE JUGS, WATER JUGS, OR OVENS	48	96	97	30	21	38	22
9	POST CHANGES TO PERSONAL AIRCREW PUBLICATIONS	87	92	90	87	87	87	62
13	REVIEW AFTO FORMS 781 SERIES FOR AIRCRAFT DISCREPANCIES	94	97	84	98	98	67	73
53	SECURE EQUIPMENT FOR DESCENT OR LANDING	86	87	94	97	74	98	86
43	SELECT MAINTENANCE BREVITY CODES	39	83	51	22	42	0	7
44	STUDY TECHNICAL ORDERS FOR ABNORMAL AND EMERGENCY INFLIGHT	3	2	•	:	•	5	r
	PROCEDURES	86	87	86	93	63	11	42
45	TURN IN AIRCRAFT LIFE SUPPORT EQUIPMENT	41	85	3.5	66	24	71	00
46	TURN IN COFFEE JUGS, WATER JUGS, OR OVENS	42	96	76	<u>ار</u>	2	5) =
47	VISUALLY INSPECT PANELS, LOCKS, OR FASTENERS	82	95	65	69	: S	3 %	37
48	VISUALLY INSPECT SPARE LIFE SUPPORT EQUIPMENT	72	94	86	63	64	22	26

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Task Factor Administration

To enhance the training manager's ability to make objective decisions, task difficulty and training emphasis booklets were also administered to incumbents in AFSs 111X0, 112X0, 113X0B, 113X0C, 114X0, and 115X0. Although the task listings in the job inventory and task factor booklets were identical, task difficulty and training emphasis booklets were processed separately because of the different types of information gathered. An explanation of these rating factors and their application is provided below.

Task Difficulty. Task difficulty data were independently collected from 255 experienced aircrew members during the same period job inventory booklets were administered. Each senior NCO who completed a task difficulty booklet was asked to rate all familiar tasks on a nine-point scale from extremely low (one) to extremely high (nine) as to the relatively difficulty of that task. Difficulty is defined as length of time required for an average member to learn to perform that task. The interrater reliability (as assessed through components of variance of standard group means) for these 255 raters was .99, which indicates extremely high agreement among the raters. The ratings were adjusted so tasks of average difficulty have ratings of 5.00 and a standard deviation of 1.00. Tasks rated 3.00 are considered very low in task difficulty and generally, are not recommended for training in resident technical training courses.

Table 3 presents the task difficulty ratings for the 48 tasks included in the common aircrew duty for all aircrew AFSCs and the combined sample. Note that Tasks 30 and 31 were rated very high in task difficulty. Raters perceive them as being more difficult to learn than any of the other common aircrew tasks. However, these two tasks have a very low percentage of 1-48 TICF members performing (see Table 2). This is probably because these tasks are performed by more experienced personnel. Even though rated high in task difficulty, they should not be included in a resident technical school.

TASK DIFFICULTY RATINGS

TAS	ß	11XXX	111X0	112X0	113X0B	113X0C	114X0	115X0
1	ADVISE MAINTENANCE PERSONNEL IN IDENTIFYING AIRCRAFT SYSTEM	2	FC 7))	r r	15 7		6 C 7
7	ANNOTATE AFTO FORMS 781A (MAINTENANCE DISCREPANCY AND WORK	C0.0	16.0	0.10	10.1	0./4	C0 .C	67.0
	DOCUMENT)	5.69	5.75	5.14	6.02	5.91	5.44	6.06
e	APPLY EXTERNAL ALTERNATING CURRENT (AC) AND DIRECT CURRENT (DC)	5 33	10	2	200	, 0E	5 7 C	60 3
4	COMPUTATE CORRECTION OF ALRCRAFT DISCREDANCIES OR MALETINCTIONS	77.C	01.10	04.0	07.0	ro.+	.	70.0
•	WITH AIRCRAFT COMMANDER	5.83	5.41	5.86	6.19	6.10	5.50	5.50
ŝ	DEMONSTRATE TO PASSENGERS THE PROPER USE OF LIFE PRESERVERS,							
	PARACHUTES, OR OXYGEN MASKS	5.68	5.93	6.30	5.87	5.01	5.11	5.54
9	INSPECT OR PREPARE CREW AREAS	4.67	4.24	4.67	3.94	4.75	4.93	5.29
1	INSPECT RAMP AREA FOR FOREIGN OBJECT DAMAGE (FOD) MATTER	4.07	3.78	4.21	4.63	4.22	3.89	4.07
60	INSTALL OR REMOVE AIRCRAFT WHEEL CHOCKS	3.72	3.87	4.11	4.13	3.75	3.33	3.32
σ	INSTRUCT EXTRA CREW MEMBERS OR PASSENGERS ON INFLIGHT OR							
	GROUND EMERGENCY PROCEDURES	5.68	5.80	6.09	5.92	5.18	5.27	5.50
10	LOAD CREW GEAR ON AIRCRAFT	4.16	4.32	4.31	5.16	3.73	3.67	4.85
11	MAINTAIN FLIGHT MANUALS, SAFETY AND OPERATIONAL SUPPLEMENTS,							
	AND FLIGHT CREW CHECKLISTS	6.17	6.30	6.02	6.10	6.51	5.96	5.47
12	MOMITOR RADIO COMPUNICATION TRANSMISSIONS	5.43	5.54	5.08	6.07	5.66	5.02	4.93
13	OPEN OR CLOSE CREW ENTRANCE DOORS	4.25	4.39	4.56	4.44	4.28	4.07	4.08
14	OPERATE ENERGENCY ESCAPE HATCHES	4.57	4.85	4.75	4.53	4.50	4.39	4.54
15	OPERATE FIRE EXTINGUISHERS	4.41	4.65	4.71	4.42	4.30	4.31	4.42
16	OPERATE FLIGHTLINE MOTOR VEHICLES	4.84	5.15	5.23	47.44	4.27	5.03	4.67
17	OPERATE GALLEY EQUIPMENT, SUCH AS OVEN OR COFFEE MAKERS	4.06	3.97	4.05	3.28	4.22	4.28	4.41
18	OPERATE HIGH FREQUENCY (HF) RADIOS	5.38	5.44	5.11	4.42	4.95	6.41	6.33
19	OPERATE ULTRA HIGH FREQUENCY (UHF) RADIOS	5.33	5.42	5.15	4.81	4.99	5.85	6.08
20	ORDER AIRCREW FLIGHT LUNCHES	3.55	3.64	3.67	3.12	3.55	3.59	3.97
21	ORDER AIRCREW TRANSPORTATION	3.54	3.55	3.61	3.45	3.75	3.55	4.20
22	PARTICIPATE IN CREW MAINTENANCE DEBRIEFINGS	4.79	5.11	4.47	5.27	5.26	4.19	4.19
23	PARTICIPATE IN CREW OPERATION DEBRIEFINGS	4.98	5.21	4.63	5.34	5.43	4.43	4.73
24	PARTICIPATE IN GENERAL OR SPECIALIZED MISSION BRIEFINGS	5.31	5.43	4.88	5.54	5.58	4.79	5.89

TABLE 3 (CONTINUED)

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TASK DIFFICULTY RATINGS

TAS	ß	11XXX	111X0	112X0	113X0B	113X0C	114X0	115X0
25	PARTICIPATE IN LIFE SUPPORT TRAINING SEMINARS	5						
26		20.0	11.0	4./0	10.0	5.23	4.59	5.16
9 r 9 c	FANTLUISTE IN FUSIFICIAL INTELLIGENCE BREFINGS	5.14	5.27	4.64	5.69	4.79	4.92	5.80
7	FAMILUTATE IN PREMISSION INTELLIGENCE BRIEFINGS	4.99	4.89	4.64	5.75	4.84	4.74	5.56
	PARTICUPATE IN PREMISSION WEATHER BRIEFINGS	4.51	4.11	4.18	5.03	5.17	4.15	4.79
23	FEREVOLD CALM INFORMATION FILL CHECKS	4.44	4.04	4.35	5.05	4.96	4.41	4.35
2	PERCONN FLIGHT TEST FOR NEW VALIDATION	7.68	7.50	7.70	69.9	7.33	7.67	7.70
1.5	PERFORM IT ALL AND I FOR NEW FLICHT PROCEDURES	7.79	7.75	7.77	6.76	7.55	7.78	7.48
2 6	PERFORM OF PRAMIES PROVIDE PROCEDURES IN ALTITUDE CHAMBER	5.85	5.74	5.99	5.58	5.44	6.14	5.90
2 4	FEATURE OF FRAUILUE EAEKGENCY AIKCKAFT EGRESS PROCEDURES	5.90	6.02	6.31	5.20	5.50	5.90	5.89
1 u 0 0	FEATURE FEATURE EQUITIENT INSPECTION	5.37	5.56	5.31	5.19	5.46	5.18	5.36
2,4	FEMERUNG SCHLIM AND QUALIFICATION	5.50	5.56	5.30	5.31	5.41	6.35	4.87
	LERGUND WIND WIND AND AND AND AND AND AND AND AND AND A	4.32	4.21	4.45	4.07	3.85	5.04	4.83
5	FICE UP ALKUKAFT LIFE SUPPORT EQUIPMENT	3.91	3.92	3.94	4.03	3.77	4.53	3.84
	FILM OF AND INSPECT FLIGHT LUNCHES	3.58	3.62	3.74	3.19	3.55	4.12	3.53
2	FILM UT UUFFEL JUGS, WATER JUGS, UK OVENS	3.39	3.57	3.55	3.13	3.33	3.72	3.34
3 3	PUBLICATIONS IN PARSONAL ALKCREW PUBLICATIONS	5.82	6.39	5.80	5.16	5.89	5.75	5.05
	REVIEW AFID FURDS /81 SERIES FOR AIRCRAFT DISCREPANCIES CONTREPARTMENT FOR PROVINING AN FURDING	5.33	5.01	5.10	5.73	5.96	5.03	4.92
7 7	SDUURDE EQUITIDENT FUN UESUENT UK LANUING Settert Maturteraure Bidditter Aand	5.03	4.61	5.68	4.90	4.89	5.29	4.53
7	SEMENT TRADUTAT ADADG FOR ANYANYI YIM NATATING TATATING TA	5.10	4.94	5.12	4.81	4.93	5.98	5.99
‡ %	JIVUI IEUMIUMI UNUEND FUK ABNUKIAL AND EREKGENCY PROCEDURES	6.71	6.54	6.65	6.64	6.83	6.83	5.58
	INJURI IN CONTRACT TATES SUPPORT AND A CONTRACT AND AN AND A CONTRACT AND A CONTRACTACT AND A CONTRACT AND A CONTRACT AND A CONTRACTACT AND A CONTRACTACT AND A CONTRACTACT AND A CONTRACTACTACT AND A CONTRACTACTACTACTACTACTACTACTACTACTACTACTACTA	3.85	3.71	3.74	4.12	4.07	4.44	3.79
2	VICIALLY VUCTED VUCO, WALEN JUGO, UN UVENS VICIALLY INCODEM DAVIDIC I ACTOR ON PARAMINING	3.34	3.66	3.47	3.07	3.27	3.75	2.69
89	VISUALLI INSECUT FANELS, LUCKS, UK FASTENEKS VISUATIV INSDEFT SDADD ITTE SUMPODE POILTAND.	4.69	4.35	4.52	5.12	5.25	4.72	4.36
) F	ATSOMPTET TRACECT SEAVE FILE SOLVARI FULTERING	4.75	4.66	4.56	4.82	5.25	4.69	4.62

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Training Emphasis. Training emphasis (TE) booklets were administered to 7-level DAFSC personnel in AFSs 111X0, 112X0, 113X0B, 113X0C, 114X0, and 115X0 during the same period the job inventories were administered. The 290 senior NCOs who completed training emphasis booklets rated tasks from zero (no training emphasis required) to nine (extremely high training emphasis required). Training emphasis ratings provide an indication of how much emphasis should be placed on structured training. Structured training is defined as training provided at resident technical schools, field training detachments (FTD), mobile training teams (MTT), formal on-the-job training (OJT), or any other organized training method.

Since individuals rated tasks based only on their AFSCs, separate reliability coefficients were computed to determine the amount of agreement among respondents for each AFSC, as well as for the combined sample. High agreement was found among the raters for each AFSC. Because of the high agreement, training emphasis ratings should provide objective data which can be used with other factors to assess training requirements. The interrater agreement for the combination of raters indicates extremely high agreement, and should help identify general tasks which may be trained in a common aircrew school.

To assess the degree of relationship between the training emphasis ratings for each specialty, a correlation matrix was computed. The matrix correlates the group means for each task for each specialty. Table 4 illustrates the correlation matrix. The strength of relationship can be described as follows:

Less than .20	Slight, almost no relationship
.2040	Low correlation, definite but small relationship
.4070	Moderate correlation; substantial relationship
.7090	High correlation; marked relationship
.90-1.00	Very high correlation; very dependable relationship

As can be seen in the table, most correlations were high. Each of the specialties, except the 115X0, showed a high correlation with the combined sample and with each other specialty. Excluding the 115X0 specialty, the lowest correlation was between the 114X0 and 111X0 personnel, but was still indicative of a strong relationship. The correlations between the 115X0 specialty and the others indicates only moderate correlations. There is a relationship, but a much weaker one than between the other specialties.

Normally, training emphasis data are reported in the form of the average rating for each task by the group of raters. In this study, data are being compared across six different studies, but only for a portion (the common aircrew tasks) from each job inventory. Further, training emphasis ratings are based on a 0 to 9 scale where zero is a legitimate rating (no training recommended). With the 0 to 9 scale and task inventories of differing lengths, the training emphasis ratings for each speciality are not directly

comparable (as was the case with task difficulty with a 1 to 9 scale with ratings normalized to an average of 5, and a standard deviation of 1).

To make the training emphasis ratings comparable, they were converted to rankings; that is, they were ordered from 1 to 48 in the order they were recommended for training, with 1 being the task recommended for the most emphasis in training, and 48 the task least recommended for emphasis in structured training. Thus, the median rank would be between 24 and 25; those ranked 1-24 can be considered as "above average" (or more literally in the upper half) on training emphasis. Tasks ranked above the median probably should be included in some type of structured training.

The ranking of tasks across all aircrew specialties (shown in the 11XXX columns in succeeding tables) is a simple average of the ranking across the six career fields which were also rank ordered. These overall rankings are provided to give a picture of the priority each task might have in a common aircrew course.

Tasks with more than 30 percent members performing were grouped according to similar functions, as discussed in the previous section. These groups are administrative functions; using emergency equipment/procedures; and preflight, inflight, and postflight duties. Tables 5 through 7 illustrate these task groupings, and their training emphasis rankings.

As can be seen in Table 5, administrative tasks with greater than 30 percent members performing also ranked high in training emphasis across all aircrew AFSCs. Note that four of the five administrative tasks have high training emphasis rankings across the specialties (11XXX column). A review of the ranking for each specialty shows fairly good agreement, except for AFSC 115X0. Where these administrative tasks have high training emphasis rankings, and were performed by 30 percent of the members, they provide good examples of tasks which may be considered for training in a common aircrew technical school.

Table 6 illustrates tasks which involve using emergency equipment or procedures and have more than 30 percent members performing. They were also ranked high in training emphasis. The 115X0 rankings place the task "study technical orders for abnormal and emergency inflight procedures" very low in training emphasis, whereas the other aircrew specialties ranked it very high. Also, the task "instruct extra crew members or passengers on inflight and ground emergency procedures" ranked low in AFSs 111X0 and 115X0 in comparison to the others. Because most of the tasks in this group have high training emphasis and percent members performing, these are also good examples of tasks which may be considered for training.

Table 7 illustrates preflight, inflight, and postflight tasks with greater than 30 percent members performing. Tasks such as "secure equipment for descent or landing, monitor radio transmissions, and advise maintenance personnel in identifying aircraft system malfunctions" also have high training emphasis rankings. Tasks such as these should be considered for formal training. In contrast, tasks such as "order aircrew transportation", and "order aircrew flight lunches" were ranked very low in training emphasis. These tasks may be more suitable for formal or informal on-the-job training. Overall, the average rankings (11XXX) seem to give a good priority for what should be trained, except for possibly the 115X0 speciality. The things most important for 115X0 training (such as "participate in premission intelligence briefings," etc.) do not always show up high in the overall rankings. This may imply a need for a somewhat different training program for the 115X0 specialty.

CORRELATION OF GROUP MEANS

	<u>11XXX</u>	<u>111X0</u>	<u>112X0</u>	<u>113X0B</u>	<u>113X0C</u>	<u>114X0</u>	<u>115X0</u>
11XXX	1.0	.90	. 88	. 89	. 92	.87	.58
111X0		1.0	.74	.82	.83	.67	.61
112X0			1.0	. 76	.74	.74	. 40
113X0B				1.0	. 78	.71	.54
113X0C					1.0	.72	. 42
114X0						1.0	.50
115X0							1.0

TRAINING EMPHASIS RANKINGS ON COMMON AIRCREW TASKS WITH MORE THAN 30 PERCENT MEMBERS PERFORMING (ADMINISTRATIVE TASKS)

TASK	8	TOTAL	111X0	112X0	113X0B	113X0C	114X0	115X0
11	MAINTAIN FLIGHT MANUALS, SAFETY AND OPERATIONAL SUPPLEMENTS, AND FLIGHT CREW CHECKLISTS	ы	7	1	5	7	-	14
40	POST CHANGES TO PERSONAL AIRCREW PUBLICATIONS	ŝ	9	6	ø	9	10	13
5	ANNOTATE AFTO FORMS 781A (MAINTENANCE DISCREPANCY AND WORK DOCUMENT)	7	Ś	ø	11	ŝ	11	21
41	REVIEW AFTO FORMS 781 SERIES FOR AIRCRAFT DISCREPANCIES	¢	11	18	2			02
29	PERFORM CREW INFORMATION FILE CHECKS	24	25*	24	25*	23	28*	16

* BELOW THE MEDIAN RANK IN TRAINING EMPHASIS

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TRAINING EMPHASIS RANKINGS ON COMMON AIRCREW TASKS WITH MORE THAN 30 PERCENT MEMBERS PERFORMING (USING EMERGENCY EQUIPMENT OR PROCEDURES)

TASK	8	TI XXX	111X0	<u>112X0</u>	113X0B	113X0C	114X0	115X0
44	STUDY TECHNICAL ORDERS FOR ABNORMAL AND EMERGENCY INFLIGHT PROCEDURES	5	1	6	1	1	7	32*
14	OPERATE EMERGENCY ESCAPE HATCHES	£	6	٢	10	10	'n	4
15	OPERATE FIRE EXTINGUISHERS	4	10	11	13	6	4	Ś
33	PERFORM OR PRACTICE EMERGENCY AIRCRAFT EGRESS PROCEDURES	ø	ñ	16	7	16	7	15
34	PERFORM PERSONAL EQUIPMENT INSPECTION	6	4	21	٢	17	12	ñ
6	INSTRUCT EXTRA CREW MEMBERS OR PASSENGERS ON INFLIGHT OR GROUND EMERGENCY PROCEDURES	15	30*	2	6	19	ę	31*
25	PARTICIPATE IN LIFE TRAINING SEMINARS	19	20	22	24	25	18	22

* BELOW THE MEDIAN RANK IN TRAINING EMPHASIS

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TRAINING EMPHASIS RANKINGS ON COMMON AIRCREW TASKS WITH MORE THAN 30 PERCENT MEMBERS PERFORMING* (PREFLIGHT, INFLIGHT, AND POSTFLIGHT TASKS)

TASK	(A)	11XXX	111X0	112X0	113X0B	113X0C	114X0	115X0
42	SECURE EQUIPMENT FOR DESCENT OR LANDING	10	15	4	4	22	80	12
12	MONITOR RADIO COMMUNICATION TRANSMISSIONS	11	7	9	16	11	27	10
1	ADVISE MAINTENANCE PERSONNEL IN IDENTIFYING AIRCRAFT SYSTEM MALFUNCTIONS	12	80	12	19	6	17	27
13	OPEN OR CLOSE CREW ENTRANCE DOORS	13	28	10	15	13	14	12
24	PARTICIPATE IN GENERAL OR SPECIALIZED MISSION BRIEFINGS	14	16	13	14	20	23	7
4	COORDINATE CORRECTION OF AIRCRAFT DISCREPANCIES OR MALFUNCTIONS WITH AIRCRAFT COMMANDER	16	18	18	22	4	16	24
47	VISUALLY INSPECT PANELS, LOCKS, OR FASTENERS	20	17	41	ñ	7	24	39
16	OPERATE FLIGHTLINE MOTOR VEHICLES	23	12	26	35	35	23	10
27	PARTICIPATE IN PRE-MISSION INTELLIGENCE BRIEFINGS	26	28	33	26	37	21	2
19	OPERATE ULTRA HIGH FREQUENCY (UHF) RADIOS	27	25	23	32	15	37	19
٢	INSPECT RAMP AREA FOR FOREIGN OBJECT DAMAGE (FOD) MATTER	30	35	28	31	18	19	27
90	INSTALL OR REMOVE AIRCRAFT WHEEL CHOCKS	31	37	31	27	25	26	17
10	LOAD CREW GEAR ON AIRCRAFT	33	34	30	29	27	34	28
32	PERFORM HIGH ALTITUDE PROCEDURES IN ALTITUDE CHAMBER	36	22	40	44	31	37	25
20	ORDER AIRCREW FLIGHT LUNCHES	37	39	30	40	41	32	45
21	ORDER AIRCREW TRANSPORTATION	38	46	43	44	32	25	42

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* TASKS RANKED BELOW MEAN ARE BELOW AVERAGE IN TRAINING EMPHASIS

COMPARISON OF TASKS WITH PROPOSED COURSE OUTLINE

In May 1983, a conference was held to propose a curriculum for the Enlisted Undergraduate Aircrew Course. The proposed course outline is presented in Appendix A. To gain a better understanding of how the survey data relates to the proposed course, tasks from the inventory were matched with areas from the course outline. Many of the items proposed for the common aircrew course are knowledge areas, and do not relate directly to the inventory items. Some areas, however, do relate and are supported by the data. Table 8 presents the matched tasks, their training emphasis ranking, task difficulty rating, and percentage of members performing.

When looking at the safety items in the combined sample (11XXX column), note that three of the four tasks should be considered for formal training. For example, Task 14, "operate emergency escape hatches," was given a very high training emphasis ranking. The percentage of members performing this task is also high. In each of the separate specialties, training emphasis ranking is high, as is percent members performing except for the 111X0 specialty. Task difficulty is comparable across the specialties and combined sample, it being slightly less than average. This pattern is evident for Tasks 15 and 33, also, and illustrates that safety items such as these should be considered for inclusion in the common aircrew course.

Under the Aircrew Publication Requirements Section, it can be easily seen that Task 11, "maintain flight manuals, safety and operational supplements, and flight crew checklists," is an example of a task that should be included in formal training. It ranked first overall as the task recommended for the most training emphasis. It also ranked high in each specialty. Percent members performing is high, as are the task difficulty ratings. Task 40 "post changes to personal aircrew publications," also rated high on the three factors; however, task difficulty was somewhat lower than on Task 11. This illustrates that both tasks should be included in the school, but more time allotted to teach Task 11 than 40.

In the Associated Directives Section, Task 44, "study technical orders for abnormal and emergency inflight procedures," ranked second overall in training emphasis. The training emphasis rankings for this task are comparable to those for Task 11, except in the 115X0 specialty. This task also received high task difficulty and percent members performing ratings except in the 115X0 specialty. Again, this is an example of a task that should be included in a formal training program.

When looking at the Aircrew Coordination Section, note that Tasks 12 and 34 received high ratings on the three factors and warrant inclusion in formal training. An area of interest is the Briefing Section. Although participating in various briefings was not ranked high in training emphasis and ranked about average in task difficulty, a significant number of people perform these tasks. Note that 115X0 personnel ranked participating in some types of briefings very high. Task 27, "participate in premission intelligence briefings," ranked second in the 115X0 specialty, which shows that these personnel, in contrast to the others, feel that participating in this type of

briefing should receive a great deal of emphasis in formal training. This again emphasizes the differences as to what is important for training in the 115X0 specialty compared to the others.

To further illustrate these differences, note that the 115X0 personnel rated Task 35, "perform small arms qualification," as the most important task in training emphasis, whereas the others ranked it low. In the combined sample (11XXX column) it would appear that it ranked above average in training emphasis. Remember, however, this figure is an average of the training emphasis rankings for all the specialties so, naturally, the "1" rankings given by the 115X0 personnel makes the average appear much higher. This task received above average task difficulty ratings in all but the 115X0 specialty.

In summary, many of the areas on the proposed course outline are supported by the survey data. Tasks such as 11 and 44 are excellent examples of tasks supported by the data, and warrant inclusion in a formal course. Many areas of the outline are knowledge areas and cannot be addressed by the survey data. It is evident that 115X0 personnel emphasize different areas than do the other aircrew specialties which may indicate that these personnel would not benefit from attending an Enlisted Undergraduate Aircrew Course.

COMPARISON OF TASKS WITH COURSE OUTLINE

			11XXX			0X11	ļ	-	12X0		11	3X0B		113	XOC		114X			115X0	
		INC BND	TSK	L A	TNG	TSK	PCT	EMP	TSK	진질	TNG T	IF P	E	NG TS	F PC		C TSK	PCT	TNG	TSK	PCT
ч і . • і ч	. GENERAL MILITARY TRAINING SAFETY								I			1	1	I 		1					
1 2	OPERATE FIRE EVITACITUME		5	ç	:	:															
- 1	INSPECT RAMP AREAS FOR FOREIGN	t	4.41	63	10	4.65	35	1	4.71	56	12 4	.42	70	84.	30 7,	, E	4 4.3	1 72	3	4.42	34
9 14	OBJECT DAMGE (FOD) MATTER OPERATE EMERGENCY ESCAPE HATCHES INSTRUCT EXTRA CREW MEMBERS OR	° 9	4.07 4.57	73 81	35	3.78 4.85	30 90	28 1	4.21 1.75	53 92	31 4 10 4	.53	61 72	18 4. 10 4.	22 8{ 50 91	51 1	3.89	79 90	27 4	4.07 4.54	53 63
33	PASSENCERS ON INFLIGHT OR GROUND EMERGENCY PROCEDURES PERFORM OR PRACTICE EMERGENCY AIR-	15	5.68	74	30	5.80	65	5 6	.09	92	9 2	.92	94	195.	18 55	- -	5.27	92	31	5.50	38
	CRAFT EGRESS PROCEDURES	80	5.90	61	ñ	6.02	54	16 6	.31	63	75	.20	82	16 5.	50 61		5.90	55	15	5.89	62
~	HAND GUN QUALIFICATION																				
35	PERFORM SMALL ARMS QUALIFICATION	21	5.50	11	19	5.56	92	45 5	.30	23	28 5	.31	33	29 5.	19 13	51	4 3E	6	-	10 7	0
2	AIRCREW PUBLICATION REQUIREMENTS												1	; ì	;	:	20.00	26	-	4.0	0
-	FLIGHT MANUAL																				
11	HAINTAIN FLIGHT MANUALS, SAFETY AND OPERATIONAL SUPPLEMENTS, AND FLIGHT CUPPL FURDER SUPPLEMENTS, AND FLIGHT																				
£ 3	PERFORM CREW INFORMATION FILE CHECKS POST CHANGES TO PERSONAL AIRCREW	1 24	6.17 4.44	93 64	25 4	6.30 4.04	93 79	1 24 4	.35	95 69	25 6. 25 5.	02	51 5	2 6.1	51 95 36 65	28	5.96	92 51	14 16	5.47 4.35	79 58
Υ.	PUBLICATIONS ASSOCIATED DIRECTIVES	Ś	5.82	87	9	6.39	92	9 5	.80	06	85.	.16	37	6 5.1	39 87	10	5.75	81	13	5.05	62
ا <u>د</u> ا	AIRCRAFT FORMS																				
7	ANNOTATE AFTO FORMS 781A (MAINTENANCE DISCREPANCY AND																				
41	WORK DOCUPENT) REVIEW AFTO FORM 781 SERIES FOR	1	5.69	92	5	. 75	93	8	5 71.	16	11 6.	02 9	12	5.5	79 16	11	5.44	89	21	6.06	07
4	ALINCIART DISCREPANCIES STUDY TECHNICAL ORDERS FOR ABNORMAL	80	5.33	94	11 5	10.	16	17 5	.10	84	25.	73 9	8	3 5.5	96 <u>9</u> 8	6	5.03	67	20	4.92	73
	AND ENERGENCY INFLIGHT PROCEDURES	2	6.71	86	1 6	.54	87	5 6	.65 {	86	16.	649	33	1 6.8	13 93	2	6.83	11	32	5.58	42

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			PCT				77 26	36			32	99	88	25	29	26		67	16	62	78	99	45
		15X0	TSK DIF				4.93 6.33	6.08			5.54	5.16	5.36	3.84	3.79	4.62		4.79	4.19	4.73	5.89	5.80	5.56
		1	TNG				23	18			30	22	m	33	35	38		ور	43	18	~	œ	2
			PCT MEN				48 18	39			16	49	75	13	14	11		10	16	29	70	21	43
		14X0	rsk DIF				5.02	5.85			5.11	4.59	5.18	4.53	4.44	4.69		4.15	4.19	4.43	4.79	4.92	4.74
		1	TNG				27 38	36			e	18	12	45	43	20		94	35	33	22	29	21
			PCT				95 57	06			28	67	78	16	16	64		52	97	56	75	30	51
		13X0C	TSK DIF				5.66 4.95	4.99			5.01	5.23	5.46	3.77	4.07	5.25		5.17	5.26	5.43	5.58	4.79	4.84
		-	TNG				11 26	15			36	24	17	44	44	28		33	14	21	20	40	37
			PCT				91 23	4 8			67	70	86	63	99	63		75	76	92	89	50	62
	~	13X0B	TSK DIF				6.07 4.42	4.81			5.87	5.61	5.19	4.03	4.12	4.82		5.03	5.27	5.34	5.54	5.69	5.75
8 (CONTINUED)	UTLIN		TNG				16 33	32			12	23	7	32	36	20		23	18	17	14	30	26
	urse o		PCT				95 49	63			98	06	85	82	85	86		95	98	92	93	640	58
	LTH CO	12X0	TSK DIF				5.08 5.11	5.15			6.30	4.70	5.31	3.94	3.74	4.56		4.18	4.47	4.63	4.88	4.64	4.64
	SKS WI		TNG				32 5	23			e	22	21	39	39	25		20	19	15	13	38	33
TABLE	OF TA		PCT				93 66	75			55	82	92	82	85	94		06	67	90	94	11	80
	ARISON	111X0	TSK DIF				5.54 5.44	5.42			5.93	5.11	5.56	3.92	3.71	4.66		4.11	5.11	5.21	5.43	5.27	4.89
	COMP		TNG				31	24			33	20	4	42	07	22		29	13	14	16	26	27
			PCT				85 45	68			60	70	81	39	14	72		59	11	64	81	38	56
		1XXX	TSK DIF				5.83 5.38	5.33			5.68	5.02	5.37	3.91	3.85	4.75		4.51	4.79	4.98	5.31	5.14	4.99
			TNG				35	27			17	19	6	39	40	28		30	25	18	14	32	26
				AIRCREW COORDINATION	RADIO PROCEDURES	MONITOR RADIO COMMUNICATION	TRANSMISSIONS OPERATE HIGH FREQUENCY (HF) RADIOS ODFDATE HITDAHICH FDECHTWICY (HUE)	RADIOS CONTRACTOR (1012)	LIFE SUPPORT EQUIPHENT	DEMONSTRATE TO PASSENGERS THE PROPER	USE OF LAFE FRESERVENS, FAMALULES, OR OXYGEN MASKS SUBDADE TRAINING DARFTFRETE TH TTEP SUBDADE TRAINING	EXMINITY AND	FERRUGED FANSORAL EQUIPTION	FICA OF AINCAAN'I LIFE SUFFURI EQUIPPENT THENE IN AIDCRAFTER FILE SUFFURE	LUND IN ALVING I LIFE SUFFURI	SUPPORT EQUIPMENT	BRIEFINGS	PARTICIPATE IN PREMISSION WEATHER BRIEFINGS	PARTICIPATE IN CREW MAINTENANCE DEBRIEFINGS	PARTICIPATE IN CREW OPERATION DEBRIEFINGS	PARTICIPATE IN GENERAL OR SPECIALIZED MISSION BRIEFINGS	FAKILUTATE IN POSTFLIGHT INTELLIGENCE BALEFINGS Dabaticate	INTELLIGENCE BRIEFINGS
3				111	~	12	81 01	2		ŝ	Ŷ	3 7	, ,	ñ ¥	a	<u>}</u>	4	28	22	53	4 7	9 7	;

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Analysis of Job Attitudes

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Tables 9 through 11 present data reflecting attitudes incumbents had about their jobs. These data are provided by questions in the background section of the inventory that addresses perceptions of how interesting the job is, how well talents and training are utilized by the job, and whether they intend to reenlist.

To provide a meaningful standard by which to measure job attitudes, recently surveyed AFSCs are compared with each study on these measures. In this study, job attitudes for aircrew members were compared with all other AFSCs surveyed in 1982.

As can be seen in the tables, aircrew members are very satisfied with their jobs. In most cases, the aircrew members were more satisfied with their jobs than other Air Force members.

Table 9 indicates job attitudes for the 1-48 months TICF groups are comparable, with two exceptions. The 111X0 personnel do not feel their talents are being utilized as well as do incumbents in the other AFSCs. Also, the 115X0 personnel have lower reenlistment intentions than other aircrew members.

Table 10 provides information about job attitudes in the 49-96 months TICF groups. Again, job attitudes are comparable, with the exception of the 115X0 personnel. Personnel in AFS 115X0 in this experience group have less favorable attitudes about their jobs on all measures.

As can be seen in Table 11, incumbents with 97+ months TICF also have favorable attitudes about their jobs. This group indicates lower reenlistment intentions, which can probably be attributed to the retirement of some members.

In summary, aircrew members have very positive attitudes about their jobs for the most part. They are more satisfied with their jobs than incumbents in other AFSCs surveyed during 1982.

JOB ATTITUDE DATA FOR 1-48 MONTHS TICF GROUPS (PERCENT MEMBERS RESPONDING)

	COMPARATIVE* SAMPLE (N=6,952)	11XXX (N=1,836)	111X0 (N=215)	112X0 (N=349)	113X0B (N=120)	113X0C (N=690)	114X0 (N=355)	115X0 (N=73)
JOB FAIRLY INTERESTING OR BETTER	63	06	75	92	87	95	89	82
TALENTS UTILIZED FAIRLY WELL OR BETTER	72	06	67	89	88	97	06	84
TRAINING UTILIZED FAIRLY WELL OR BETTER	11	64	88	95	80 .	57	96	78
FAVORABLY CONSIDERING REENLISTMENT	43	81	70	80	85	86	62	69

* COMPARATIVE SAMPLE = ALL AFSCs SURVEYED IN 1982

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JOB ATTITUDE DATA FOR 49-96 MONTHS TICF GROUPS (PERCENT MEMBERS RESPONDING)

	COMPARATIVE* SAMPLE (N=3,264)	11XXX (N=1,075)	111X0 (N=104)	112X0 (N=181)	113X0B (N=36)	113X0C (N=516)	114X0 (N=182)	115X0 (N=42)
JOB FAIRLY INTERESTING OR BETTER	68	89	81	92	06	92	86	61
TALENTS UTILIZED FAIRLY WELL OR BETTER	76	16	76	16	67	95	92	76
TRAINING UTILIZED FAIRLY WELL OR BETTER	78	76	93	93	67	96	95	69
FAVORABLY CONSIDERING REENLISTMENT	62	83	68	66	83	82	89	67

* COMPARATIVE SAMPLE = ALL AFSCs SURVEYED IN 1982

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JOB ATTITUDE DATA FOR 97+ MONTHS TICF GROUPS (PERCENT MEMBERS RESPONDING)

115X0	(60-W)	81	78	11	73
114X0 (1=14X0		0	93	76	74
113X0C (N=319)	60	0	92	95	61
113X0B (N=69)	6	R .	91	64	65
112X0 (N=228)	92		£	89	65
111X0 (N=106)	93	6	6	89	65
11XXX (N=1,217)	06	0	4	92	69
COMPARATIVE* SAMPLE (N=5,343)	74	81	0	0	69
	JOB FAIRLY INTERESTING OR BETTER	TALENTS UTILIZED FAIRLY WELL OR BETTER	TRAINING UTILIZED FAIRLY WELL OR BETTER	FAVORABLY CONSIDERING	LNTHISTON

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* COMPARATIVE SAMPLE = ALL AFSCs SURVEYED IN 1982

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IMPLICATIONS

Occupational survey results indicated a large amount of overlap between the common aircrew tasks performed by the aircrew AFSCs surveyed. Of the 48 tasks included in the common aircrew duty, 36 were performed by 50 percent or more of the personnel surveyed. Generally, tasks that had a high percentage of members performing received high training emphasis rankings and may warrant inclusion in a centralized undergraduate enlisted aircrew school. The things most important for 115X0 training do not always show up high in the overall rankings. This may imply a need for a different training program for the 115X0 specialty.

Job attitudes are very positive throughout the aircrew AFSCs. The majority of individuals in all TICF groups reported their job interesting and their talents and training well utilized. Comparison shows job attitudes are noticeably better than other AFSCs surveyed during 1982.

Many areas targeted for training in the proposed course curriculum were well supported by the data. Many of the areas, however, are knowledge areas and cannot be evaluated with the OSR data.

APPENDIX A

PROPOSED OUTLINE FOR COMMON AIRCREW COURSE

I. GENERAL MILITARY TRAINING

- 1. Orientation
- 2. Security
 - COMSEC
 - OPSEC
- 3. Aircrew Member Discipline
 - Fraternization
 - Customs and Courtesies
 - 35-10
 - -- Flight Uniforms
 - Contributions of Enlisted Aircrew Members
 - Drug/Alcohol Abuse
- 4. Personal Affairs
 - Power of Attorney
 - Wills
 - Sure Pay
 - Financial Responsibility
 - Travel Vouchers
- 5. Communicative Skills
 - Oral (Presentation)
 - Written
 - Test Awareness
- 6. Safety

- Fire

A1

- Flightline

-- AGE

-- FOD

- Aircraft

- Flying

7. Hand Gun Qualification

- .38 Pistol

8. Physical Fitness

"II. ORIENTATION TO FLYING

1. Mission of the Air Force

- MAJCOMs

- 2. Career Progression
 - Aviation Badges
 - Career Ladder
 - -- 39-1 AFSC Handout
- 3. Flight Medicine
 - Annual Physical
 - QNIF/A Status
 - Self-Medication
 - Medical Factors of Flight
- 4. General Aviation Skills
 - GMT Time (Zulu)
 - 12/24-Hour Clock
 - Acronyms

A2

III. BASIC AERODYNAMICS

- 1. Forces of Flight
- 2. Basic Controls and Functions
- 3. Basic Aircraft Instruments
- 4. Aircraft Field Trip

IV. AIRCREW PUBLICATION REQUIREMENTS

- 1. Flight Manual
- 2. Checklist

V. ASSOCIATED DIRECTIVES

- 1. 60-1
- 2. 60-16
- 3. 51 Series
- 4. 55 Series
- 5. Aircraft Forms

VI. AIRCREW TRAINING PROGRAM

- 1. Initial Training
- 2. Recurring/Continuation
- 3. Standardization/Evaluation

VII. AIRCREW COORDINATION

- 1. Interphone Discipline
- 2. Radio Procedures
 - Monitoring

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- 3. Life Support Equipment
 - Weather
 - Mission
 - Pilots

VIII. ORIENTATION FLIGHT

1. MAJCOM Support Required

IX. SCREENING PROCEDURES

1. Reading Comp

2. Math Comp

