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ABSTRACT

This research was designed to identify and assess the effects of a job's context and naturally occurring job content changes upon the job attitudes of 709 Air Force radio operators. The first of two phases of the investigation identified specific job types within the radio operator career field at two points in time, and determined the flow of personnel from one of eight job types to another over a seventeen-month period. In the second phase, a series of multiple linear regression analyses were employed in the prediction of job attitude criteria consisting of perceived job interest, felt utilization of talents and training, and overall satisfaction. Results indicated that individual inputs such as months on the job (MOJ) and total active federal military service time contributed significantly in predicting job interest and felt utilization; and MOJ, aptitude, and grade contributed to the prediction of overall job satisfaction. In addition, situational inputs such as number of tasks performed and average task difficulty substantially improved prediction of attitudes. Interest and overall satisfaction tended to be more highly associated with an individual's current job while felt utilization tended to be associated with both the individual's current and past job experiences. Implications for job satisfaction predictions include improving job perceptions through personnel, task, and duty assignment policies as an approach to job enrichment. (Author/KC)

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AIR FORCE HUMAN RESOURCES LABORATORY

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LONGITUDINAL EFFECTS OF JOB CHANGE UPON INTEREST, UTILIZATION, AND SATISFACTION ATTITUDES

By

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October 1980

Final Report

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This technical report has been reviewed and is approved for publication.

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20. ABSTRACT *(Continue on reverse side if necessary and identify by block number)*

This research was designed to identify and assess the effects of a job's context and naturally occurring job content changes upon the job attitudes of 709 Air Force radio operators (career field 293X3). This investigation consisted of two phases. The first phase concentrated upon identifying specific job types within the radio operator career field at two points in time, and determining the flow of personnel from one job type to another over a 17-month period. Eight specific job types along with associated task and job changes are discussed. In the second phase, a series of multiple linear regression analyses were employed in the prediction of job attitude criteria consisting of perceived job interest, felt utilization of talents and training, and overall satisfaction. Results

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indicated that individual inputs such as months on the job (MOJ) and total active Federal military service time contributed significantly in predicting job interest and felt utilization; and MOJ, aptitude and grade contributed to the prediction of overall job satisfaction. In addition, situational inputs such as number of tasks performed and average task difficulty measures substantially improved prediction of attitudes. Prediction of satisfaction criteria by job types identified in phase one of this study revealed that interest and overall satisfaction tended to be more highly associated with an individual's current job while felt utilization tended to be associated with both the individual's current and past job experiences. The test of a final model incorporating individual and situational inputs as well as job type or group membership information revealed that even when controlling for radio operator and task characteristics, group data in the form of job types contributed significantly to all satisfaction attitude measures. Implications for job satisfaction predictions include improving job perceptions through personnel, task, and duty assignment policies as an approach to job enrichment.

PREFACE

This research was conducted under Project 7734, Development of Methods for Describing, Evaluating, and Structuring Air Force Occupations; Task 773405, Derivation of Methods to Provide for Career Progression and Development of Air Force Personnel; Work Unit 77340505, Develop Methodologies for Identifying Career Ladder Specific Job Satisfaction Problems. Research conducted for this study specifically addressed job related attitudes as a function of longitudinal work environment factors.

Recognition must be given to Dr. Raymond E. Christal, Dr. Joe T. Hazel, Dr. William E. Alley, and Dr. R. Bruce Gould for their technical advice in the direction and accomplishment of this study. Appreciation is also extended to Johnny Weissmuller, AFHRL/SM, for his part in designing and conducting numerous CODAP analyses essential for this research effort.

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LONGITUDINAL EFFECTS OF JOB CHANGE UPON INTEREST, UTILIZATION, AND SATISFACTION ATTITUDES

I. INTRODUCTION

Background

Over the past decade, the Air Force has been actively engaged in a comprehensive occupational research and survey program. This program has been directed toward the collection and analysis of occupational data from the Air Force job environment. Recently, as an outgrowth of this program, research has focused upon job perceptions and attitudes pertaining to satisfaction, in addition to measures of job and task accomplishment. This particular focus has been articulated in several investigations exploring the specific attitudes toward job interest and perceptions of felt utilization of talents and training (Gould, 1972, 1976a, 1976b). An extension of this first line of research focusing upon job satisfaction attitudes led to a review of the job satisfaction literature (Tuttle & Hazel, 1974; Tuttle, Gould, & Hazel, 1975) and subsequently to the development of a comprehensive Occupational Attitude Inventory (OAI) tailored for Air Force use. In a recent report, Edwards (1978) investigated responses to 200 OAI items for more than 7,000 first-term and career enlisted airmen. Personnel responses were compared for 35 specific job satisfaction factors, as well as for attitudes toward job interest, felt utilization, and overall job satisfaction. General findings indicated that a larger percentage of careerists found their jobs to be interesting and their talents and training utilized than did first-term airmen. In addition, a larger percentage of careerists than first-term airmen indicated higher overall satisfaction with their jobs.

The general satisfaction model developed by Tuttle and Hazel (1974) outlines a sequential process of individual and job characteristics which lead to satisfaction attitudes that in turn lead to positive career decisions and tenure.

Cast in this scheme, measures such as job, task, and background information from occupational surveys may be used as indicants of job participation and performance and as predictors of job perceptions and attitudes. In turn, data measures pertaining to job attitudes, such as the OAI, can be used as indicants of job satisfaction and as predictors of reenlistment intent and tenure (Alley & Gould, 1975; Gould, 1976a).

The aim of this research is to establish an individual and job characteristic-job satisfaction linkage in the form of a general satisfaction model by identifying specific individual inputs (such as months on the job, aptitude, age, and education levels), job situation inputs (such as number of tasks performed, supervisory experiences, task difficulty) and job types or group membership inputs which are most closely associated with job satisfaction attitudes. These individual, job content and group membership factors, once identified, can be used not only in the prediction of satisfaction but also as a basis for modifying certain Air Force career areas as part of a job redesign program. The central intent of job redesign is to enhance job effectiveness and to influence career decisions by making the job environment more attractive to personnel filling those jobs (Hackman & Lawler, 1971; Hackman & Oldham, 1974; Hackman & Morris, 1975).

Previously, job satisfaction investigations in the Air Force have primarily employed cross-sectional research methods (Gould, 1976a). As Tuttle and Hazel (1974) point out, a longitudinal

tracking of those job changes which naturally occur is needed so that the effects of changing job characteristics upon attitudes and changes in those attitudes can be studied. A longitudinal design offers the advantage of observing attitude changes due to changes in job characteristics without the necessity of experimentally inducing or manipulating job conditions.

Purpose of the Study

The purpose of this study was to obtain measures of job satisfaction at one point in time, along with job and task information from occupational analysis inventories, and after a period of 17 months had elapsed, to take the same measures again in order to assess job and attitudinal changes which had occurred. There were then two central questions which this research addressed. Several hypotheses were formulated for each of these two central questions.

Research Questions and Hypotheses

Question 1: What are some of the specific and naturally occurring changes in the nature of an Air Force job over time?

Hypothesis 1.1 Some job types which make up an Air Force job or career field will remain stable over time while others may vary due to changes in the nature of the tasks which individuals perform.

Hypothesis 1.2 Based upon the tasks they are assigned, some individuals will remain in the same job types over time while others may be reassigned to other job types.

Question 2: How do those naturally occurring changes in the nature of an Air Force job affect an individual's attitudes toward job interest, perceived utilization of talents and training, and overall job satisfaction?

Hypothesis 2.1 Job satisfaction perceptions can be predicted from individual and situational variables associated with job characteristics.

Hypothesis 2.2 The unique variance associated with job satisfaction attitude changes can be identified by longitudinal prediction.

Hypothesis 2.3 Job satisfaction perceptions can be predicted from a knowledge of job types.

Hypothesis 2.4 Job satisfaction perceptions can be predicted from individual and situational variables together with group or job type variables in order to assess whether or not satisfaction predictions can be improved using all three types of information.

II. METHOD

Subjects

The Air Force radio operator career field (AFSC 293X3) was selected as the target population. A longitudinal sample of 709 airmen contacted at two points in time was employed in this study. An initial Occupational Measurement Center (OMC) survey conducted in November 1974 indicated that the career field consisted of 2,022 airmen of which 1,501 individuals were sampled. A second

survey (time 2) conducted by the Air Force Human Resources Laboratory (AFHRL) in April 1976 (17 months later) contacted 709 members of the original sample who were still in the 293X3 career field.

Design

The data analysis scheme and research design consisted of two phases corresponding to the two central questions outlined above.

Phase 1. In order to assess the job change effects addressed by the first set of hypotheses, job-typing analyses were performed upon both time sets of occupational data to determine what naturally occurring job changes had taken place in the career field over the 17-month period.

Incumbents checked which of 345 radio operator tasks they performed and then made a relative 9-point rating of the amount of time (1 = very small amount, to 9 = very large amount) spent performing that particular task (see Appendix A for the full task list). Based upon the relative amount of time spent and the percentage of members performing each task, individuals were clustered into task groupings or job types. Hierarchical job type clustering analyses were performed using the Comprehensive Occupational Data Analysis Programs (CODAP) computer programs and techniques developed at AFHRL (see Morsh & Archer, 1967; Morsh & Christal, 1966; Stacey, Weissmuller, Barton, & Rogers, 1974; Weissmuller, Barton, & Rogers, 1974 for details). Job-typing was accomplished twice on the same individuals, once for their responses to the November 1974 survey, and again for their responses to the April 1976 survey. The job type and kind of work performed by the incumbent in November 1974—time 1, could then be compared with the job type of this individual in April 1976—time 2. By examining the tasks performed at two points in time, two kinds of information can be obtained.

The first kind of information deals with the nature of the job types identified; that is, which tasks changed, and which tasks remained the same. This information was then interpreted as an index of the stability of a job type over time.

The second kind of information indicating which job types the individuals were in at time 1 and at time 2 allows a tracking of the naturally occurring career progression of individuals within the career field.

A full description of the job typing analysis results is outlined in Appendix B of this report.

Phase 2. The second portion of the design addressed Hypotheses 2.1 through 2.4, and consisted of the attitudinal aspects associated with job characteristics and naturally occurring job changes.

Dependent variables consisted of measures of perceived job satisfaction tapped by three attitude items: job interest, felt utilization of talents and training, and overall job satisfaction. Independent variables consisted of individual, situational, and job type inputs. Individual characteristics included such variables as months on the job (MOJ), average aptitude scores from the Armed Services Vocational Aptitude Battery (ASVAB), age, grade, education level, and sex. (Appendix C lists the independent variables.) Situational inputs specific to the job setting consisted of measures such as the number of tasks performed, the number of subordinates supervised, the average task difficulty per unit time spent (ATDPUTS), and various skill levels required for the job. Job type inputs identified in the first phase of the study were also employed as independent variables for phase two.

A series of multiple linear regression models (Ward &. Jennings. 1973) and F-tests associated with restrictions on those models were then employed to determine the significant individual input. situational input and job type predictor variables (hypotheses 2.1 and 2.3) associated with the three job satisfaction criteria. An explanation of the model-seeking exercises and procedures for arriving at final regression models is detailed in Appendix D.

An Alternative Approach to Attitude Change Scores

Gould (1979) stresses the difficulty of using separate measures of the same variable at two points in time to assess changes in jobs and attitudes. The dilemma involved in the use of change measures. demonstrated by several investigators (Campbell. 1978; Garside. 1956; Overall & Woodward. 1975. 1976). is that the correlations between initial scores and change scores or gains tend to be spurious and redundant. Based upon an approach outlined by Cronbach and Furby (1970). Gould (1979) proposes that the effects of change can be assessed by predicting an attitude at time 2 while holding an initial attitude constant at time 1 as a predictor variable in a regression equation. Thus for hypothesis 2.2. individual and job characteristic predictor variables from both points in time may be included in the prediction equation. To assess individual and situational job changes. time 2 variables are systematically removed and tested for significance against the full model in order to determine their impact upon attitude prediction. This approach is exemplified by the general model seeking procedure outlined in Appendix D.

Attitude Prediction from All Inputs Combined

Once final regression models had been computed for individual. situational. and job type predictor sets. predictors from all sets were combined to predict each of the three satisfaction criteria. Imposing a restriction by removing job type data allowed the evaluation of whether information about group membership could contribute to predictions of job perceptions over and above individual and situational data.

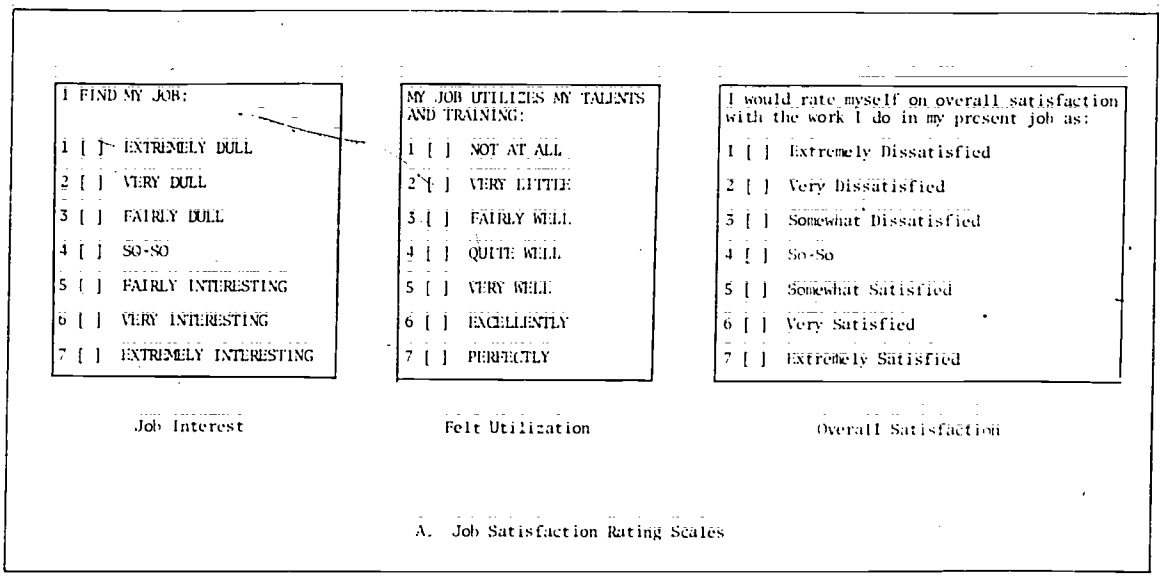
Instrumentation

Both the time 1 and time 2 background questions and the common 345 task list used in this project are contained in Appendix A. The occupational survey questionnaire consists of two sections: a background information section and a task list and rating scale section. Figure 1. Section A. portrays the job satisfaction rating scales used for job interest and felt utilization which appeared in both the time 1 and time 2 questionnaires and the overall satisfaction rating scale which appeared only in the time 2 survey questionnaire sent out by AFHRL. A portion of the task list and rating scales is shown in Figure 1. Section B.

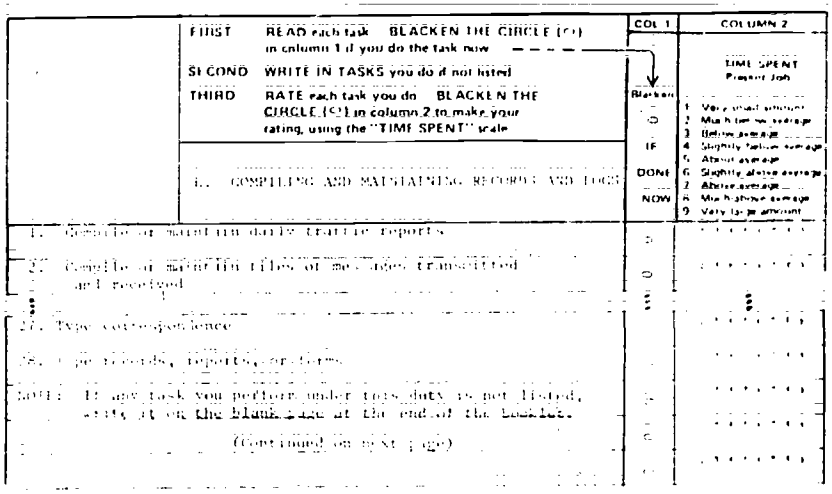
III. RESULTS

Longitudinal Job Type Changes

In order to address the first research question and hypotheses 1.1 and 1.2, CODAP job-typing was accomplished identifying eight job types for the November 1974 survey and eight slightly different job types for the April 1976 survey.



A. Job Satisfaction Rating Scales



B. Task Rating Scales

Figure 1. **Job perception criteria rating scales and task rating scales used in the study.**

Time 1 Versus Time 2 Job Types. Figure 2 depicts the two temporal job typing clusters based upon group member task responses. Job clusters labeled ground-to-air, point-to-point, airborne, and staff NCO radio-operations job types were identified in both the 1974 and 1976 sample surveys. The ground-to-air group increased from 157 members to 180 members, airborne gained 13 members, staff NCO gained eight members, while point-to-point decreased by five members over the 17-month time frame. The supervisory time 1 job type (156 members) appeared to be more specialized at time 2 with two types of supervisors being identified, one type reflecting 100 on-line supervisors (sometimes called "working" supervisors) and the other reflecting 77 supervisors dealing primarily with administrative tasks. The point-to-point apprentice group and the tactical specialists identified at time 1 were no longer present at time 2, while a mobile unit consisting of 10 members not present at time 1 emerged in the time 2 job clustering. Some individuals did not appear to cluster with any clearly identifiable group at either point in time and were labeled as isolates. Appendix B provides a detailed account of the job typing analysis and a listing of task, job difficulty, and various other changes which occurred over the 17-month period.

Movement of Individuals Within Job Types. The flow of individuals from one job type cluster or group membership to another was determined by a cross-tabulation procedure available within the CODAP system. Since the job types varied slightly from time 1 to time 2, the matrix is not entirely symmetrical, as shown by the slightly irregular diagonal in Table 1 below. For example, 85 group members in the ground-to-air job type at time 1 were still in that job type at time 2; however, six of the 157 time 1 ground-to-air members were identified as belonging to the airborne job type at time 2; 15 had moved to the point-to-point job type; 21 were on-line supervisors at time 2; and so on. To the extent that these 709 members are representative of all radio operators, the movement from one job type to another reflects the Air Force management assignment policy associated with radio operator jobs.

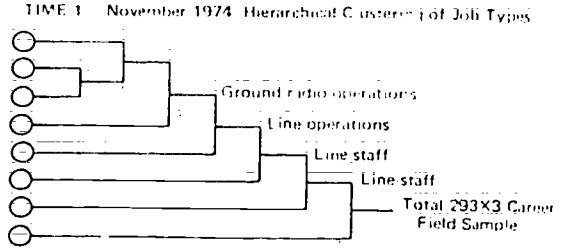
In addition, the stability of a job type is roughly indicated by a larger proportion of members remaining in a type over time than that proportion entering or exiting the job type. For instance, 137 out of 152 airborne members at time 1 were still members of the 163-member airborne job type at time 2.

Using the average job difficulty index (see Appendix B for computational details), the job types at both survey times were arrayed and graphed in Figure 3. This schematic arrays the job types at both time 1 and time 2 in terms of job difficulty and shows the individual migrations from any one given job type to all other job types. For simplicity, time 1 point-to-point apprentices are included with point-to-point, and time 2 supervisors are also combined. For example, the ground-to-air job type at time 1 consisted of 157 members performing at an average job difficulty level of 10.36. During the 17-month period, 72 members left the job type and went to six other job types within the career field; e.g., 15 members became point-to-point radio operators. In addition, 95 members from other job types (e.g., 40 from the point-to-point group) joined the ground-to-air job type at time 2. The job difficulty index for ground-to-air at time 2 was 11.06. The schematic indicates the stability of the job types in terms of number of group members as well as in terms of job difficulty. Thus, point-to-point, ground-to-air, airborne, and supervisors appear to be relatively stable job types while the tactical specialists, staff NCOs, and the mobile unit appear to fluctuate to a greater degree.

Prediction of Job Attitudes and Attitude Change

In order to answer the second general research question concerning the impact of individual, situational, and job type characteristics upon job satisfaction attitudes, a series of five model-seeking sequences was accomplished using the multiple linear regression techniques suggested by Gould (1979). Complete data were not available for all 709 individuals, so those cases with missing data

Members N	Percent	Job Type Description
157	22.14	Ground to Air
63	8.89	Point to Point
156	22.00	Supervisor
69	9.73	Point to Point Apprentice
152	21.44	Airborne
55	7.76	Staff NCO
26	3.67	Tactical Specialist
31	4.37	Isolates
Total 709	100.00	



Members N	Percent	Job Type Description
180	25.39	Ground to Air
58	8.18	Point to Point
100	14.10	Supervisor (On line)
77	10.86	Supervisor (Administrative)
163	22.99	Airborne
10	1.41	Mobile Unit
63	8.89	Staff NCO
58	8.18	Isolates
Total 709	100.00	

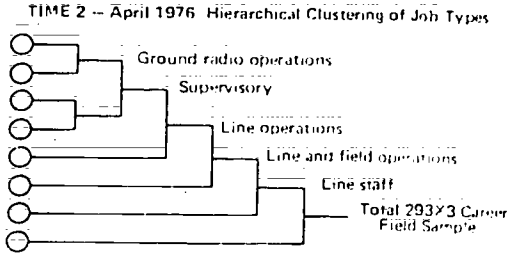


Figure 2. **Job type clusters for longitudinal measures of AFSC 293X3 Air Force Radio Operator.**

Table 1. **Cross-Tabulation of Individual Radio Operators in Time 1 and Time 2 Job Types**

	Time 2								
Time 1	Ground-to-Air	Air-borne	Point-to-Point	Sup On-line	Supv Admin	Staff NCO	Mobile Unit	Isolate	Time 1 Totals
Ground-to-Air	85	6	15	21	11	7	1	11	157
Airborne	4	137	0	2	1	1	0	1	152
Point-to-Point	19	4	11	11	4	4	0	10	63
Point-to-Point Apprentice	21	1	17	9	2	5	5	9	69
Supv	28	8	10	48	32	20	1	9	156
Staff NCO	5	1	1	8	20	14	0	3	55
TAC Spec.	7	2	1	1	2	6	1	6	26
Isolate	11	1	3	0	2	3	2	9	31
Time 2 Total	180	163	58	100	77	63	10	58	709

MIGRATION ANALYSIS - AFSC 293X3 N=709

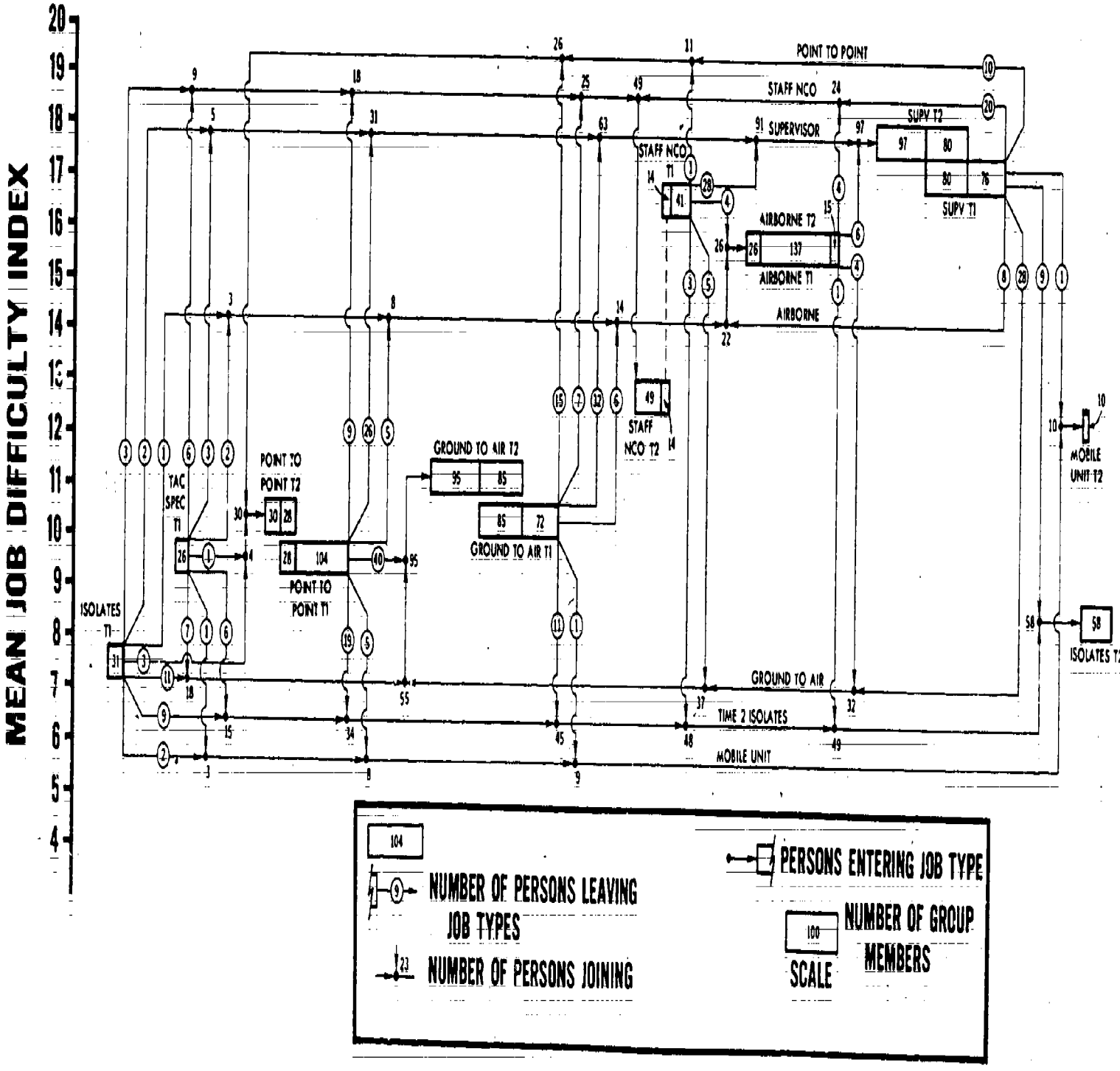


Figure 3. Schematic indicating the flow of 709 individual radio operator members between job types at time 1 to job types at time 2.

were removed from the sample, resulting in a data set of 654, a reduction of approximately 8 percent over all job types as shown in Table 2. The table shows that the cases in the reduced set are still representative of all job types. Tables 3 and 4 present the means, standard deviations, and correlations required for the linear regression model - seeking sequences specified in the following paragraphs. Data for four of the individual inputs (Table 3) were obtained from the Personnel Administrative Career Enlistment (PACE) files maintained at AFHRL. Correlations between the job satisfaction criteria at time 2 and various personnel and job variables are reported in Table 4. The logic of the model-seeking exercises based upon *F*-tests is detailed in Appendix D along with a graphic presentation for all five sequences. With the exception of model-seeking sequence 3, all three job satisfaction criteria (job interest, felt utilization, and overall satisfaction) are examined in each sequence.

Sequence 1: Individual Inputs. The starting models for predicting the three job satisfaction criteria via individual inputs are given in Appendix D. Aptitude, TAFMS, grade, education level, MOJ, age, and corresponding squared terms for each, along with sex, were interacted with the first-term versus career status in order to predict job interest. As Table 5 shows, MOJ and TAFMS were identified as being significantly associated with job interest at time 2. This relationship proved to be linear since none of the squared terms achieved significance; thus, with increases in MOJ and TAFMS, interest also increases. In addition, knowledge of career status did not significantly add to the predictive power of the individual input equations. A similar pattern emerged for the prediction of felt utilization of talents and training (see Table 6). For overall job satisfaction (Table 7) a slightly different set of individual input predictors emerged, consisting of MOJ, the average aptitude index (AI-an average taken across the four aptitude components of the ASVAB), and grade.

Table 8 presents the final individual input models for all three job satisfaction criteria together with the weights associated with all variables. In terms of predictive efficiency, felt utilization emerged with the highest multiple correlation coefficient, followed by interest and overall job satisfaction based upon individual characteristic predictors.

Table 2. Reduction of Sample Size for Correlation Analyses

Job Type	Time 1		Time 2	
	Original	Reduced	Original	Reduced
Ground-to-Air	157	148	180	172
Airborne	152	135	163	146
Supervisor	156	143	—	—
On-Line	—	—	100	90
Administrative	—	—	77	69
Point-to-Point	63	58	58	56
Point-to-Point Apprentice	69	65	—	—
Staff NCO	55	53	63	62
Isolates	31	29	58	50
Tactical Specialist	26	23	—	—
Mobile Unit	—	—	10	9
Totals	709	654	709	654

Table 3. Selected Variable Means, Standard Deviations and Percentages for Three Criteria and Various Predictors[a]

(N = 654 radio operators)

Variable	Time 1		Time 2	
	Mean	SD	Mean	SD
Criteria				
Job Interest	4.71	1.67	4.39	1.72
Felt Utilization	3.60	1.56	3.48	1.58
Job Satisfaction	-	-	4.46	1.68
Individual Inputs				
Total Active Federal Military Service (TAFMS)	(122.20)[b]	(85.74)[b]	139.20[c]	85.74[c]
Months on Job (MOJ)	14.84	12.37	19.86	11.11
Grade	4.82	1.10	5.18	1.26
Average Aptitude Index (AI)	—	—	65.08[c]	14.09[c]
Education	—	—	12.61[c]	1.01[c]
Age	—	—	30.69[c]	7.04[c]
Situational Inputs				
Number of Tasks (NTASKS)	67.78	40.27	67.77	53.63
Number of People Supervised (NSUPV)	1.63	3.68	2.08	1.29
Average Task Difficulty Per Unit Time Spent (ATDPUTS)	4.91	.42	5.04	.47

Variable	N	Percent
Males	637	97.40
Females	17	2.60
Skill Level (Time 2)		
3 Apprentice	2	.31
5 Specialist	381	58.26
7 Technician	235	35.93
9 Superintendent	36	5.50
First-Term Airmen (Time 2)	125	19.11
Career Airmen (Time 2)	529	80.89

[a]Full list of variables specified in Appendix C.
[b]TAFMS computed by subtracting 17 months-SD remains the same from Time 2 TAFMS.
[c]Taken from Personnel Records AFHRL (Personnel Administrative Career Enlistment-PACE file).

Table 4. Selected Bivariate Correlation Coefficients Between Job Satisfaction Criteria and Individual, Situational, and Job Type Inputs[a]

Variable	Time 2 Criteria		
	Job Interest	Felt Utilization	Overall Satisfaction
Individual Inputs[b]			
TAFMS	.25**	.30**	.19**
MOJ	.13**	.15**	.12**
Grade	.24**	.28**	.17**
AI	-.05	-.03	-.09*
Education	-.05	-.08	-.08
Age	.25**	.29**	.18**
Sex	.04	.05	.04
Situational Inputs[b]			
NTASKS	.28**	.34**	.26**
NSUPV	.10*	.15**	.06
NTDPUTS	.11**	.02	.05
Skill Level (Time 2)			
3 Apprentice	.00	.02	-.02
5 Specialist	-.22**	-.28**	-.16**
7 Technician	.15**	.19**	.13**
9 Superintendent	.14**	.20**	.09*
Job Types[b]			
Time 1			
1 Ground-to-Air	-.06	-.10*	-.01
2 Point-to-Point	-.06	-.07	-.08
3 Supervisor	-.08	-.07	-.08
4 Apprentice Pt-to-Pt	-.14**	-.12**	-.12**
5 Airborne	.26**	.28**	.21**
6 Staff NCO	.06	.09*	.05
7 TNC Spec	-.05	-.05	-.05
8 Isolates	.03	-.02	.03
Time 2			
1 Ground-to-Air	-.05	-.02	-.01
2 Point-to-Point	-.20**	-.17**	-.17**
3 Supv On-Line	.02	.05	.05
4 Supv Admin	.04	-.02	.01
5 Airborne	.27**	.29**	.23**
6 Mobile Unit	-.04	-.07	-.09*
7 Staff NCO	-.01	-.08	-.03
8 Isolates	-.17**	-.18**	-.17**

[a]Full list of variables specified in Appendix C.

[b]Zero order correlations greater than .088 significant at $p < .05$* and greater than .115 significant at $p < .01$**.

Table 5. Regression Analyses Identifying Significant Individual Inputs Predictive of Job Interest[a]

Model	Variance Source Tested	Full Model	R^2	R	df_1	df_2	F[b]	
1	Starting Model	—	.105	.324	—	—	—	—
2	Career Interactions	1	.088	.296	12	627	1.02	NS
3	AI^2, $Grade^2$, Age^2, $Education^2$	2	.085	.292	1	639	.39	NS
4	$TAFMS^2$, MOJ^2	3	.080	.281	2	613	1.69	NS
5	Sex	4	.080	.281	1	615	.03	NS
6	Education	5	.079	.281	1	616	.97	NS
7	Months on Job (MOJ)	6	.073	.270	1	617	4.35	*
8	Aptitude Index (AI)	6	.075	.273	1	617	3.18	NS
9	Career Status	8	.071	.271	1	618	.63	NS
10	Age	9	.074	.271	1	619	.06	NS
11	TAFMS	10	.066	.257	1	650	5.24	*
12[c]	Grade	10	.072	.269	1	650	.79	NS

[a] Full list of variables in each model specified in Appendix D.
[b] NS = nonsignificant, * significant at .05 level.
[c] Final model: Job Interest = MOJ + TAFMS + constant.

Table 6. Regression Analyses Identifying Significant Individual Inputs Predictive of Felt Utilization[a]

Model	Variance Source Tested	Full Model	R^2	R	df_1	df_2	F[b]	
1	Starting Model	—	.133	.364	—	—	—	—
2	Career Interactions	1	.115	.339	12	627	1.08	NS
3	AI^2, $Grade^2$, Age^2, $Education^2$	2	.109	.330	1	639	.98	NS
4	$TAFMS^2$, MOJ^2	3	.107	.327	2	643	.80	NS
5	Sex	4	.107	.327	1	645	.09	NS
6	Education	5	.102	.320	1	646	3.39	NS
7	Months on Job (MOJ)	6	.091	.306	1	647	6.09	*
8	Aptitude Index (AI)	6	.101	.318	1	647	.85	NS
9	Career Status	8	.099	.315	1	648	1.16	NS
10	Age	9	.099	.315	1	649	.05	NS
11	TAFMS	10	.086	.294	1	650	9.16	**
12[c]	Grade	10	.098	.313	1	650	.49	NS

[a] Full list of variables in each model specified in Appendix D.
[b] NS = nonsignificant, * significant at .05 level; ** significant at .01 level.
[c] Final model: Felt Utilization = MOJ + TAFMS + constant.

Table 7. Regression Analyses Identifying Significant Individual Inputs Predictive of Overall Job Satisfaction[a]

Model	Variance Source Tested	Full Model	R^2	R	df_1	df_2	F[b]	
1	Starting Model	—	.074	.272	—	—	—	—
2	Career Interactions	1	.067	.259	12	627	.41	NS
3	AI^2, $Grade^2$, Age^2, $Education^2$	2	.065	.254	4	639	.38	NS
4	$TAFMS^2$, MOJ^2	3	.058	.241	2	643	2.21	NS
5	Sex	4	.058	.240	1	645	.48	NS
6	Education	5	.055	.235	1	646	1.56	NS
7	Months on Job (MOJ)	6	.047	.217	1	647	5.56	*
8	Aptitude Index (AI)	6	.047	.216	1	647	6.00	*
9	Career Status	6	.055	.234	1	647	.19	NS
10	Age	9	.055	.234	1	648	.17	NS
11[c]	TAFMS	10	.050	.223	1	649	3.31	NS
12	Grade	11	.024	.156	1	650	17.43	**

[a]Full list of variables in each model specified in Appendix D.
[b]NS = nonsignificant; * significant at .05 level; ** significant at .01 level.
[c]Final model: Overall Job Satisfaction = MOJ — aptitude + grade + constant.

Table 8. Sequence 1 Summary - Final Individual Input Regression Models for Job Interest, Felt Utilization, and Job Satisfaction[a]

Variable	R^2	R	Validity[b]	Raw Weight	Standard Weight
Job Interest	.072	.269			
MOJ			.131**	.011	.088
TAFMS			.255**	.005	.239
Reg Constant				3.513	
Felt Utilization	.098	.313			
MOJ			.150**	.011	.010
TAFMS			.298**	.005	.280
Reg Constant				2.511	
Overall Job Satisfaction	.021	.156			
MOJ			.125**	.011	.090
Aptitude			-.091*	-.011	-.116
Grade			.168**	.219	.165
Reg Constant				1.010	

[a]Full list of variables in each model specified in Appendix D.
[b]Zero order correlations greater than .088 are significant at $p < .05$*; and greater than .115 are significant at $p < .01$**.

As shown by the validities (the zero-order correlations of variables with the satisfaction perceptions), as MOJ and TAFMS increase so do interest, felt utilization, and overall satisfaction.

In terms of individual inputs, prediction of interest and utilization appear to be of a higher caliber and slightly more parsimonious, although all multiple R values were significantly different ($p < .01$) from zero, partially substantiating hypothesis 2.1.

Sequence 2, Situational Inputs. The second model-seeking exercise sequence included the individual inputs identified in sequence one, together with situational inputs such as the number of tasks performed (NTASK), average task difficulty per unit time spent (ATDPUTS), number of subordinates reporting for supervision (NSUPV), these terms squared, together with skill level (3 =apprentice, 5 =specialist, 7 =technician, and 9 =superintendent) at time 2. As described previously, most variables were interacted with knowledge of career status (see Appendix D for full or starting model). Tables 9, 10, and 11 present the findings from this model-seeking sequence.

Table 9. Regression Analyses Identifying Significant Situational Inputs Predictive of Job Interest[a]

Model	Variance Source Tested	Full Model	R^2	R	df_1	df_2	F[b]	
1	Starting Model	—	.167	.408	—	—	—	—
2	Career Interactions	1	.163	.404	6	636	.43	NS
3	Skill Levels	2	.159	.399	3	642	1.12	NS
4	$ATDPUTS^2$	3	.159	.398	1	645	.21	NS
5	$NSUPV^2$	4	.159	.398	1	646	.03	NS
6	$NTASK^2$	5	.125	.354	1	647	25.50	**
7	ATDPUTS	5	.155	.394	1	647	2.93	NS
8[c]	NSUPV	7	.152	.390	1	648	2.10	NS

[a]Full list of variables in each model specified in Appendix D.
[b]NS =nonsignificant; **=significant at .01 level.
[c]Final Model: Job Interest =MOJ + TAFMS + NTASK + $NTASK^2$ + constant.

Table 10. Regression Analyses Identifying Significant Situational Inputs Predictive of Felt Utilization[a]

Model	Variance Source Tested	Full Model	R^2	R	df_1	df_2	F[b]	
1	Starting Model	—	.223	.472	—	—	—	—
2	Career Interactions	1	.218	.467	6	636	.59	NS
3	Skill Levels	2	.203	.451	3	642	1.00	**
4	$ATDPUTS^2$	2	.218	.467	1	642	.18	NS
5	$NSUPV^2$	4	.217	.466	1	643	.01	NS
6	$NTASK^2$	5	.193	.439	1	644	20.05	**
7	ATDPUTS	5	.212	.460	1	644	1.01	*
8[c]	NSUPV	5	.216	.464	1	644	.95	NS

[a]Full list of variables in each model specified in Appendix D.
[b]NS =nonsignificant; * significant at .05 level; ** significant at .01 level.
[c]Final model: Felt Utilization =MOJ + TAFMS + skill level + NTASK + $NTASK^2$ + ATDPUTS + constant.

Table 11. Regression Analyses Identifying Significant Situational Inputs Predictive of Overall Job Satisfaction[a]

Model	Variance Source Tested	Full Model	R^2	R	df_1	df_2	F[b]	
1	Starting Model	—	.138	.372	—	—	—	—
2	Career Interaction	1	.136	.359	6	635	.24	NS
3	Skill Levels	2	.134	.366	3	641	.52	NS
4	ATDPUTS^2	3	.134	.366	1	644	.08	NS
5	NSUPV^2	4	.134	.366	1	645	.13	NS
6	NTASK^2	5	.099	.314	1	646	26.08	**
7	ATDPUTS	5	.133	.364	1	646	.72	NS
8[c]	NSUPV	7	.129	.360	1	647	2.64	NS

[a]Full list of variables in each model specified in Appendix D.
[b]NS = nonsignificant. ** significant at .01 level.
[c]Final model: Overall Job Satisfaction = MOJ = aptitude + grade + NTASK + NTASK^2 + constant.

The final situational input model for job interest contains a squared term for the number of tasks performed, indicating a curvilinear relationship between interest and tasks accomplished. This task effect indicates that increasing the number of tasks performed may increase job interest up to a point, after which more tasks being added to a job would decrease job interest.

A similar pattern emerged for the prediction of utilization with the addition of knowledge of skill levels and task difficulty (see Table 10).

The prediction of overall satisfaction (Table 11) increased from a multiple R of .16 to a multiple R of .36 with the inclusion of NTASK and NTASK^2 similar to the multiple R increase from .27 to .39 for the job interest prediction. By direction, overall satisfaction is positively related to tasks, but only up to a certain limit after which satisfaction decreases as more tasks are added.

Table 12 presents a summary of the final individual and situational models predictive of all three satisfaction criteria. Regression weights associated with the variables and the regression constants are also reported. Including job situation variables has increased the predictive efficiency (R^2) for job interest from .072 to .152, for utilization from .098 to .216, and for overall satisfaction from .024 to .129. Based upon this information, it appears that attitudes toward job interest and utilization of talents and training and overall satisfaction are highly associated with situational job aspects, perhaps to a greater degree than with individual aspects. Examining the standard regression weights for all three models indicates that the NTASK variable is a substantial contributor to all criteria, and demonstrates a curvilinear function in each instance. This may be interpreted as a saturation effect in which satisfaction increases with the number of tasks performed up to a certain point and then decreases as more tasks are added.

Since all multiple R values were significant from zero ($p < .01$) these predictions confirm the statement made by hypothesis 2.1 that job satisfaction perceptions can be effectively predicted from a knowledge of both individual and situational input variables.

Sequence 3: Attitude Change. Up to this point, the analyses have been directed toward predicting time 2 attitudes toward job interest, utilization, and satisfaction. As outlined in the design section, attitudes at time 1 may be used as predictor variables to control for levels of initial attitude in order to determine or detect variance associated with the amount of attitude change that occurred between two points in time.

Table 12. Sequence 2 Summary - Final Individual and Situational Input Regression Models for Job Interest, Felt Utilization, and Job Satisfaction[a]

Variable	R^2	R	Validity[b]	Raw Weight	Standard Weight
Job Interest	.152	.390			
MOJ			.131**	.004	.035
TAFMS			.253**	.003	.155
NTASK			.284**	.021	.660
$NTASK^2$			.176**	-.000	-.454
Reg Constant				2.799	
Felt Utilization	.216	.464			
MOJ			.150**	.023	.135
TAFMS			.298**	.002	.135
Skill Level					
3			.018	.840	.029
5			-.279**	-.236	-.073
7			.188**	.000	.000
9			.202**	.788	.114
NTASK			.310**	.019	.654
$NTASK^2$			.228**	-.000	-.406
NTDPUTS			.023	-.284	-.085
Reg Constant				3.591	
Overall Job Satisfaction	.129	.360			
MOJ			.125**	.005	.040
Aptitude			-.094*	-.013	-.107
Grade			.168**	.112	.084
NTASK			.264**	.021	.667
$NTASK^2$			.162**	-.000	-.469
Reg Constant				3.559	

[a]Full list of variables in each model specified in Appendix D.
[b]Zero order correlations greater than .088 are significant at $p < .05$*, and greater than .115 are significant at $p < .01$**.

A short description of criterion attitude shifts is presented first. Figure 4 portrays the average job interest responses at time 1 and time 2 as a function of specific job type. With the exception of the administrative supervisors, all job types displayed a slight decrease in perceived job interest. By contrast, felt utilization increased for ground-to-air and on-line supervisors, while other types evidenced a slight decrease (see Figure 5). Although measures were not available for the overall job satisfaction attitude item at time one, average responses by job type at time two are presented in Figure 6 for comparison with the other two criteria.

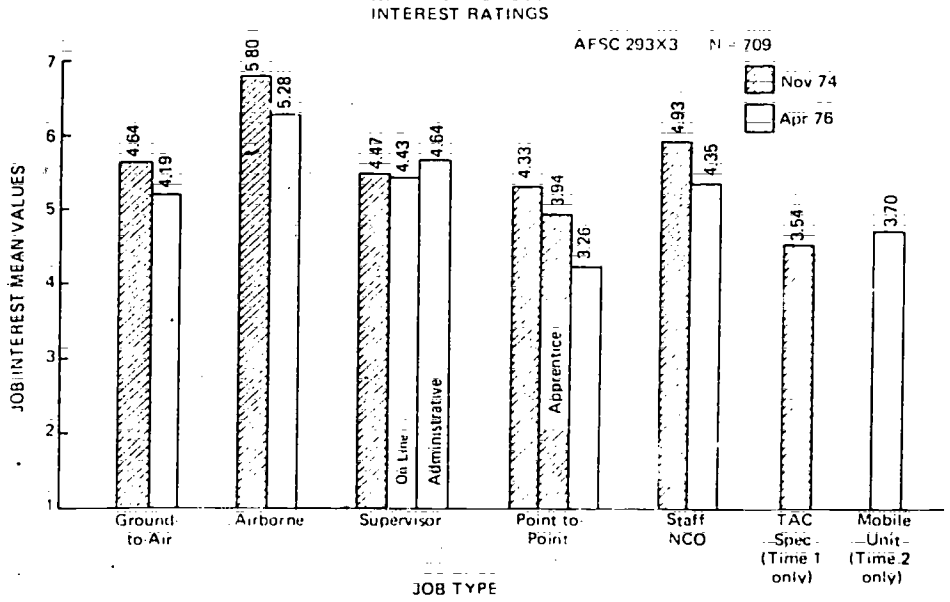


Figure 4. **Job interest at Time 1 and Time 2 as a function of job type.**

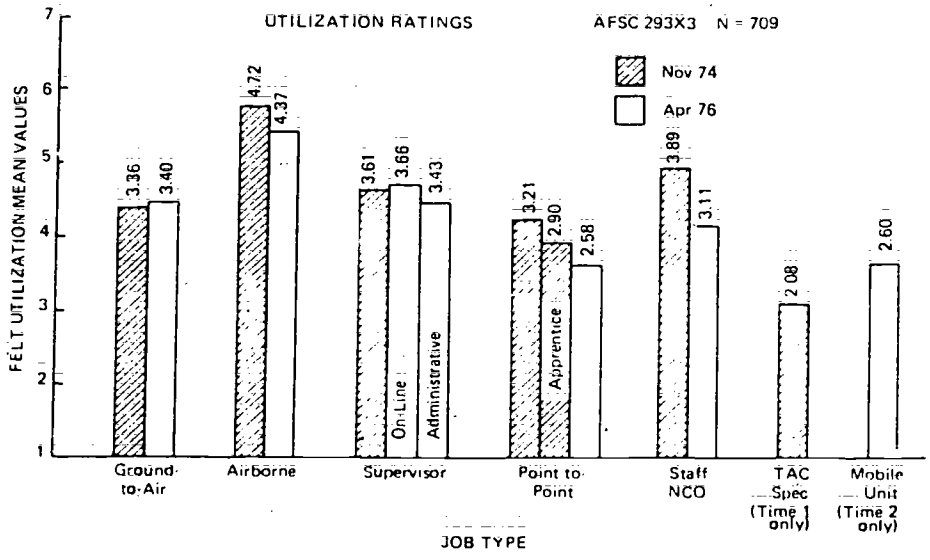


Figure 5. **Felt utilization of talents and training at Time 1 and Time 2 as a function of job type.**

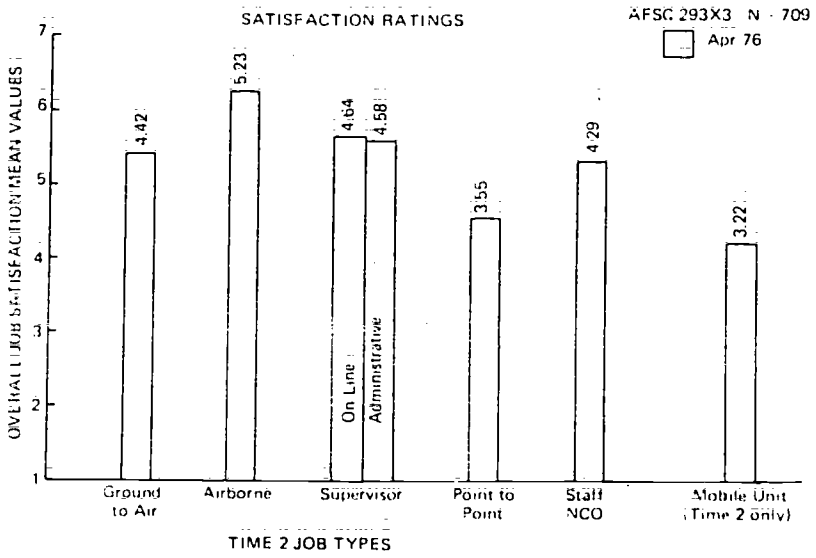


Figure 6. **Overall job satisfaction at Time 2 as a function of job type.**

Visual examination of these graphs also reveals that job satisfaction perceptions tend to vary as a function of specific job types and the work associated with those types. Job satisfaction measures taken at an aggregated career field level would probably not detect these differences in job types.

Turning to the regression predictions of attitude, Tables 13 and 14 indicate that changes in MOJ from time 1 to time 2 do not appreciably enhance prediction of interest or utilization at time 2 while holding interest and utilization attitudes at time 1 constant. However, in support of hypothesis 2.2, changes in the number of tasks performed tended to be associated with both criteria. In addition, changes in ATDPUTS also proved to be a significant predictor of felt utilization, indicating that utilization attitudes are positively related to task difficulty. In order to assure that the attitude change associated with the two final models was a function of the joint contribution of both individual and situational inputs, all individual inputs at both points in time were removed and tested against both final attitude change models. In each instance, individual inputs achieved significance and were again replaced in the final attitude change equations. Table 15 presents both of the final attitude change models with regression weights and constants. In both instances the predictive efficiency of the time 2 attitude equations are substantial. The differences of R^2 values for interest (Table 12, .152) and interest change predictions (Table 15, .244) are evident, as are the differences for utilization (.216 vs. .303). Examination of the standard weights indicates this effect is not due entirely to the time 1 attitudes being held constant in the predictions, but rather from situational job characteristics in conjunction with individual inputs.

Table 13. Regression Analyses Identifying Significant Job Aspect Changes Related to Changes in Job Interest[a]

Model	Variance Source Tested	Full Model	R^2	R	df_1	df_2	F[b]	
1.	Starting Model	—	.244	.494	—	—	—	—
2.	MOJ Time 2	1	.244	.494	1	645	.02	NS
3	NTASK and $NTASK^2$ Time 2	2	.189	.434	2	646	23.67	**
4	All individual inputs Time 1 and Time 2	2	.230	.480	2	646	5.89	**

[a]Full list of variables in each model specified in Appendix D.
[b]NS = nonsignificant, ** significant at .01 level.
[c]Final model: Job Interest = MOJ_1 + $TAFMS_1$ + $TAFMS_2$ + $NTASK_1$ + $NTASK^2_1$ + $NTASK_2$ + $NTASK^2_2$ + $interest_1$ + constant.

Table 14. Regression Analyses Identifying Significant Job Aspect Changes Related to Changes in Felt Utilization[a]

Model	Variance Source Tested	Full Model	R^2	R	df_1	df_2	F[b]	
1	Starting Model	—	.303	.551	—	—	—	—
2.	MOJ Time 2	1	.303	.551	1	640	.12	NS
3	NTASK and $NTASK^2$ Time 2	2	.239	.488	2	641	29.69	**
4	ATDPUTS Time 2	2	.298	.546	1	641	4.56	*
5	All individual inputs Time 1 and Time 2	2	.295	.544	2	641	3.53	*

[a]Full list of variables in each model specified in Appendix D.
[b]NS = nonsignificant, * significant at .05 level, ** significant at .01 level.
[c]Final model: Felt Utilization = MOJ_1 + $TAFMS_1$ + $TAFMS_2$ + $NTASK_1$ + $NTASK^2_1$ + $NTASK_2$ + $NTASK^2_2$ + $ATDPUTS_1$ + $ATDPUTS_2$ + skill level + $utilization_1$ + constant.

Table 15. Sequence 3 Summary - Final Attitude Change Regression Models for Job Interest and Felt Utilization Criteria[a]

Variable	R^2	R	Validity[b]	Raw Weight	Standard Weight
Job Interest	.244	.494			
MOJ Time 1			.038	-.003	-.024
TAFMS Time 1 and 2			.255**	.003	.137
NTASK Time 1			.253**	-.010	-.231
$NTASK^2$ Time 1			.228**	.000	.233
NTASK Time 2			.284**	.020	.630
$NTASK^2$ Time 2			.176**	-.000	-.457
Job Interest Time 1			.378**	.316	.307
Reg Constant				1.92	
Felt Utilization	.303	.551			
MOJ Time 1			.027	-.009	-.068
TAFMS Time 1 and Time 2			.208**	.002	.114
NTASK Time 1			.257**	-.006	-.162
$NTASK^2$ Time 1			.211**	.000	.085
NTASK Time 2			.340**	.019	.652
$NTASK^2$ Time 2			.228**	-.000	-.129
VTDPUTS Time 1			.023	.179	.048
VTDPUTS Time 2			.080	-.292	-.037
Skill Level					
3			.013	1.087	.038
5			-.279**	-.133	-.057
7			.188**	.000	.008
9			.202**	.131	.062
Felt Utilization Time 1			.431**	.328	.324
Reg Constant				2.131	

[a] Full set of variables in each model specified in Appendix D.

[b] Zero order correlations greater than .088 are significant at $p < .05$ *, and greater than .115 are significant at $p < .01$ **

Results of these analyses may be interpreted in the following manner. For the sake of brevity, only the job interest criterion will be considered. Felt utilization would follow a similar interpretation pattern. The final model for predicting interest is shown in Table 15, and takes the following equation form:

$$\text{Job Interest}_{\text{Time 2}} = -.003\,(MOJ_{T1}) + .003\,(TAFMS) - .01\,(NTASK_{T1}) + .000\,(NTASK^2_{T1}) + .02\,(NTASK_{T2}) - .000\,(NTASK^2_{T2}) + .316\,(\text{Job Interest}_{T1}) + 1.92$$

Where the numbers indicate raw regression weights applied to the variables and 1.92 is the regression constant.

Values can be entered in the equation using a typical 293X3 airman's scores (averages) for MOJ (1484 MOS) TAFMS, (122.20 MOS), number of tasks at time 1 (67.68) and time 2 (67.77), and job

interest at time 1 (4.71—between so-so and fairly interesting) in order to predict the job interest score at time two. This example results in a value of 4.4 (midway between so-so and fairly interesting) which is the average job interest value at time 2 (see Table 3).

Now if at time 2 the same typical radio operator was performing 120 tasks or 52 more tasks than at time 1, the job interest value at time 2 would increase to 5.5, midway between fairly and very interesting. The new time 2 attitude constitutes an increase of more than one full interest scale point.

It should be observed, however, that the typical airman would not be expected to work harder since ATDPUTS was not a significant predictor, but rather the airman would be expected to do more *kinds* of work during a typical shift. Such an interpretation is consistent with the job enrichment concept involving the core job dimension of *variety* (Hackman & Lawler, 1971; & Hackman & Oldham, 1974). According to job enrichment predictions, as variety increases, satisfaction increases, and boredom decreases.

In addition to the detected job satisfaction changes, direct assessment items for several job areas (including base of assignment, task variety, number of tasks, difficulty, meaningfulness, and responsibility) were also obtained. Table 16 presents the correlations of these perceived job change attitude items with the three time 2 job satisfaction criteria. In each instance, all positively worded items indicated an upward change associated with each factor and the three criteria, while negatively worded items indicated a downward trend. The pattern of correlations indicates that individuals saw their activities over the 17-month period for all five areas as being associated with their job satisfaction—that is, performing more varied, difficult, and meaningful tasks and responsibilities led to higher levels of interest, felt utilization, and overall satisfaction. These findings indicate that individuals were aware of job change processes in the job environment.

Table 16. Correlations Between Items Pertaining to Perceived Changes Associated with Job Interest, Felt Utilization, and Overall Job Satisfaction

		Time 2 Criteria[a]		
	Perception of Change Attitude Items	Job Interest	Felt Utilization	Overall Job Satisfaction
1	Reassigned to a base in a new location	-.15**	-.16**	-.18**
2	Reassigned to a totally new job at the same base	-.11*	.06	.11*
3	Perform a greater variety of tasks	.32**	.25**	.29**
4	Perform a smaller variety of tasks	-.21**	-.19**	-.21**
5	Perform a larger number of tasks	.30**	.21**	.22**
6	Perform a smaller number of tasks	-.23**	-.19**	-.20**
7	Perform more difficult duties	.37**	.31**	.30**
8	Perform easier duties	-.23**	-.21**	-.20**
9	Perform more meaningful work	.37**	.33**	.37**
10	Perform less meaningful work	-.37**	-.33**	-.38**
11	Have been assigned more responsibilities	.31**	.30**	.30**
12	Have been assigned less responsibilities	-.23**	-.20**	-.21**
13	Have been reassigned to a supervisory job	.01	.07	.03
14	There has been nearly a complete change in duties and responsibilities	-.01	.05	.04
15	There have been no significant changes	-.10*	.03	.10

[a]Zero order correlations greater than .088 are significant at $p < .05$*, and greater than .115 are significant at $p < .01$**.

Sequence 4. Job Type Inputs. The fourth model-seeking exercise was addressed to hypothesis 2.3 which stated that job satisfaction perceptions may be predicted from a knowledge of the job types identified in phase one of this study. The starting models for all three criteria consisted of all possible combinations of job type movement from time 1 to time 2. Since eight job types were identified at time 1 and eight job types were identified at time 2, 64 interaction variables were computed as a starting model. A restriction was then imposed which identified only the number of individuals in job types at both points in time, regardless of the actual job movements that took place over the 12-month period. Tables 17, 18, and 19 present the results of the *F* tests between the 64-variable, full interacting model, and the 16 (8 + 8) distinct job type variable model.

Table 17 Regression Analyses Identifying Significant Job Types Predictive of Job Interest[a]

Model	Variance Source Tested	Full Model	R^2	R	df_1	df_2	F[b]	
1	Starting Model	—	.214	.463	—	—	—	—
2	Job Type Interactions Time 1 and Time 2	1	.142	.376	44	595	1.25	NS
3	Job Types Time 2	2	.088	.296	7	639	5.71	**
4[c]	Job Types Time 1	2	.123	.351	7	639	1.96	NS

[a]Full list of variables in each model specified in Appendix D.
[b]NS =nonsignificant, ** significant at .01 level.
[c]Final Model: Job Interest =8 job types at Time 2 + constant.

Table 18. Regression Analyses Identifying Significant Job Types Predictive of Felt Utilization[a]

Model	Variance Source Tested	Full Model	R^2	R	df_1	df_2	F[b]	
1	Starting Model	—	.199	.447	—	—	—	—
2[c]	Job Type Interactions Time 1 and Time 2	1	.161	.401	44	595	.65	NS
3	Job Types Time 2	2	.137	.370	7	639	2.66	*
4	Job Types Time 1	2	.102	.320	7	639	6.39	**

[a]Full list of variables in each model specified in Appendix D.
[b]NS =nonsignificant, * significant at .05 level, ** significant at .01 level.
[c]Final model: Felt Utilization =8 job types at Time 1 + 8 job types at Time 2 + constant.

Table 19. Regression Analyses Identifying Significant Job Types Predictive of Overall Job Satisfaction[a]

Model	Variance Source Tested	Full Model	R^2	R	df_1	df_2	F[b]	
1	Starting Model	—	.188	.434	—	—	—	—
2	Job type interactions Time 1 and Time 2	1	.123	.350	44	595	1.09	NS
3	Job types Time 2	2	.063	.252	7	639	6.18	**
4[c]	Job types Time 1	2	.105	.324	7	639	1.89	NS

[a]Full list of variables in each model specified in Appendix D.
[b]NS =nonsignificant, ** significant at .01 level.
[c]Final model: Overall Job Satisfaction =8 job types at Time 2 + constant.

In support of hypothesis 2.3 pertaining to job types predicting time 2 job satisfaction perceptions, results of these F tests indicated that job interest and overall satisfaction were significantly associated with the current job types that individuals occupied, while felt utilization was associated with both the current job types that individuals occupied and job types from which those individuals had come 17 months previously. Table 20 presents the final models for the three criteria predicted by job types.

Analysis of sequence 4 predicted scores. Using the regression equations presented in Table 20, predicted scores for job types were calculated for all three criteria. Since the analyses for felt utilization indicated that job types at both time 1 and time 2 were predictive of that attitude at time 2, a predicted score matrix was prepared for those job types existing at both points in time. Table 21 presents the predicted scores for the three criteria. These predicted scores may be regarded as indicants for maximizing job attitudes through the process of assignments. Considering the simpler attitudes of job interest and overall satisfaction first, notice that an assignment strategy which moves point-to-point operators to supervisory positions enhances job interest by over one full scale point, from 3.27 (scale point 3—fairly dull) to about 4.47 (4—so-so and 5—fairly interesting). For overall satisfaction, point-to-point operators given supervisory working tasks would exhibit a similar increase in expected overall satisfaction (from 3.52 to 4.51). Of course not all point-to-point operators could be assigned as full-time supervisors; however, the introduction of some supervisory tasks would be expected to boost job interest and overall satisfaction attitudes to some extent. Obviously such assignment strategies would not be needed for airborne job types since their levels of interest and job satisfaction are already relatively higher than the supervisory job types. The work assignment strategies suggested here are consistent with general job redesign and job enrichment principles advanced by Hackman and Lawler (1971) and Hackman and Oldham (1974).

Personnel and duty assignment strategies for maximizing felt utilization should take into account both the present job type of an individual and previous job type assignments. Referring again to Table 21, notice that apprentice point-to-point operators at time 1 assigned to point-to-point operations at time 2 have the lowest predicted scores at time 2. If some supervisory tasks could be introduced, felt utilization predicted scores would be expected to increase to some extent from the scale value of 2 (very little) toward a value of 3 (fairly well). Similarly, if personnel assignment options existed for reassigning a ground-to-air operator (time 1) to either a point-to-point position (2.68) or to an on-line supervisory position (3.70), the supervisory assignment would prove to be the most advantageous in terms of felt utilization. Likewise, if a point-to-point job were open and several personnel were eligible to fill the position, point-to-point apprentices and ground-to-air operators would not feel as utilized in that job as would a staff NCO or airborne operator.

Sequence 5. All Inputs Combined. Using the sequence 4 job input models developed earlier in this section and those models developed in sequence 2, a final set of regression predictions was computed and tested to address hypothesis 2.4. According to this hypothesis, if job types (based upon the radio operator career field) account for a significant amount of job perception variance while holding individual and situation variables constant, this would mean that predictions could be improved by considering group membership data as well as individual and situational information. Models incorporating all three types of information are shown as the starting models in Table 22. The job type predictors identified in sequence 4 above were then removed to test the contribution of job types to the prediction of all three criteria. As the table indicates, job types were significant in each instance. Knowing the group an individual belongs to appears to impact the prediction of job perceptions, as well as knowing the individual and situational characteristics including grade and number of tasks. Individual, situational and job type models developed for other career areas may differ from those developed in this report. Partial evidence for this conclusion may be found in the

Table 20. Sequence 4 Summary - Final Job Type Regression Models for Job Interest, Felt Utilization, and Job Satisfaction[a]

Variable	R^2	R	Validity[b]	Raw Weight	Standard Weight
Job Interest	.123	.351			
Ground to Air			-.051	-.114	-.029
Point-to-Point			-.200**	-1.090	-.178
Supervisor (On-line)			.018	.108	.022
Supervisor (Admin)			.038	.222	.040
Airborne			.268**	.888	.216
Mobile Unit			-.042	-.580	-.039
Staff NCO			-.007	-.003	-.001
Isolate			-.166**	-.958	-.148
Reg Constant				4.358	
Felt Utilization	.161	.401			
Ground-to-Air			-.101*	-.084	-.022
Point-to-Point			-.075	-.009	-.002
Supervisor			-.066	.024	.006
Point-to-Point apprentice			-.118**	-.101	-.019
Airborne			.281**	.568	.145
Staff NCO			.094*	.796	.137
Tactical Specialist			-.048	-.014	-.002
Isolate			-.024	.374	.049
Ground-to-Air			-.020	.167	.047
Point-to-Point			-.173**	-.650	-.115
Supervisor (On-line)			.052	.366	.080
Supervisor (Admin)			-.017	-.083	-.016
Airborne			.293**	.605	.159
Mobile Unit			-.069	-.727	-.054
Staff NCO			-.076	-.366	-.068
Isolate			-.179**	-.839	-.141
Reg Constant				3.418	
Overall Job Satisfaction	.105	.324			
Ground-to-Air			-.006	-.013	-.003
Point-to-Point			-.172**	-.937	-.156
Supervisor (On-line)			.047	.201	.041
Supervisor (Admin)			.010	.052	.010
Airborne			.230**	.724	.180
Mobile Unit			-.087	-1.232	-.086
Staff NCO			-.033	-.164	-.029
Isolate			-.168**	-.975	-.155
Reg Constant				4.455	

[a]Full list of variables in each model specified in Appendix D.
[b]Zero order correlations greater than .088 are significant at $p < .05$*, and greater than .115 are significant at $p < .01$**.

Table 21. Job Type Predicted Scores for Job Interest Overall Job Satisfaction, and Felt Utilization

Job Interest Time 2		Overall Satisfaction Time 2	
Job Type	Predicted Score	Job Type	Predicted Score
Airborne	5.25	Airborne	5.18
Supv (Admin)	4.58	Supv (On-line)	4.66
Supv (On-line)	4.47	Supv (Admin)	4.51
Staff NCO	4.35	Ground-to-Air	4.44
Ground-to-Air	4.24	Staff NCO	4.29
Mobile Unit	3.78	Point-to-Point	3.52
Point-to-Point	3.27	Mobile Unit	3.22

	Felt Utilization Time 2 Job Types					
Felt Utilization Time 1 Job Types	Ground to-Air	Point to-Point	Supv On-line	Supv Admin	Airborne	Staff NCO
Point-to-Point Apprentice	3.48	2.67	3.68	3.23	3.92	2.95
Ground-to-Air	3.50	2.68	3.70	3.25	3.40	2.97
Point-to-Point	3.58	2.76	3.75	3.33	4.01	3.04
Supv	3.61	2.79	3.81	3.36	4.05	3.08
Airborne	4.15	3.34	4.35	3.90	4.59	3.62
Staff NCO	4.38	3.56	4.58	4.13	4.82	3.85

Table 22. Sequence 5 Summary-Regression Analyses Testing All Inputs Combined in Predicting Job Interest, Felt Utilization and Overall Job Satisfaction[a]

Model	Variance Source Tested	Full Model	R^2	R	df_1	df_2	F[b]
Job Interest							
1	Starting Model	—	.188	.433	—	—	—
2	Job Types Time 2	1	.152	.390	7	642	1.01**
Felt Utilization							
1	Starting Model	—	.250	.500	—	—	—
2	Job Types Time 1 and Time 2	1	.216	.464	11	631	2.01*
Overall Job Satisfaction							
1	Starting Model	—	.158	.397	—	—	—
2	Job Types Time 2	1	.129	.360	7	642	3.17**

[a]Full list of variables in each model specified in Appendix D.
[b]* Significant at .05 Level; ** significant at .01 level.
[c]Final models are the same as starting models.

studies of pavement maintenance and heavy equipment operators (Edwards, 1978; Gould 1979) where group differences between first-term and career airmen were discovered, as opposed to the present study where such career differences were not found to exist. In addition, the predictor variable configurations for Gould's sample were also markedly different, exhibiting several squared terms (saturation effects) for aptitude, ATDPUTS, and career interactions.

IV. DISCUSSION AND CONCLUSIONS

Relation of Current Findings to Gould's 1979 Study

The attitude prediction sequences undertaken in this study were generally patterned after the work of Gould (1979); however, this study included job-typing analyses whereas the Gould study did not. The prediction models for the Gould study detected differences between career status groups while the present study did not find such differences, even though the percentages of first-term airmen versus careerists were similar (radio operator 293X3—19 percent versus 81 percent; pavements/maintenance 551X0/X1—22 percent versus 78 percent). Gould's sample consisted of 941 pavement maintenance and construction equipment operator airmen (AFSC 551X0/551X1), while this study consisted of 709 radio operators (AFSC 293X3). The 293X3 and 551X0/X1 time 2 samples appeared comparable in respect to age, (30.60 vs. 28.96 yrs), grade (5.18 vs. 4.99), education (12.61 vs. 12.01 yrs), and job difficulty (13.66 vs. 13.13). However, large differences existed between months on the job with 19.87 months for 293X3 and 32.17 months for 551X0/X1, while the average TAFMS was reversed (139.20 vs. 118.56 months). Similarly, 293X3's supervised an average of 2.08 individuals, while 551X0/X1 supervised an average of 4.44 individuals. The largest differences were for the mean number of tasks, 293X3 (67.77) vs. 551X0/X1 (103.06) and aptitude scores, 293X3 (55.08) vs. 551X01/X1 (50.15).

Sequences 3 and 4 of the present study indicated that job satisfaction perceptions appear to be tied to specific current job contexts; especially for job interest and overall general job satisfaction. Utilization of talents and training, however, appeared to be temporally tied to both the current job and past assignments in the 293X3 career field.

The implications of these results for job enrichment and redesign efforts through the use of personnel, duty, and task assignment strategies appear to be evident. The specificity of job contexts needs to be examined in order to affect the elements tied to a given job context. Unilateral job interventions which would be applied across all career fields would fail to account for specific contexts and would not be nearly as effective as tailored efforts directed toward specific career fields and job types in those career fields. The interrelatedness of types of tasks with such variables as supervision may be such that redesign affecting one area indirectly affects another. In addition, the constraints of supervising an essentially individual task, such as tuning a radio, may not be similar to shared tasks, such as installing a field ground radio antenna, which involve coordinated action.

Differences between first-termers and careerists have been documented for first-term versus career airmen in the form of square-root curves (Gould, 1976a) and based upon the finding from Edwards (1978) in a recent 7,567-airmen aggregated sample taken across several Air Force career fields. Since this study did not detect first-term/careerist differences, the reenlistment effect upon attitudes appears to be specific to various occupational specialties.

Summary

In reference to the first research question: changes were found in the nature of the jobs over the 17-month period. Four of the job types were very stable while the remaining three evidenced varying degrees of change in the nature of tasks performed, confirming hypothesis 1.1. Hypothesis 1.2, stating that, over time, variable numbers of individuals will remain in job types or migrate to other job types based upon assigned tasks, was also supported. The same job types that were stable with regard to tasks, were relatively stable with regard to migration of incumbents. While airmen do not always have control over their assignments, these findings suggest that they may choose to remain in job types exhibiting stable task characteristics. This leads to an important management consideration: Is the optimal condition one in which 293X3 personnel specialize for long periods of time within a job type or in which they experience diverse training in a variety of job types?

The second research question concerned how naturally occurring changes in the nature of an Air Force job affect an individual's attitudes toward job interest, perceived utilization of talents and training, and overall job satisfaction. Hypothesis 2.1 relating to this research question was supported; i.e., individual and situational variables associated with job characteristics were found to be effective predictors of job satisfaction perceptions.

Individual variables such as months on the job and total active federal military service were significant predictors of job interest and felt utilization. Months on the job, aptitude, and grade were significant predictors of overall job satisfaction. The addition of situational variables significantly improved the prediction of job satisfaction perceptions.

The final models for prediction of job interest and overall job satisfaction include the respective individual variables mentioned above plus the two situational variables, number of tasks performed, and the square of the number of tasks performed. The final model for predicting felt utilization included the individual variables above plus the number of tasks performed variables plus skill level and average task difficulty per unit of time. As the time that an airman has spent in the Air Force increases and the time he spent on a job increases, both job interest and felt utilization increase. Overall job satisfaction is high with increased time on the job and increased grade level but with lower average aptitude indices. This information is of interest but does not indicate any reason that these variables are associated with high job satisfaction perceptions. One may assume that as time on the job increases, changes in the nature of the job occur which result in higher job satisfaction perceptions. The addition of situational variables offers insight into what these changes might be. For job interest and overall job satisfaction, the addition of NTASK and $NTASK^2$ improved prediction. An increase in the number of tasks performed in this specialty results in an increase in these two job satisfaction perceptions but with the caveat that the increase is only up to a point, beyond which the satisfaction levels begin decreasing. The logical assumption is that the naturally occurring changes in the job over time that cause the increase in these perceptions are in fact increases in the number of tasks which the airmen perform. This finding supports a large body of literature which indicates that jobs can be made more interesting and satisfying by increasing the variety of tasks to be performed. Felt utilization, however, required a slightly more complicated interpretation. Felt utilization increased as MOJ, TAFMS, NTASK, $NTASK^2$, SKILL LEVEL, and ATDPUTS increased. By increasing the number of tasks, and concomitantly, the difficulty of the tasks, one can cause an increase in the felt utilization of the talents and training of the airmen. This also occurs with increases in the skill level of the airmen. Thus, after some time in the Air Force and on the job, and after achieving higher skill levels, radio operators finally are assigned enough tasks to perform which are sufficiently difficult to cause them to feel that they are being adequately utilized. The payoff from this finding for the Air Force would be optimized by facilitating the condition as early as possible in the airmen's careers.

In support of hypothesis 2.2, it was found that felt utilization and job interest were a function of individual and situational inputs at both time 1 and time 2. Individual inputs were removed from the regression equation as a group rather than one at a time. The inclusion of time 1 and time 2 predictors resulted in an increase in R^2 for both criteria. Overall job satisfaction data were available only at time 2; therefore, this criterion was not included in this analysis.

Hypothesis 2.3 stated that job satisfaction perceptions can be predicted from knowledge of job types. In support of this hypothesis it was found that job types at time 2 were significant predictors of job interest and job satisfaction, while job types at time 1 and time 2 were significant predictors of felt utilization. Job type interactions between time 1 and time 2 were not significant predictors for any of the job satisfaction perceptions. Thus, job interest and satisfaction can be varied by assignment of airmen to various job types at time 2 regardless of the job types they were in at time 1. However, knowledge of job types at both time 1 and time 2 is necessary to optimize felt utilization. Finally, it was found that the addition of job type information to the final individual and situational inputs resulted in better prediction of all of the job satisfaction perceptions, substantiating hypothesis 2.4.

A logical follow-on step in this stream of research would be to investigate the effects of adding job type information to attitude change models when predicting job satisfaction perceptions. Another potential research project would be to examine the interaction effects of job types at time 1 and time 2 individually rather than as a group. The model-seeking approach employed in the present research effort shows promise for use in investigating a wide variety of relations between job satisfaction and job characteristics. Perhaps the next step in expanding its application should be to apply it to migration between Air Force specialties. Prediction of attitude change, success in new jobs, and other related variables experienced as a result of cross-training should be enhanced by information brought out using these techniques.

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APPENDIX A: JOB SURVEY QUESTIONNAIRES

TIME I SURVEY-INVENTORY BACKGROUND QUESTIONS

UNITED STATES AIR FORCE
JOB INVENTORY

RADIO OPERATOR
CAREER LADDER
AFSCs 29333, 29353, 29373, 29333A, 29353A,
29373A, 29353B, 29373B, and 29393

OCCUPATIONAL SURVEY BRANCH
3700 OCM SQ
LACKLAND AFB, TEXAS 78236

AFPT 90-293-123
15 September 1974

SUSPENSE IS 10 WORKING DAYS
IN ACCORDANCE WITH AFM 35-2

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INSTRUCTIONS

DO NOT REMOVE ANY CARDS FROM THE ENVELOPE UNTIL YOU ARE READY TO USE ANSWER CARD A. INSTRUCTIONS ARE ON PAGE iv.

GENERAL INSTRUCTIONS

1. Your assistance in completing this inventory is VERY IMPORTANT. Your answers will be used to:

   a. Write specialty descriptions for your career ladder.

   b. Develop training materials.

2. To qualify for this survey:

   a. You must have a duty AFSC of 29343, 29353, 29373, 29333A, 29353A, 29373A, 29353B, 29373B, or 29393.

   b. You must have been working in your present job assignment for at least four weeks.

   c. If your duty AFSC is 29393, you must be supervising AFS 29363, 29X3A, or 29X3B personnel.

3. This booklet is in three sections. You must complete all three sections in order.

   SECTION I PERSONNEL INFORMATION (answer directly in the booklet)

   SECTION II BACKGROUND INFORMATION (answer on card A)

   SECTION III TASK INFORMATION

   Part I, task checklist (check directly in the booklet)

   Part II, time ratings (time ratings on detached cards)

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INSTRUCTIONS

SECTION I

PERSONNEL INFORMATION

INSTRUCTIONS

Turn to page iii and answer the personnel information questions. Print or check your answer directly into the booklet using a number 2 pencil.

PERSONNEL INFORMATION

CASE CONTROL NUMBER (1–4)

PLEASE PRINT INFORMATION REQUESTED AND CHECK APPLICABLE BOXES

LAST NAME – FIRST NAME – MIDDLE INITIAL (5–22)

GRADE (23)

E1	E2	E3	E4	E5	E6	E7	E8	E9
AB	AMN	A1C	SGT	SSGT	TSGT	MSGT	SMSGT	CMSGT

SOCIAL SECURITY ACCOUNT NUMBER (24–32)

(24–26) – (27–28) – (29–32)

DUTY TELEPHONE EXT

CIRCLE THE HIGHEST EDUCATION LEVEL (OR GED EQUIVALENT) YOU HAVE COMPLETED (33–34)

ELEMENTARY				HIGH SCHOOL				COLLEGE				GRADUATE	
05	06	07	08	09	10	11	12	13	14	15	16	17	18

MAJOR COMMAND (35)

A	G	C	E	Y	F	M
AAC	ACIC	AOC	AFAFC	AFCS	AFLC	AFRES
H	J	K	P	N	Q	R
AFSC	ATC	AU	HQ COMO	HQ USAF	MAC	PACAF
S	T	B	D	L	U	
SAC	TAC	USAFA	USAFE	USAFSO	USAFSS	

PRIMARY AFSC (36–42)

PREFIX (36) NUMBER (37–41) SUFFIX (42)

DUTY AFSC (43–49)

PREFIX (43) NUMBER (44–48) SUFFIX (49)

TOTAL MONTHS IN PRESENT JOB	TOTAL MONTHS AT PRESENT BASE	TOTAL MONTHS IN DUTY AFSC
(50–52)	(53–55)	(56–58)
TOTAL MONTHS IN CAREER FIELD	**TOTAL MONTHS ACTIVE FEDERAL MILITARY SERVICE**	**NO. OF SUBORDINATES WHO REPORT TO YOU DIRECTLY FOR SUPERVISION**
(59–61)	(62–64)	(65–66)

IF YOU WERE CONVERTED OR RETRAINED, ENTER PREVIOUS AFSC

PREFIX (67) NUMBER (68–72) SUFFIX (73)

ORGANIZATION DO NOT WRITE IN BASE OR APO NUMBER (CARD 2: 5–35)

PRESENT WORK ASSIGNMENT (Position or Job Title) (CARD 2: 36–73)

INSTRUCTIONS

SECTION II

BACKGROUND INFORMATION

INSTRUCTIONS

1. Take card A Background Information from your envelope.

2. Read the Background Information questions on pages v through viii.

3. Answer each question on answer card A. Blacken the circle that indicates your choice of answers.

BE SURE YOU HAVE THE RIGHT CARD LINE NUMBER TO ANSWER EAC QUESTION.

4. When you have finished answering the Background Information questions, check card A, erase any stray marks and replace the card in the envelope.

BACKGROUND INFORMATION

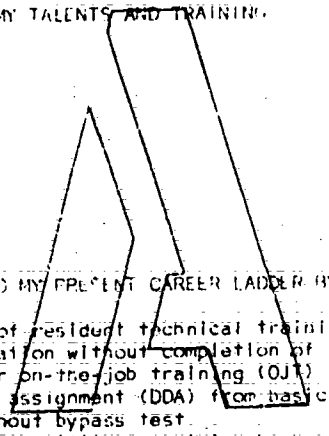
INDICATE YOUR ANSWERS TO THE BACKGROUND QUESTIONS BY BLACKENING THE APPROPRIATE CIRCLE ON ANSWER CARD A.

1. I FIND MY JOB

(1) Extremely dull
(2) Very dull
(3) Fairly dull
(4) So-so
(5) Fairly interesting
(6) Very interesting
(7) Extremely interesting

2. MY JOB UTILIZES MY TALENTS AND TRAINING

(1) Not at all
(2) Very little
(3) Fairly well
(4) Quite well
(5) Very well
(6) Excellently
(7) Perfectly



3. I WAS ASSIGNED TO MY PRESENT CAREER LADDER BY

(1) Completion of resident technical training course
(2) Reclassification without completion of resident technical training or on-the-job training (OJT)
(3) Direct duty assignment (DDA) from basic military training to OJT without bypass test
(4) DDA from basic military training by bypass test
(5) Conversion from another AF specialty without training
(6) Retraining from another AF specialty
(7) Reenlistment from another branch of service

4. DO YOU PLAN ON LEAVING THE AIR FORCE WITHIN THE NEXT FIVE YEARS?

(1) Yes
(2) No

IF YES, GO TO QUESTION 5.
IF NO, GO TO QUESTION 6.

BACKGROUND INFORMATION

5. INDICATE WHICH YEAR YOU PLAN ON LEAVING THE AIR FORCE

(1) 1974 (2) 1975 (3) 1976 (4) 1977 (5) 1978 or later

6. DO YOU PLAN TO REENLIST?

(1) No, I plan to retire
(2) No, I plan to separate without retirement benefits
(3) Uncertain, probably no
(4) Uncertain, probably yes
(5) Yes

7. ARE YOU COMPLETING THIS USAF JOB INVENTORY UNDER THE DIRECT SUPERVISION OF THE CBPO OCCUPATIONAL SURVEY CONTROL OFFICER?

(1) Yes
(2) No

IF YES, GO TO QUESTION 10.

8. ARE YOU COMPLETING THIS JOB INVENTORY AT YOUR HOME OR BARRACKS?

(1) Yes
(2) No

9. ARE YOU COMPLETING THIS JOB INVENTORY AT THE ORGANIZATION AT WHICH YOU WORK?

(1) Yes
(2) No

10. HAVE THE INSTRUCTIONS FOR COMPLETING THIS SURVEY BEEN READ OR EXPLAINED TO YOU?

(1) Yes
(2) No

BACKGROUND INFORMATION

11. ARE YOU PRESENTLY LOCATED AT AN INSTALLATION WHICH IS INSIDE THE CONTINENTAL US (ZONE OF THE INTERIOR)?

    (1) Yes (2) No

12. ARE YOU PRESENTLY LOCATED AT AN INSTALLATION WHICH IS OUTSIDE THE CONTINENTAL US (INCLUDING ALASKA AND HAWAII)?

    (1) Yes (2) No

13. DO YOU SEND MESSAGES USING MORSE CODE?

    (1) Yes (2) No

14. DO YOU RECEIVE MESSAGES USING MORSE CODE?

    (1) Yes (2) No

BLACKEN CIRCLE NUMBER 1 NEXT TO THE NUMBER THAT REFERS TO DUTY POSITIONS THAT DESCRIBE YOUR PRESENT DUTY POSITION.

15. AERONAUTICAL STATION
16. AIRBORNE COMMAND AND CONTROL POST
17. AIRBORNE RADIO COUNTERMEASURES UNIT
18. FIELD RADIO OPERATIONS UNIT
19. MARS NET CONTROL STATION
20. MARS STATION
21. MOBILE COMMUNICATIONS UNIT
22. RADIO OPERATIONS HEADQUARTERS
23. SAC A AND B NET STATION
24. TACT AND CONTROL UNIT STATION
25. TECHNICAL SCHOOL TRAINING COURSE
26. OTHER (PLS SPECIFY ON LAST PAGE)
27. HAVE YOU COMPLETED THE 3ABR29330 RADIO OPERATOR (VOICE) COURSE?

    (1) Yes (2) No

BACKGROUND INFORMATION

28. ARE YOU A 7-LEVEL OR 9-LEVEL?

(1) Yes (2) No

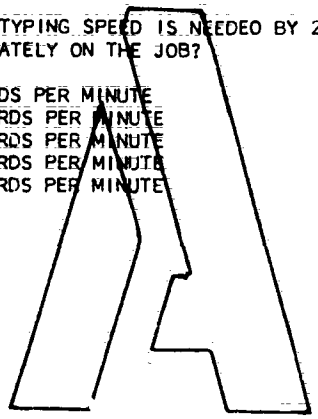
IF YES, ANSWER THE FOLLOWING QUESTION.

29. HOW MANY 293X3/A/B THAT WORK FOR YOU TYPE AS A PART OF THEIR JOB?

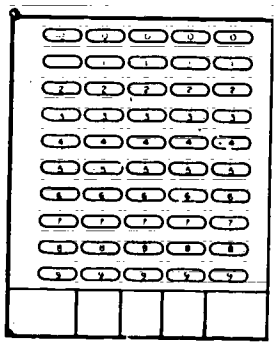
(1) 0
(2) 1-2
(3) 3-4
(4) 5-6
(5) 7 OR MORE

30. WHAT MINIMUM TYPING SPEED IS NEEDED BY 203X3/A/B PERSONNEL TO PERFORM ADEQUATELY ON THE JOB?

(1) 1-10 WORDS PER MINUTE
(2) 11-20 WORDS PER MINUTE
(3) 21-30 WORDS PER MINUTE
(4) 31-40 WORDS PER MINUTE
(5) 41-50 WORDS PER MINUTE

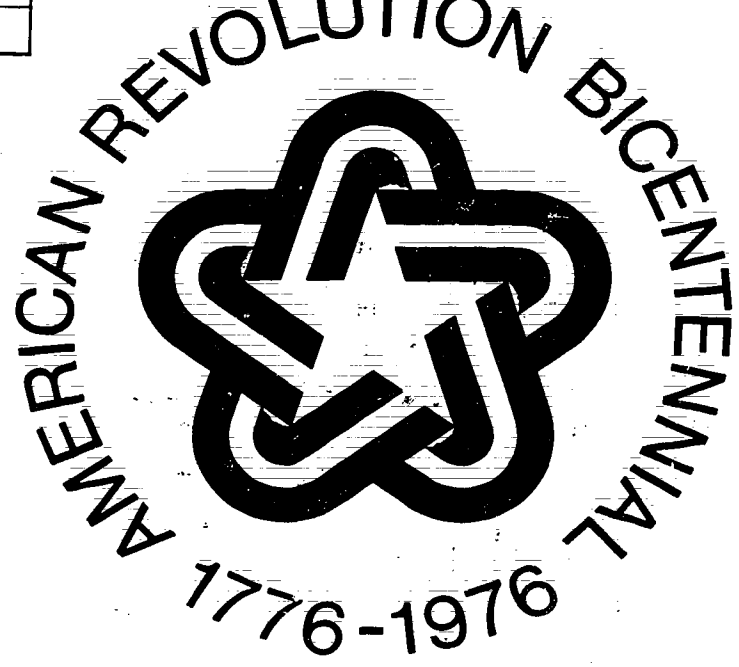


TIME 2 SURVEY-INVENTORY BACKGROUND QUESTIONS



UNITED STATES AIR FORCE

JOB INVENTORY



RADIO OPERATOR CAREER LADDER

AFSCs 29333, 29353, 29373, 29333A, 29353A

29373A, 29353B, 29373B, and 29393

OCCUPATIONAL & MANPOWER RESEARCH DIVISION
AIR FORCE HUMAN RESOURCES LABORATORY (AFSC)
LACKLAND AFB, TEXAS 78236

AFPT-80-293-29

19 April 1976

SUSPENSE IS 10 WORK DAYS IN
ACCORDANCE WITH AFM 35-2

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2. AUTHORITY

10 U.S.C. 8012 Secretary of Air Force, Powers, Duties, Delegation by Compensation.

E09397, 22 Nov 43, Numbering System for Federal Accounts Relating to Individual Persons

3. PRINCIPAL PURPOSE(S)

This information will be used solely for Air Force Research and Development purposes. Use of the Social Security Account Number is necessary to make positive identification of the individual and records.

5. ROUTINE USES

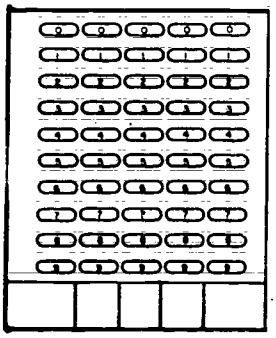
Information provided by individual respondents will not be disclosed and will be treated confidentially. Individual identity will not be revealed. Job information from groups of respondents, who will not be identified by name or Social Security Account Number, will be used for the following purposes:

1. Evaluation of career field structure.
2. Preparation of specialty training standards and training programs.
3. Weighted Airman Promotion System test outlines.
4. Personnel research.
5. Other personnel management systems applications.

4. WHETHER DISCLOSURE IS MANDATORY OR VOLUNTARY AND EFFECT ON INDIVIDUAL OF NOT PROVIDING INFORMATION

Completion of the inventory by job incumbents is mandatory. Failure to provide information would detract from the Air Force's ability to evaluate career field structure; prepare specialty training standards and training programs; prepare Weighted Airman Promotion System test outlines; perform personnel research; and perform other personnel management systems applications.

FORM NUMBER AND DATE	PRIVACY ACT STATEMENT	DATE PRIVACY ACT STATEMENT ASSIGNED (Month and Year)
AFPT-80-293-29 19 April 1976		September 1975



GENERAL INSTRUCTIONS

1. Your assistance in completing this inventory is very important. Your responses will be contrasted with the responses you gave on a very similar job inventory several months ago to examine the changes that have taken place in the actual work that you do. Your present and past answers as well as the answers of other airmen completing this USAF job inventory will be combined to support an extensive study of the past, current, and ideal structure of your career field.

2. In accordance with AFM 35-2, you have 10 work days in which to complete this inventory. Even though this is very similar to the inventory you previously completed, it is imperative that you follow the instructions very carefully.

3. This USAF job inventory is divided into two sections:

a. Section I: General Information. You are asked to provide information which will aid in the interpretation and analysis of your responses.

b. Section II: Duty-Task List. You are asked to give information about your current work experience.

4. In completing this inventory, it is important to do each section in order and to follow the outlined procedures very carefully.

5. The information you are asked to provide will be used for research purposes only. Responses will not be identified with you by name, but will be combined with responses from others in aggregate form for use by Air Force managers.

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SECTION I - GENERAL INFORMATION

Case Control Number

Please print the information requested and check applicable blocks. Respond to all items.

SOCIAL SECURITY ACCOUNT NUMBER (SSAN) ☐☐☐-☐☐-☐☐☐☐

AGE ☐☐

SEX 1 ☐ M 0 ☐ F

GRADE

E1	E2	E3	E4	E5	E6	E7	E8	E9
[ ] AB	[ ] AMN	[ ] AIC	[ ] SGT	[ ] SSGT	[ ] TSGT	[ ] MSGT	[ ] SMSGT	[ ] CMSGT

MAJOR COMMAND

A [ ] AAC	C [ ] ADC	E [ ] AFAFC	Y [ ] AFCS	O [ ] AFDAA	M [ ] AFRES	H [ ] AFSC
F [ ] ALC	J [ ] ATC	K [ ] AU	P [ ] HQ COMD	N [ ] HQ USAF	Q [ ] MAC	R [ ] PACAF
S [ ] SAC	T [ ] TAC	B [ ] USAFA	D [ ] USAFE	L [ ] USAFSO	U [ ] USAFSS	

PRIMARY AFSC ☐ Prefix ☐☐☐☐☐ ☐ Suffix

DUTY AFSC ☐ Prefix ☐☐☐☐☐ ☐ Suffix

TOTAL MONTHS IN PRESENT JOB ☐☐

TOTAL MONTHS AT PRESENT BASE ☐☐

TOTAL MONTHS IN DUTY AFSC ☐☐☐

TOTAL MONTHS IN CAREER FIELD ☐☐☐

TOTAL MONTHS ACTIVE FEDERAL MILITARY SERVICE ☐☐☐

NUMBER OF SUBORDINATES WHO REPORT TO YOU DIRECTLY FOR SUPERVISION ☐☐☐

TOTAL MONTHS AS A SUPERVISOR ☐☐☐

ORGANIZATION

BASE OR INSTALLATION

PRESENT WORK ASSIGNMENT (POSITION OR JOB TITLE)

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CIRCLE THE HIGHEST EDUCATION LEVEL (OR GED EQUIVALENT) YOU HAVE COMPLETED

ELEMENTARY				HIGH SCHOOL			
05	06	07	08	09	10	11	12

COLLEGE				GRADUATE	
13	14	15	16	17	18

I PLAN TO REENLIST:

1 [ ] NO, I PLAN TO RETIRE
2 [ ] NO, I PLAN TO SEPARATE WITHOUT RETIREMENT BENEFITS
3 [ ] UNCERTAIN, PROBABLY NO
4 [ ] UNCERTAIN, PROBABLY YES
5 [ ] YES

MY JOB UTILIZES MY TALENTS AND TRAINING:

1 [ ] NOT AT ALL
2 [ ] VERY LITTLE
3 [ ] FAIRLY WELL
4 [ ] QUITE WELL
5 [ ] VERY WELL
6 [ ] EXCELLENTLY
7 [ ] PERFECTLY

I FIND MY JOB:

1 [ ] EXTREMELY DULL
2 [ ] VERY DULL
3 [ ] FAIRLY DULL
4 [ ] SO-SO
5 [ ] FAIRLY INTERESTING
6 [ ] VERY INTERESTING
7 [ ] EXTREMELY INTERESTING

I would rate myself on overall satisfaction with the work I do in my present job as:

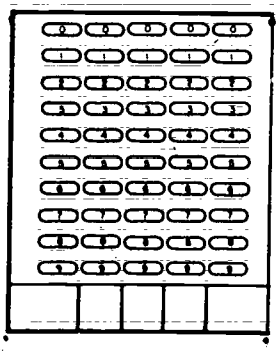
1 [ ] Extremely Dissatisfied
2 [ ] Very Dissatisfied
3 [ ] Somewhat Dissatisfied
4 [ ] So-So
5 [ ] Somewhat Satisfied
6 [ ] Very Satisfied
7 [ ] Extremely Satisfied

Compared to other jobs in my career field, my present job is:

1 [ ] Extremely Undesirable
2 [ ] Very Undesirable
3 [ ] Somewhat Undesirable
4 [ ] About the Same
5 [ ] Somewhat Desirable
6 [ ] Very Desirable
7 [ ] Extremely Desirable

In satisfactorily performing my present job, the work experience gained from my last job assignment was of:

1 [ ] No Importance
2 [ ] Little Importance
3 [ ] Below Average Importance
4 [ ] Average Importance
5 [ ] Above Average Importance
6 [ ] Great Importance
7 [ ] Extreme Importance



Check all following statements which accurately describe significant changes which have taken place in your job during the 1 1/2 years since you last completed a job inventory.

[ ] Reassigned to a base in a new location

[ ] Reassigned to a totally new job at the same base

[ ] Perform a greater variety of tasks

[ ] Perform a smaller variety of tasks

[ ] Perform a larger number of tasks

[ ] Perform a smaller number of tasks

[ ] Perform more difficult duties

[ ] Perform easier duties

[ ] Perform more meaningful work

[ ] Perform less meaningful work

[ ] Have been assigned more responsibilities

[ ] Have been assigned less responsibilities

[ ] Have been reassigned to a supervisory job

[ ] There has been nearly a complete change in duties and responsibilities

[ ] There have been no significant changes

[ ] Other (specify)_____

_____

_____

(Please check all of the above that apply)

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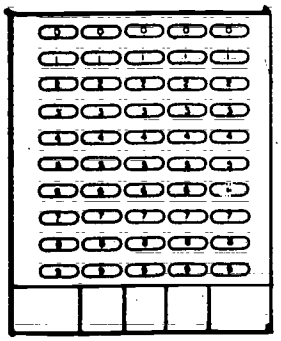

OCCUPATIONAL ATTITUDE INFORMATION

This part of the inventory asks you to indicate your attitude about specific aspects of your present job. On the following pages are a number of statements. Read each statement carefully. Then decide for yourself whether you are satisfied or dissatisfied with that aspect of your present job. Indicate "how satisfied" or "how dissatisfied" by choosing the statement below which best represents your attitude. Then fill in the appropriate space in the right hand column.

Mark 1 if you are EXTREMELY DISSATISFIED
Mark 2 if you are VERY DISSATISFIED
Mark 3 if you are MODERATELY DISSATISFIED
Mark 4 if you are SLIGHTLY DISSATISFIED
Mark 5 if you are NEITHER SATISFIED NOR DISSATISFIED
Mark 6 if you are SLIGHTLY SATISFIED
Mark 7 if you are MODERATELY SATISFIED
Mark 8 if you are VERY SATISFIED
Mark 9 if you are EXTREMELY SATISFIED

Answer every item.

Give a true picture of your feelings about your present job.

IN THE "JOB ATTITUDE" COLUMN, RATE EACH ITEM ON YOUR ATTITUDE TOWARD YOUR PRESENT JOB.

HOW YOU FEEL ABOUT SPECIFIC ASPECTS OF YOUR PRESENT JOB	JOB ATTITUDE PRESENT JOB
	1. Extremely dissatisfied 2. Very dissatisfied 3. Moderately dissatisfied 4. Slightly dissatisfied 5. Neither satisfied nor dissatisfied 6. Slightly satisfied 7. Moderately satisfied 8. Very satisfied 9. Extremely satisfied
1. Your unit's policy for assigning additional duties	① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨
2. The cost of living in the area to which assigned	① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨
3. The condition of the tools or equipment you use	① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨
4. The adequacy of the information provided you on the AF promotion system	① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨
5. The BX and Commissary facilities at your base	① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨
6. The chance to help people	① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨
7. The chance to tell others what to do	① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨
8. The geographical area to which you are assigned	① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨
9. The amount of work space available	① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨
10. The opportunity to meet new people	① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨
11. Your amount of effort compared to the effort of your co-workers	① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨
12. The feeling of economic security you have in the Air Force	① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨
13. The recognition you receive from your family for the work you do	① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨
14. The chance to be responsible for your own work	① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨
15. The competence of the instructors you have encountered	① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨
16. The level of danger in your job	① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨
17. Your chances of remaining on active duty until retirement if you want to	① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨
18. The chance to do things which do not violate your sense of right and wrong	① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨
19. The educational opportunities provided by the surrounding community	① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨
20. The friendliness of your co-workers	① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨
21. The chance to engage in physical activity on the job	① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨
22. Your chance for promotion compared to others doing similar work	① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨
23. The quality of base quarters, barracks, or civilian housing in which you live	① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨
24. The amount of required telephone communication	① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨

ERIC

	IN THE "JOB ATTITUDE" COLUMN, RATE EACH ITEM ON YOUR ATTITUDE TOWARD YOUR PRESENT JOB.	JOB ATTITUDE PRESENT JOB
	HOW YOU FEEL ABOUT SPECIFIC ASPECTS OF YOUR PRESENT JOB	1. Extremely dissatisfied 2. Very dissatisfied 3. Moderately dissatisfied 4. Slightly dissatisfied 5. Neither satisfied nor dissatisfied 6. Slightly satisfied 7. Moderately satisfied 8. Very satisfied 9. Extremely satisfied
25.	The attention given to safety in your work area	①②③④⑤⑥⑦⑧⑨
26.	The attitudes of civilians around your base toward the AF	①②③④⑤⑥⑦⑧⑨
27.	The way your supervisor handles his subordinates	①②③④⑤⑥⑦⑧⑨
28.	The living and working conditions faced on TDY	①②③④⑤⑥⑦⑧⑨
29.	Normal temperature of your work environment	①②③④⑤⑥⑦⑧⑨
30.	Travel (PCS) opportunities for personnel in your specialty	①②③④⑤⑥⑦⑧⑨
31.	The demand for your job-obtained skills in the civilian job market	①②③④⑤⑥⑦⑧⑨
32.	The amount of leave time you are allowed	①②③④⑤⑥⑦⑧⑨
33.	The challenge provided by your job	①②③④⑤⑥⑦⑧⑨
34.	Your work schedule	①②③④⑤⑥⑦⑧⑨
35.	The chance to show you can supervise the work of others	①②③④⑤⑥⑦⑧⑨
36.	The contribution your work makes to the national defense	①②③④⑤⑥⑦⑧⑨
37.	The fairness with which your supervisor assigns work	①②③④⑤⑥⑦⑧⑨
38.	The challenge provided by your job	①②③④⑤⑥⑦⑧⑨
39.	The distance to your home of record	①②③④⑤⑥⑦⑧⑨
40.	The frequency of slack periods on the job	①②③④⑤⑥⑦⑧⑨
		①②③④⑤⑥⑦⑧⑨
		①②③④⑤⑥⑦⑧⑨
		①②③④⑤⑥⑦⑧⑨
		①②③④⑤⑥⑦⑧⑨
		①②③④⑤⑥⑦⑧⑨
		①②③④⑤⑥⑦⑧⑨
		①②③④⑤⑥⑦⑧⑨
		①②③④⑤⑥⑦⑧⑨

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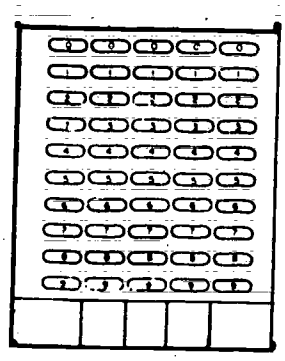

SECTION II

READ THIS PAGE BEFORE GOING FURTHER

PROCEDURE A. IDENTIFYING TASKS OF PRESENT JOB

1. Read through the whole list of task statements pages 1 - 19. As you read,

a. Blacken the circle in Column 1 beside each task that you do in your job. Be sure to use a number 2 pencil.

EXAMPLE: If you develop organizational charts, blacken the circle in Column 1, like this:

(Skip the task if you don't do it.)

Keep your mark inside the circle.

	COL 1	COLUMN 2
	Blacken IF DONE NOW	TIME SPENT Present Job 1. Very small amount. 2. Much below average. 3. Below average. 4. Slightly below average. 5. About average. 6. Slightly above average. 7. Above average. 8. Much above average. 9. Very large amount.
Assign personnel to duty positions	O	
Develop organizational charts	●	

b. Write in tasks you do which are not listed. Use the blank pages at the end of the booklet to write in tasks. DO NOT WRITE IN CLASSIFIED INFORMATION.

2. After you have identified all the tasks you do and have written in tasks not listed, turn to page xii and read the instructions for procedure B.

3. DO NOT COMPLETE COLUMN 2 AT THIS TIME.

4. Do not confuse work you do yourself with work you supervise.

5. Now, turn to page 1 and begin.

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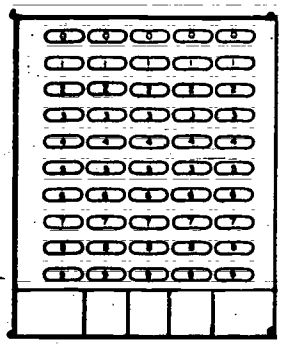
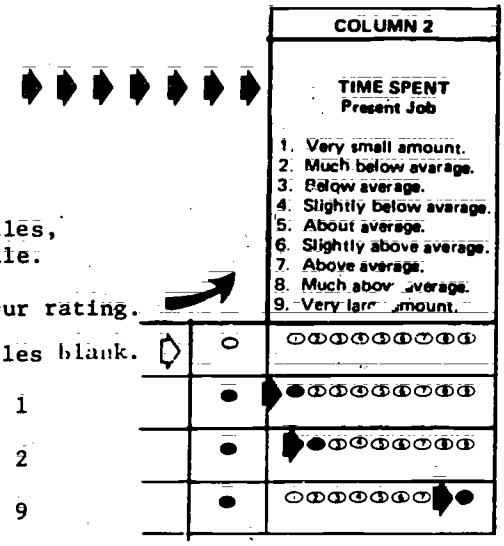


PROCEDURE B. RATING TIME SPENT ON TASKS ON PRESENT JOB

1. Now you are to rate the relative amount of time you spend performing each task in your present job. Relative time spent means the total time you spend doing the task compared with the time you spend on each of the other tasks of your present job. This is an estimate of how much time you spend on each of the tasks you do.

2. Look at the example.

- The TIME SPENT PRESENT JOB scale (Column 2) appears at the top of each page.
- Following each task, in Column 2, are 9 circles, numbered from 1 to 9 to match the rating scale.
- Any number from 1 to 9 may be selected as your rating.
- If you DO NOT do a task, then leave the circles blank.
- If you rate a task "1" - then blacken circle 1
- If you rate a task "2" - then blacken circle 2
- If you rate a task "9" - then blacken circle 9



3. Remember, you are to rate only tasks that you have already identified as being part of your present job. Be sure to keep your pencil mark inside the circle.

4. Now, turn to page 1 and begin your ratings. When you finish, seal the inventory in the envelope provided and give it to the survey administrator

COMMON TASK LIST

FIRST: READ each task – BLACKEN THE CIRCLE (○) in column 1 if you do the task now.

SECOND: WRITE IN TASKS you do if not listed.

THIRD: RATE each task you do – BLACKEN THE CIRCLE (○) in column 2 to make your rating, using the "TIME SPENT" scale.

A. ORGANIZING AND PLANNING

	COL 1	COLUMN 2
	Blacken IF DONE NOW	TIME SPENT Present Job 1. Very small amount. 2. Much below average. 3. Below average. 4. Slightly below average. 5. About average. 6. Slightly above average. 7. Above average. 8. Much above average. 9. Very large amount.
1. Categorize information as top secret, secret, confidential, or for official use only	○	○①②③④⑤⑥⑦⑧⑨
2. Conduct or participate in staff meetings	○	○①②③④⑤⑥⑦⑧⑨
3. Coordinate Military Affiliate Ration Station (MARS) activities with member radio operators or stations	○	○①②③④⑤⑥⑦⑧⑨
4. Coordinate work activities with other units or sections	○	○①②③④⑤⑥⑦⑧⑨
5. Determine personnel requirements	○	○①②③④⑤⑥⑦⑧⑨
6. Determine requirements for equipment or supplies	○	○①②③④⑤⑥⑦⑧⑨
7. Develop operators' checklists	○	○①②③④⑤⑥⑦⑧⑨
8. Develop organizational or functional charts	○	○①②③④⑤⑥⑦⑧⑨
9. Develop or improve work methods or procedures	○	○①②③④⑤⑥⑦⑧⑨
10. Develop or maintain status boards, charts, or graphs	○	○①②③④⑤⑥⑦⑧⑨
11. Develop radio operations communications operating instructions (COI)	○	○①②③④⑤⑥⑦⑧⑨
12. Establish most usable frequency (MUF) based on propagation predictions	○	○①②③④⑤⑥⑦⑧⑨
13. Establish safety procedures	○	○①②③④⑤⑥⑦⑧⑨
14. Establish work controls or performance standards	○	○①②③④⑤⑥⑦⑧⑨
15. Establish work priorities	○	○①②③④⑤⑥⑦⑧⑨
16. Estimate budget requirements	○	○①②③④⑤⑥⑦⑧⑨
17. Plan or establish procedures for alternate routing of traffic	○	○①②③④⑤⑥⑦⑧⑨
18. Plan or prepare briefings	○	○①②③④⑤⑥⑦⑧⑨
19. Plan or reorganize physical layout of station, radio facilities, or equipment	○	○①②③④⑤⑥⑦⑧⑨
20. Plan or schedule leaves or passes	○	○①②③④⑤⑥⑦⑧⑨
21. Plan or schedule work assignments or shift schedules	○	○①②③④⑤⑥⑦⑧⑨
22. Plan radio operational support for exercises or special missions	○	○①②③④⑤⑥⑦⑧⑨
NOTE: If any task you perform under this duty is not listed, write it on the blank page at the end of the booklet.	○	○①②③④⑤⑥⑦⑧⑨
(Continued on next page)	○	○①②③④⑤⑥⑦⑧⑨

CODE 01, TYPE 1-9-B

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FIRST: READ each task – BLACKEN THE CIRCLE (○) in column 1 if you do the task now.

SECOND: WRITE IN TASKS you do if not listed.

THIRD: RATE each task you do – BLACKEN THE CIRCLE (○) in column 2 to make your rating, using the "TIME SPENT" scale.

B. DIRECTING AND IMPLEMENTING

	COL 1	COLUMN 2
	Blacken IF DONE NOW	TIME SPENT Present Job 1. Very small amount. 2. Much below average. 3. Below average. 4. Slightly below average. 5. About average. 6. Slightly above average. 7. Above average. 8. Much above average. 9. Very large amount.
1. Counsel subordinates on career progression	○	①②③④⑤⑥⑦⑧⑨
2. Counsel subordinates on personal or military problems	○	①②③④⑤⑥⑦⑧⑨
3. Direct establishment or operation of fixed field radio stations	○	①②③④⑤⑥⑦⑧⑨
4. Direct establishment or operation of mobile field radio stations	○	①②③④⑤⑥⑦⑧⑨
5. Direct implementation of emergency procedures to support disaster or contingency plans	○	①②③④⑤⑥⑦⑧⑨
6. Direct operations of ground radio stations and associated equipment	○	①②③④⑤⑥⑦⑧⑨
7. Direct personnel in the observance of safety practices	○	①②③④⑤⑥⑦⑧⑨
8. Direct preparation or maintenance of records, reports, forms, or logs	○	①②③④⑤⑥⑦⑧⑨
9. Dispatch mobile radio units	○	①②③④⑤⑥⑦⑧⑨
10. Draft charts, graphs, or reports	○	①②③④⑤⑥⑦⑧⑨
11. Draft, edit, or review correspondence	○	①②③④⑤⑥⑦⑧⑨
12. Draft job descriptions	○	①②③④⑤⑥⑦⑧⑨
13. Draft recommended changes to communication publications	○	①②③④⑤⑥⑦⑧⑨
14. Establish procedures for care or utilization of work space, equipment, or supplies	○	①②③④⑤⑥⑦⑧⑨
15. Implement cost reduction programs	○	①②③④⑤⑥⑦⑧⑨
16. Implement personnel recognition programs	○	①②③④⑤⑥⑦⑧⑨
17. Implement procedures for document security or control	○	①②③④⑤⑥⑦⑧⑨
18. Implement suggestion programs	○	①②③④⑤⑥⑦⑧⑨
19. Maintain non-tactical radio account records	○	①②③④⑤⑥⑦⑧⑨
20. Maintain tactical radio accounts	○	①②③④⑤⑥⑦⑧⑨
21. Perform staff assistance visits	○	①②③④⑤⑥⑦⑧⑨
22. Prepare job proficiency standards	○	①②③④⑤⑥⑦⑧⑨
	○	①②③④⑤⑥⑦⑧⑨
(Continued next page)	○	①②③④⑤⑥⑦⑧⑨

FIRST: READ each task – BLACKEN THE CIRCLE (○) in column 1 if you do the task now.

SECOND: WRITE IN TASKS you do if not listed.

THIRD: RATE each task you do – BLACKEN THE CIRCLE (○) in column 2 to make your rating, using the "TIME SPENT" scale.

B. DIRECTING AND IMPLEMENTING (Continued)

	COL 1	COLUMN 2
	Blacken IF DONE NOW	TIME SPENT Present Job 1. Very small amount. 2. Much below average. 3. Below average. 4. Slightly below average. 5. About average. 6. Slightly above average. 7. Above average. 8. Much above average. 9. Very large amount.
23. Prepare outage reports	○	①②③④⑤⑥⑦⑧⑨
24. Prepare requests for equipment repair	○	①②③④⑤⑥⑦⑧⑨
25. Prepare requisitions for supplies or equipment	○	①②③④⑤⑥⑦⑧⑨
26. Receive or issue MAKS equipment	○	①②③④⑤⑥⑦⑧⑨
27. Resolve technical problems of subordinates	○	①②③④⑤⑥⑦⑧⑨
28. Supervise Airborne Command Post Communicators (AFSC 29333A)	○	①②③④⑤⑥⑦⑧⑨
29. Supervise Airborne Command Post Communicators (AFSC 29353A)	○	①②③④⑤⑥⑦⑧⑨
30. Supervise Airborne Radio/Countermeasures Operators (AFSC 29353B)	○	①②③④⑤⑥⑦⑧⑨
31. Supervise Airborne Command Post Communicators (AFSC 29373A)	○	①②③④⑤⑥⑦⑧⑨
32. Supervise Airborne Radio/Countermeasures Operators (AFSC 29373B)	○	①②③④⑤⑥⑦⑧⑨
33. Supervise Apprentice Radio Operators (AFSC 29333)	○	①②③④⑤⑥⑦⑧⑨
34. Supervise civilian personnel	○	①②③④⑤⑥⑦⑧⑨
35. Supervise personnel in AFSs other than AFS 293X3/A/B	○	①②③④⑤⑥⑦⑧⑨
36. Supervise Radio Operations Supervisors (AFSC 29373)	○	①②③④⑤⑥⑦⑧⑨
37. Supervise Radio Operators (AFSC 29353)	○	①②③④⑤⑥⑦⑧⑨
NOTE: If any task you perform under this duty is not listed, write it on the blank page at the end of the booklet.	○	①②③④⑤⑥⑦⑧⑨
	○	①②③④⑤⑥⑦⑧⑨
	○	①②③④⑤⑥⑦⑧⑨
	○	①②③④⑤⑥⑦⑧⑨
	○	①②③④⑤⑥⑦⑧⑨
	○	①②③④⑤⑥⑦⑧⑨
	○	①②③④⑤⑥⑦⑧⑨
	○	①②③④⑤⑥⑦⑧⑨
	○	①②③④⑤⑥⑦⑧⑨
	○	①②③④⑤⑥⑦⑧⑨

(Continued on next page)

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FIRST: READ each task – BLACKEN THE CIRCLE (○) in column 1 if you do the task now.

SECOND: WRITE IN TASKS you do if not listed.

THIRD: RATE each task you do – BLACKEN THE CIRCLE (○) in column 2 to make your rating, using the "TIME SPENT" scale.

C. INSPECTING AND EVALUATING

	COL 1	COLUMN 2
	Blacken ○ IF DONE NOW	TIME SPENT Present Job 1. Very small amount. 2. Much below average. 3. Below average. 4. Slightly below average. 5. About average. 6. Slightly above average. 7. Above average. 8. Much above average. 9. Very large amount.
1. Analyze logsheets	○	○①②③④⑤⑥⑦⑧⑨
2. Analyze technical reports	○	○①②③④⑤⑥⑦⑧⑨
3. Conduct traffic analyses	○	○①②③④⑤⑥⑦⑧⑨
4. Coordinate airborne and ground radio communications activities	○	○①②③④⑤⑥⑦⑧⑨
5. Evaluate care and use of workspace, equipment, or supplies	○	○①②③④⑤⑥⑦⑧⑨
6. Evaluate compliance with work standards or operating procedures	○	○①②③④⑤⑥⑦⑧⑨
7. Evaluate individuals for promotion, demotion, or reclassification	○	○①②③④⑤⑥⑦⑧⑨
8. Evaluate interference caused by jamming	○	○①②③④⑤⑥⑦⑧⑨
9. Evaluate procedures for storage, inventory, or inspection of property items	○	○①②③④⑤⑥⑦⑧⑨
10. Evaluate station or unit reports, graphs, or studies	○	○①②③④⑤⑥⑦⑧⑨
11. Evaluate station or unit safety practices and procedures	○	○①②③④⑤⑥⑦⑧⑨
12. Evaluate station or unit security practices and procedures	○	○①②③④⑤⑥⑦⑧⑨
13. Evaluate suggestions	○	○①②③④⑤⑥⑦⑧⑨
14. Evaluate usability of frequencies	○	○①②③④⑤⑥⑦⑧⑨
15. Inspect radio stations or operations	○	○①②③④⑤⑥⑦⑧⑨
16. Investigate accidents or incidents	○	○①②③④⑤⑥⑦⑧⑨
17. Report interference caused by jamming	○	○①②③④⑤⑥⑦⑧⑨
18. Review survey of inspection findings	○	○①②③④⑤⑥⑦⑧⑨
19. Review or research technical publications	○	○①②③④⑤⑥⑦⑧⑨
NOTE: If any task you perform under this duty is not listed, write it on the blank page at the end of the booklet.	○	○①②③④⑤⑥⑦⑧⑨
	○	○①②③④⑤⑥⑦⑧⑨
	○	○①②③④⑤⑥⑦⑧⑨
	○	○①②③④⑤⑥⑦⑧⑨
(Continued on next page)	○	○①②③④⑤⑥⑦⑧⑨

FIRST: READ each task – BLACKEN THE CIRCLE (○) in column 1 if you do the task now.

SECOND: WRITE IN TASKS you do if not listed.

THIRD: RATE each task you do – BLACKEN THE CIRCLE (○) in column 2 to make your rating, using the "TIME SPENT" scale.

D. TRAINING

	COL 1 Blacken IF DONE NOW	COLUMN 2 TIME SPENT Present Job 1. Very small amount. 2. Much below average. 3. Below average. 4. Slightly below average. 5. About average. 6. Slightly above average. 7. Above average. 8. Much above average. 9. Very large amount.
1. Administer written, oral, or performance tests	○	○①②③④⑤⑥⑦⑧⑨
2. Arrange for training aids, space, or equipment	○	○①②③④⑤⑥⑦⑧⑨
3. Attend training conferences or briefings	○	○①②③④⑤⑥⑦⑧⑨
4. Conduct classroom instruction	○	○①②③④⑤⑥⑦⑧⑨
5. Conduct job proficiency training	○	○①②③④⑤⑥⑦⑧⑨
6. Conduct on-the-job training (OJT) for radio operators	○	○①②③④⑤⑥⑦⑧⑨
7. Conduct specialized training, such as combat or forward air controller training	○	○①②③④⑤⑥⑦⑧⑨
8. Conduct training conferences and briefings	○	○①②③④⑤⑥⑦⑧⑨
9. Demonstrate how to locate or interpret technical information	○	○①②③④⑤⑥⑦⑧⑨
10. Develop OJT materials	○	○①②③④⑤⑥⑦⑧⑨
11. Develop or revise resident course training or career development course (CDC) materials	○	○①②③④⑤⑥⑦⑧⑨
12. Develop written, oral, or performance tests	○	○①②③④⑤⑥⑦⑧⑨
13. Evaluate resident course training	○	○①②③④⑤⑥⑦⑧⑨
14. Evaluate training programs other than resident course training	○	○①②③④⑤⑥⑦⑧⑨
15. Indoctrine newly-assigned personnel	○	○①②③④⑤⑥⑦⑧⑨
16. Interpret policies or directives for subordinates	○	○①②③④⑤⑥⑦⑧⑨
17. Maintain or review training records	○	○①②③④⑤⑥⑦⑧⑨
18. Review section training status	○	○①②③④⑤⑥⑦⑧⑨
19. Review training progress of individuals	○	○①②③④⑤⑥⑦⑧⑨
20. Schedule OJT	○	○①②③④⑤⑥⑦⑧⑨
21. Select individuals for specialized training	○	○①②③④⑤⑥⑦⑧⑨
22. Select or assign instructors or trainers	○	○①②③④⑤⑥⑦⑧⑨
NOTE: If any task you perform under this duty is not listed, write it on the blank page at the end of the booklet.	○	○①②③④⑤⑥⑦⑧⑨
(Continued on next page)	○	○①②③④⑤⑥⑦⑧⑨

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FIRST: READ each task – BLACKEN THE CIRCLE (○) in column 1 if you do the task now.

SECOND: WRITE IN TASKS you do if not listed.

THIRD: RATE each task you do – BLACKEN THE CIRCLE (○) in column 2 to make your rating using the "TIME SPENT" scale.

E. COMPILING AND MAINTAINING RECORDS AND LOGS

	COL 1	COLUMN 2
	Blacken IF DONE NOW	TIME SPENT Present Job 1. Very small amount. 2. Much below average. 3. Below average. 4. Slightly below average. 5. About average. 6. Slightly above average. 7. Above average. 8. Much above average. 9. Very large amount.
1. Compile or maintain daily traffic reports	○	○①②③④⑤⑥⑦⑧⑨
2. Compile or maintain files of messages transmitted and received	○	○①②③④⑤⑥⑦⑧⑨
3. Conduct traffic counts	○	○①②③④⑤⑥⑦⑧⑨
4. Log incoming or outgoing messages	○	○①②③④⑤⑥⑦⑧⑨
5. Maintain control symbol reports	○	○①②③④⑤⑥⑦⑧⑨
6. Maintain coordinators' logs	○	○①②③④⑤⑥⑦⑧⑨
7. Maintain current call sign lists	○	○①②③④⑤⑥⑦⑧⑨
8. Maintain digital voice and teletype data worksheets	○	○①②③④⑤⑥⑦⑧⑨
9. Maintain equipment status report files	○	○①②③④⑤⑥⑦⑧⑨
10. Maintain files of propagation graphs	○	○①②③④⑤⑥⑦⑧⑨
11. Maintain frequency utilization records or reports	○	○①②③④⑤⑥⑦⑧⑨
12. Maintain logs of aircraft transmissions or receptions	○	○①②③④⑤⑥⑦⑧⑨
13. Maintain MARS equipment inventory or supply records	○	○①②③④⑤⑥⑦⑧⑨
14. Maintain MARS membership records	○	○①②③④⑤⑥⑦⑧⑨
15. Maintain master station clock logs	○	○①②③④⑤⑥⑦⑧⑨
16. Maintain master station logs	○	○①②③④⑤⑥⑦⑧⑨
17. Maintain phone patch records	○	○①②③④⑤⑥⑦⑧⑨
18. Maintain position or circuit logs	○	○①②③④⑤⑥⑦⑧⑨
19. Maintain publications or directive files	○	○①②③④⑤⑥⑦⑧⑨
(Continued on next page)	○	○①②③④⑤⑥⑦⑧⑨
	○	○①②③④⑤⑥⑦⑧⑨
	○	○①②③④⑤⑥⑦⑧⑨
	○	○①②③④⑤⑥⑦⑧⑨
	○	○①②③④⑤⑥⑦⑧⑨

FIRST: READ each task – BLACKEN THE CIRCLE (○) in column 1 if you do the task now.

SECOND: WRITE IN TASKS you do if not listed.

THIRD: RATE each task you do – BLACKEN THE CIRCLE (○) in column 2 to make your rating, using the "TIME SPENT" scale.

E. COMPILING AND MAINTAINING RECORDS AND LOGS (Continued)

	COL 1 Blacken IF DONE NOW	COLUMN 2 TIME SPENT Present Job
20. Maintain records, correspondence, or report files	○	○①②③④⑤⑥⑦⑧⑨
21. Maintain station number sheets	○	○①②③④⑤⑥⑦⑧⑨
22. Maintain vistors' logs	○	○①②③④⑤⑥⑦⑧⑨
23. Prepare activated mission resumes	○	○①②③④⑤⑥⑦⑧⑨
24. Prepare interference reports	○	○①②③④⑤⑥⑦⑧⑨
25. Prepare reports of security violations	○	○①②③④⑤⑥⑦⑧⑨
26. Store, research, or maintain inventory lists of classified documents	○	○①②③④⑤⑥⑦⑧⑨
27. Type correspondence	○	○①②③④⑤⑥⑦⑧⑨
28. Type records, reports, or forms	○	○①②③④⑤⑥⑦⑧⑨
NOTE: If any task you perform under this duty is not listed, write it on the ... page at the end of the booklet.	○	○①②③④⑤⑥⑦⑧⑨
(Continued on next page)	○	○①②③④⑤⑥⑦⑧⑨
	○	○①②③④⑤⑥⑦⑧⑨
	○	○①②③④⑤⑥⑦⑧⑨
	○	○①②③④⑤⑥⑦⑧⑨
	○	○①②③④⑤⑥⑦⑧⑨
	○	○①②③④⑤⑥⑦⑧⑨
	○	○①②③④⑤⑥⑦⑧⑨
	○	○①②③④⑤⑥⑦⑧⑨
	○	○①②③④⑤⑥⑦⑧⑨
	○	○①②③④⑤⑥⑦⑧⑨
	○	○①②③④⑤⑥⑦⑧⑨
	○	○①②③④⑤⑥⑦⑧⑨
	○	○①②③④⑤⑥⑦⑧⑨
	○	○①②③④⑤⑥⑦⑧⑨

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FIRST: READ each task – BLACKEN THE CIRCLE (○) in column 1 if you do the task now.

SECOND: WRITE IN TASKS you do if not listed.

THIRD: RATE each task you do – BLACKEN THE CIRCLE (○) in column 2 to make your rating, using the "TIME SPENT" scale.

F. SETTING UP AND MAINTAINING GROUND RADIO OPERATOR

	COL 1	COLUMN 2
	Blacken IF DONE NOW	TIME SPENT Present Job 1. Very small amount. 2. Much below average. 3. Below average. 4. Slightly below average. 5. About average. 6. Slightly above average. 7. Above average. 8. Much above average. 9. Very large amount.
1. Adjust antenna tuning units	○	○①②③④⑤⑥⑦⑧⑨
2. Adjust manual telegraph keys for operation	○	○①②③④⑤⑥⑦⑧⑨
3. Adjust receivers to obtain readable signals	○	○①②③④⑤⑥⑦⑧⑨
4. Adjust semiautomatic telegraph keys for operation	○	○①②③④⑤⑥⑦⑧⑨
5. Calibrate fixed ground transceivers	○	○①②③④⑤⑥⑦⑧⑨
6. Calibrate portable transceivers	○	○①②③④⑤⑥⑦⑧⑨
7. Calibrate standard communications receivers	○	○①②③④⑤⑥⑦⑧⑨
8. Change or store recording tapes	○	○①②③④⑤⑥⑦⑧⑨
9. Check operation of ground radio recording equipment	○	○①②③④⑤⑥⑦⑧⑨
10. Configure equipment to provide radio-to-radio relay	○	○①②③④⑤⑥⑦⑧⑨
11. Configure scope control consoles for operation	○	○①②③④⑤⑥⑦⑧⑨
12. Configure scope safe equipment for operation	○	○①②③④⑤⑥⑦⑧⑨
13. Construct or orient antennas for mobile or portable operations	○	○①②③④⑤⑥⑦⑧⑨
14. Coordinate traffic with other agencies or units, such as air traffic control, or airborne command posts	○	○①②③④⑤⑥⑦⑧⑨
15. Operate auxiliary generators and equipment	○	○①②③④⑤⑥⑦⑧⑨
16. Operate rotating antenna equipment for maximum signal strength	○	○①②③④⑤⑥⑦⑧⑨
17. Perform operational checks of power units	○	○①②③④⑤⑥⑦⑧⑨
18. Perform operator maintenance of facility equipment	○	○①②③④⑤⑥⑦⑧⑨
19. Perform operator tests to isolate antenna malfunctions	○	○①②③④⑤⑥⑦⑧⑨
20. Perform operator tests to isolate control unit malfunctions of ground radio equipment	○	○①②③④⑤⑥⑦⑧⑨
(Continued on next page)	○	○①②③④⑤⑥⑦⑧⑨
	○	○①②③④⑤⑥⑦⑧⑨
	○	○①②③④⑤⑥⑦⑧⑨
	○	○①②③④⑤⑥⑦⑧⑨

CODE 99

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SECOND: WRITE IN TASKS you do if not listed.

THIRD: RATE each task you do – BLACKEN THE CIRCLE (○) in column 2 to make your rating, using the "TIME SPENT" scale.

F. SETTING UP AND MAINTAINING GROUND RADIO OPERATOR (Continued)

	COL 1 Blacken IF DONE NOW	COLUMN 2 TIME SPENT Present Job 1. Very small amount. 2. Much below average. 3. Below average. 4. Slightly below average. 5. About average. 6. Slightly above average. 7. Above average. 8. Much above average. 9. Very large amount.
21. Perform operator tests to isolate ground receiver malfunctions	○	○①②③④⑤⑥⑦⑧⑨
22. Perform operator tests to isolate ground transmitter malfunctions	○	○①②③④⑤⑥⑦⑧⑨
23. Select optimun working frequency (OWF) through use of propagation charts	○	○①②③④⑤⑥⑦⑧⑨
24. Select or change antennas by remote control	○	○①②③④⑤⑥⑦⑧⑨
25. Set up duplex operations	○	○①②③④⑤⑥⑦⑧⑨
26. Set up field radio equipment	○	○①②③④⑤⑥⑦⑧⑨
27. Set up interior patch panels in technical control bays or TSQ-93V modules	○	○①②③④⑤⑥⑦⑧⑨
28. Set up mobile radio equipment or antennas	○	○①②③④⑤⑥⑦⑧⑨
29. Set up mobile switchboard/telephone equipment	○	○①②③④⑤⑥⑦⑧⑨
30. Set up TSQ-93V modules, or interface radio units to modules	○	○①②③④⑤⑥⑦⑧⑨
31. Set up Very High Frequency/Frequency Modulated (VHF/FM) equipment for repeater use in field	○	○①②③④⑤⑥⑦⑧⑨
32. Test receiver or transmitter frequencies	○	○①②③④⑤⑥⑦⑧⑨
33. Tune or change receiver frequencies by means of remote control	○	○①②③④⑤⑥⑦⑧⑨
34. Tune or change receiver frequencies manually	○	○①②③④⑤⑥⑦⑧⑨
35. Tune or change transceiver frequencies by means of remote control	○	○①②③④⑤⑥⑦⑧⑨
36. Tune or change transceiver frequencies manually	○	○①②③④⑤⑥⑦⑧⑨
37. Tune or change transmitter frequencies by means of remote control	○	○①②③④⑤⑥⑦⑧⑨
38. Tune or change transmitter frequencies manually	○	○①②③④⑤⑥⑦⑧⑨
39. Tune or operate standard high frequency, single side-band (HF SSB) aircraft liaison radio systems	○	○①②③④⑤⑥⑦⑧⑨
NOTE: If any task you perform under this duty is not listed, write it on the blank page at the end of the booklet.	○	○①②③④⑤⑥⑦⑧⑨
	○	○①②③④⑤⑥⑦⑧⑨
(Continued on next page)	○	○①②③④⑤⑥⑦⑧⑨
	○	○①②③④⑤⑥⑦⑧⑨
	○	○①②③④⑤⑥⑦⑧⑨

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SECOND: WRITE IN TASKS you do if not listed.

THIRD: RATE each task you do – BLACKEN THE CIRCLE (○) in column 2 to make your rating, using the "TIME SPENT" scale.

G. TRANSMITTING AND RECEIVING

	COL 1	COLUMN 2
	Blacken IF DONE NOW	TIME SPENT Present Job 1. Very small amount. 2. Much below average. 3. Below average. 4. Slightly below average. 5. About average. 6. Slightly above average. 7. Above average. 8. Much above average. 9. Very large amount.
1. Alert direction finding stations	○	○①②③④⑤⑥⑦⑧⑨
2. Analyze or evaluate foreign electronic equipment or systems	○	○①②③④⑤⑥⑦⑧⑨
3. Authenticate stations or message traffic using "built-in" authentication systems	○	○①②③④⑤⑥⑦⑧⑨
4. Authenticate stations or message traffic using challenge-and-reply systems	○	○①②③④⑤⑥⑦⑧⑨
5. Communicate with other stations using pro-sign, pro-words, or phonetics in radio communications	○	○①②③④⑤⑥⑦⑧⑨
6. Coordinate air-to-ground traffic	○	○①②③④⑤⑥⑦⑧⑨
7. Determine probable purpose or use of foreign electronic equipment	○	○①②③④⑤⑥⑦⑧⑨
8. Determine type of interference	○	○①②③④⑤⑥⑦⑧⑨
9. Encode or decode messages automatically	○	○①②③④⑤⑥⑦⑧⑨
10. Encode or decode messages manually	○	○①②③④⑤⑥⑦⑧⑨
11. Identify characteristics of electronic emissions by aural means	○	○①②③④⑤⑥⑦⑧⑨
12. Identify characteristics of electronic emissions by viewing panoramic adapters	○	○①②③④⑤⑥⑦⑧⑨
13. Identify incoming calls using call sign list	○	○①②③④⑤⑥⑦⑧⑨
14. Implement interference countermeasures	○	○①②③④⑤⑥⑦⑧⑨
15. Interpret source or type of signals	○	○①②③④⑤⑥⑦⑧⑨
16. Interpret weather reports for transmission	○	○①②③④⑤⑥⑦⑧⑨
17. List traffic with net control stations	○	○①②③④⑤⑥⑦⑧⑨
18. Maintain watch on designated frequencies	○	○①②③④⑤⑥⑦⑧⑨
19. Make phone patches	○	○①②③④⑤⑥⑦⑧⑨
20. Make receiver changes or adjustments to reduce interference	○	○①②③④⑤⑥⑦⑧⑨
	○	○①②③④⑤⑥⑦⑧⑨
(Continued on next page)	○	○①②③④⑤⑥⑦⑧⑨
	○	○①②③④⑤⑥⑦⑧⑨
	○	○①②③④⑤⑥⑦⑧⑨

CODE 99

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SECOND: WRITE IN TASKS you do if not listed.

THIRD: RATE each task you do – BLACKEN THE CIRCLE (○) in column 2 to make your rating, using the "TIME SPENT" scale.

C. TRANSMITTING AND RECEIVING (Continued)

	COL 1	COLUMN 2
	Blacken IF DONE NOW	TIME SPENT Present Job 1. Very small amount. 2. Much below average. 3. Below average. 4. Slightly below average. 5. About average. 6. Slightly above average. 7. Above average. 8. Much above average. 9. Very large amount.
21. Make time checks	○	○①②③④⑤⑥⑦⑧⑨
22. Make voice contacts at scheduled times	○	○①②③④⑤⑥⑦⑧⑨
23. Monitor net security	○	○①②③④⑤⑥⑦⑧⑨
24. Monitor or maintain frequency standards of stations on net	○	○①②③④⑤⑥⑦⑧⑨
25. Monitor or patch radio teletype traffic through High Frequency (HF) equipment	○	○①②③④⑤⑥⑦⑧⑨
26. Monitor primary radio frequency	○	○①②③④⑤⑥⑦⑧⑨
27. Obtain or transmit aircraft clearances and advisories	○	○①②③④⑤⑥⑦⑧⑨
28. Operate confusion reflectors on dispensing equipment	○	○①②③④⑤⑥⑦⑧⑨
29. Operate fixed ground transceivers	○	○①②③④⑤⑥⑦⑧⑨
30. Operate jamming transmitters	○	○①②③④⑤⑥⑦⑧⑨
31. Operate portable transceivers	○	○①②③④⑤⑥⑦⑧⑨
32. Operate standard communications receivers	○	○①②③④⑤⑥⑦⑧⑨
33. Operate standard communications transmitters	○	○①②③④⑤⑥⑦⑧⑨
34. Process requests for assistance, information, or instructions from aircraft in flight	○	○①②③④⑤⑥⑦⑧⑨
35. Receive international Morse code	○	○①②③④⑤⑥⑦⑧⑨
36. Relay communications traffic between fixed stations and aircraft	○	○①②③④⑤⑥⑦⑧⑨
37. Relay communications traffic between fixed stations and mobile stations	○	○①②③④⑤⑥⑦⑧⑨
38. Relay communications traffic between mobile stations and aircraft	○	○①②③④⑤⑥⑦⑧⑨
39. Request weather reports	○	○①②③④⑤⑥⑦⑧⑨
40. Route or reroute aircraft movement messages	○	○①②③④⑤⑥⑦⑧⑨
(Continued on next page)	○	○①②③④⑤⑥⑦⑧⑨
	○	○①②③④⑤⑥⑦⑧⑨
	○	○①②③④⑤⑥⑦⑧⑨
	○	○①②③④⑤⑥⑦⑧⑨

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FIRST: READ each task – BLACKEN THE CIRCLE (○) in column 1 if you do the task now.

SECOND: WRITE IN TASKS you do if not listed.

THIRD: RATE each task you do – BLACKEN THE CIRCLE (○) in column 2 to make your rating, using the "TIME SPENT" scale.

G. TRANSMITTING AND RECEIVING (Continued)

	COL 1	COLUMN 2
	Blacken ○ IF DONE NOW	TIME SPENT Present Job 1. Very small amount. 2. Much below average. 3. Below average. 4. Slightly below average. 5. About average. 6. Slightly above average. 7. Above average. 8. Much above average. 9. Very large amount.
41. Send departure messages	○	①②③④⑤⑥⑦⑧⑨
42. Send international Morse code	○	①②③④⑤⑥⑦⑧⑨
43. Send or receive messages using International Civil Aviation Organization (ICAO) procedures	○	①②③④⑤⑥⑦⑧⑨
44. Send or receive messages using joint forces operating procedures	○	①②③④⑤⑥⑦⑧⑨
45. Send or receive telegram traffic	○	①②③④⑤⑥⑦⑧⑨
46. Send position reports	○	①②③④⑤⑥⑦⑧⑨
47. Take actions upon receipt of emergency or distress signals	○	①②③④⑤⑥⑦⑧⑨
48. Transcribe international Morse code by hand	○	①②③④⑤⑥⑦⑧⑨
49. Transcribe international Morse code using typewriters	○	①②③④⑤⑥⑦⑧⑨
50. Transcribe voice transmissions by hand	○	①②③④⑤⑥⑦⑧⑨
51. Transcribe voice transmissions using typewriters	○	①②③④⑤⑥⑦⑧⑨
52. Transmit or receive messages by radioteletype systems	○	①②③④⑤⑥⑦⑧⑨
53. Transmit or receive messages by signal lamps	○	①②③④⑤⑥⑦⑧⑨
NOTE: If any task you perform under this duty is not listed, write it on the blank page at the end of the booklet.	○	①②③④⑤⑥⑦⑧⑨
	○	①②③④⑤⑥⑦⑧⑨
(Continued on next page)	○	①②③④⑤⑥⑦⑧⑨
	○	①②③④⑤⑥⑦⑧⑨
	○	①②③④⑤⑥⑦⑧⑨
	○	①②③④⑤⑥⑦⑧⑨
	○	①②③④⑤⑥⑦⑧⑨
	○	①②③④⑤⑥⑦⑧⑨
	○	①②③④⑤⑥⑦⑧⑨
	○	①②③④⑤⑥⑦⑧⑨
	○	①②③④⑤⑥⑦⑧⑨

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SECOND: WRITE IN TASKS you do if not listed.

THIRD: RATE each task you do – BLACKEN THE CIRCLE (○) in column 2 to make your rating, using the "TIME SPENT" scale.

H. PERFORMING PREFLIGHT AND POSTFLIGHT INSPECTIONS	COL 1 Blacken IF DONE NOW	COLUMN 2 TIME SPENT Present Job
1. Check aircraft transmitter or receiver channel settings	○	
2. Check or tighten aircraft radio or navigation equipment fittings	○	
3. Operationally check aircraft direction finders	○	
4. Operationally check aircraft electronic direction finding (EDF) antenna systems	○	
5. Operationally check aircraft EDF preamplifiers	○	
6. Operationally check aircraft EDF receivers	○	
7. Operationally check aircraft EDF signal display units (SDU)	○	
8. Operationally check aircraft HF transceivers	○	
9. Operationally check aircraft identification friend or foe (IFF) systems	○	
10. Operationally check aircraft omni navigation receivers	○	
11. Operationally check aircraft radio compasses	○	
12. Operationally check aircraft Ultra High Frequency (UHF) receivers	○	
13. Operationally check aircraft UHF transmitters	○	
14. Operationally check aircraft Very High Frequency (VHF) receivers	○	
15. Operationally check aircraft VHF transmitters	○	
16. Operationally check marker beacon buoys or tactical training beacons	○	
17. Perform preflight or postflight inspections of airborne command post multiplexer systems	○	
18. Perform preflight or postflight inspections of aircraft antenna controls	○	
(Continued on next page)	○	
	○	
	○	
	○	
	○	
	○	

1. Very small amount.
2. Much below average.
3. Below average.
4. Slightly below average.
5. About average.
6. Slightly above average.
7. Above average.
8. Much above average.
9. Very large amount.

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SECOND: WRITE IN TASKS you do if not listed.

THIRD: RATE each task you do – BLACKEN THE CIRCLE (○) in column 2 to make your rating, using the "TIME SPENT" scale.

H. PERFORMING PREFLIGHT AND POSTFLIGHT INSPECTIONS (Continued)	COL 1 Blacken ○ IF DONE NOW	COLUMN 2 TIME SPENT Present Job 1. Very small amount. 2. Much below average. 3. Below average. 4. Slightly below average. 5. About average. 6. Slightly above average. 7. Above average. 8. Much above average. 9. Very large amount.
19. Perform preflight or postflight inspections of aircraft emergency equipment	○	○①②③④⑤⑥⑦⑧⑨
20. Perform preflight or postflight inspections of aircraft emergency radios	○	○①②③④⑤⑥⑦⑧⑨
21. Perform preflight or postflight inspections of aircraft navigation equipment	○	○①②③④⑤⑥⑦⑧⑨
22. Perform preflight or postflight inspections of aircraft or navigation equipment circuit breakers or fuses	○	○①②③④⑤⑥⑦⑧⑨
23. Perform preflight or postflight inspections of aircraft oxygen systems	○	○①②③④⑤⑥⑦⑧⑨
24. Perform preflight or postflight inspections of aircraft power supplies or panels	○	○①②③④⑤⑥⑦⑧⑨
25. Perform preflight or postflight inspections of aircraft tape recording systems	○	○①②③④⑤⑥⑦⑧⑨
26. Perform preflight or postflight inspections of command staff consoles	○	○①②③④⑤⑥⑦⑧⑨
27. Perform preflight or postflight inspections of equipment cooling systems or controls	○	○①②③④⑤⑥⑦⑧⑨
28. Perform preflight or postflight inspections of fixed aircraft antennas	○	○①②③④⑤⑥⑦⑧⑨
29. Perform preflight or postflight inspections of radio G-files	○	○①②③④⑤⑥⑦⑧⑨
30. Perform preflight or postflight inspections of secure voice systems	○	○①②③④⑤⑥⑦⑧⑨
31. Perform preflight or postflight inspections of static dischargers	○	○①②③④⑤⑥⑦⑧⑨
32. Perform preflight or postflight inspections of switchboards	○	○①②③④⑤⑥⑦⑧⑨
33. Perform preflight or postflight inspections of trailing wire antennas	○	○①②③④⑤⑥⑦⑧⑨
34. Perform preflight or postflight inspections of UHF radios	○	○①②③④⑤⑥⑦⑧⑨
35. Perform preflight or postflight inspections of VHF-FM radios	○	○①②③④⑤⑥⑦⑧⑨
36. Prepare or review Aircraft Inventory Equipment List forms (AFTO Form 780-1)	○	○①②③④⑤⑥⑦⑧⑨
NOTE: If any task you perform under this duty is not listed, write it on the blank page at the end of the booklet.	○	○①②③④⑤⑥⑦⑧⑨
	○	○①②③④⑤⑥⑦⑧⑨
(Continued on next page)	○	○①②③④⑤⑥⑦⑧⑨
	○	○①②③④⑤⑥⑦⑧⑨
	○	○①②③④⑤⑥⑦⑧⑨
	○	○①②③④⑤⑥⑦⑧⑨

FIRST: READ each task - BLACKEN THE CIRCLE (○) in column 1 if you do the task now.

SECOND: WRITE IN TASKS you do if not listed.

THIRD: RATE each task you do - BLACKEN THE CIRCLE (○) in column 2 to show your rating, using the "TIME SPENT" scale.

I. ISOLATING EQUIPMENT MALFUNCTIONS	COL 1 — Blacken IF DONE NOW	COLUMN 2 — TIME SPENT Present Job
1. Remove or replace assemblies of aircraft EDF antenna systems	○	○①②③④⑤⑥⑦⑧⑨
2. Remove or replace assemblies of aircraft EDF preamplifiers	○	○①②③④⑤⑥⑦⑧⑨
3. Remove or replace assemblies of aircraft EDF receivers	○	○①②③④⑤⑥⑦⑧⑨
4. Remove or replace assemblies of aircraft EDF SDU	○	○①②③④⑤⑥⑦⑧⑨
5. Remove or replace assemblies of aircraft tape recorder systems	○	○①②③④⑤⑥⑦⑧⑨
6. Remove or replace assemblies of amplitude modulation (AM) dropout systems	○	○①②③④⑤⑥⑦⑧⑨
7. Remove or replace assemblies of automatic direction finding (ADF) systems	○	○①②③④⑤⑥⑦⑧⑨
8. Remove or replace assemblies of automatic identification monitoring systems (AIMS) systems	○	○①②③④⑤⑥⑦⑧⑨
9. Remove or replace assemblies of electrical switching systems	○	○①②③④⑤⑥⑦⑧⑨
10. Remove or replace assemblies of equipment cooling systems	○	○①②③④⑤⑥⑦⑧⑨
11. Remove or replace assemblies of glide scope systems	○	○①②③④⑤⑥⑦⑧⑨
12. Remove or replace assemblies of HF radio systems	○	○①②③④⑤⑥⑦⑧⑨
13. Remove or replace assemblies of IFF systems	○	○①②③④⑤⑥⑦⑧⑨
14. Remove or replace assemblies of ILS systems	○	○①②③④⑤⑥⑦⑧⑨
15. Remove or replace assemblies of interphone systems	○	○①②③④⑤⑥⑦⑧⑨
16. Remove or replace assemblies of liaison radio systems	○	○①②③④⑤⑥⑦⑧⑨
17. Remove or replace assemblies of long-range navigation (LORAN) systems	○	○①②③④⑤⑥⑦⑧⑨
18. Remove or replace assemblies of marker beacon systems	○	○①②③④⑤⑥⑦⑧⑨
19. Remove or replace assemblies of multiplexing systems	○	○①②③④⑤⑥⑦⑧⑨
20. Remove or replace assemblies of radar altimeter systems	○	○①②③④⑤⑥⑦⑧⑨
(Continued on next page)	○	○①②③④⑤⑥⑦⑧⑨
	○	○①②③④⑤⑥⑦⑧⑨
	○	○①②③④⑤⑥⑦⑧⑨
	○	○①②③④⑤⑥⑦⑧⑨

1. Very small amount.
2. Much below average.
3. Below average.
4. Slightly below average.
5. About average.
6. Slightly above average.
7. Above average.
8. Much above average.
9. Very large amount.

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FIRST: READ each task – BLACKEN THE CIRCLE (○) in column 1 if you do the task now.

SECOND: WRITE IN TASKS you do if not listed.

THIRD: RATE each task you do – BLACKEN THE CIRCLE (○) in column 2 to make your rating, using the "TIME SPENT" scale.

I. ISOLATING EQUIPMENT MALFUNCTIONS (Continued)

	COL 1	COLUMN 2
	Blacken ○ IF DONE NOW	TIME SPENT Present Job 1. Very small amount. 2. Much below average. 3. Below average. 4. Slightly below average. 5. About average. 6. Slightly above average. 7. Above average. 8. Much above average. 9. Very large amount.
21. Remove or replace assemblies of radar navigation systems	○	①②③④⑤⑥⑦⑧⑨
22. Remove or replace assemblies of radio altimeter systems	○	①②③④⑤⑥⑦⑧⑨
23. Remove or replace assemblies of secure voice systems	○	①②③④⑤⑥⑦⑧⑨
24. Remove or replace assemblies of tactical air navigation (TACAN) systems	○	①②③④⑤⑥⑦⑧⑨
25. Remove or replace assemblies of UHF radio systems	○	①②③④⑤⑥⑦⑧⑨
26. Remove or replace assemblies of VHF omnirange systems	○	①②③④⑤⑥⑦⑧⑨
27. Remove or replace assemblies of VHF radio systems	○	①②③④⑤⑥⑦⑧⑨
28. Remove or replace assemblies of VHF-FM telephone systems	○	①②③④⑤⑥⑦⑧⑨
29. Troubleshoot ADF systems to malfunctioning assemblies	○	①②③④⑤⑥⑦⑧⑨
30. Troubleshoot AIMS systems to malfunctioning assemblies	○	①②③④⑤⑥⑦⑧⑨
31. Troubleshoot aircraft EDF antenna systems to malfunctioning assemblies	○	①②③④⑤⑥⑦⑧⑨
32. Troubleshoot aircraft EDF preamplifiers to malfunctioning assemblies	○	①②③④⑤⑥⑦⑧⑨
33. Troubleshoot aircraft EDF receivers to malfunctioning assemblies	○	①②③④⑤⑥⑦⑧⑨
34. Troubleshoot aircraft EDF SDU's to malfunctioning assemblies	○	①②③④⑤⑥⑦⑧⑨
35. Troubleshoot aircraft tape recorder systems to malfunctioning assemblies	○	①②③④⑤⑥⑦⑧⑨
36. Troubleshoot AM dropout systems to malfunctioning assemblies	○	①②③④⑤⑥⑦⑧⑨
37. Troubleshoot electrical switching systems to malfunctioning assemblies	○	①②③④⑤⑥⑦⑧⑨
38. Troubleshoot equipment cooling systems to malfunctioning assemblies	○	①②③④⑤⑥⑦⑧⑨
39. Troubleshoot glide scope systems to malfunctioning assemblies	○	①②③④⑤⑥⑦⑧⑨
40. Troubleshoot HF radio systems to malfunctioning assemblies	○	①②③④⑤⑥⑦⑧⑨
	○	①②③④⑤⑥⑦⑧⑨
(Continued on next page)	○	①②③④⑤⑥⑦⑧⑨
	○	①②③④⑤⑥⑦⑧⑨
	○	①②③④⑤⑥⑦⑧⑨

	FIRST: READ each task – BLACKEN THE CIRCLE (○) in column 1 if you do the task now.	COL 1	COLUMN 2
	SECOND: WRITE IN TASKS you do if not listed.		TIME SPENT Present Job
	THIRD: RATE each task you do – BLACKEN THE CIRCLE (○) in column 2 to make your rating, using the "TIME SPENT" scale.	Blacken ○ IF DONE NOW	1. Very small amount. 2. Much below average. 3. Below average. 4. Slightly below average 5. About average. 6. Slightly above average 7. Above average. 8. Much above average. 9. Ve[illegible] large amount.
	I. ISOLATING EQUIPMENT MALFUNCTIONS (Continued)		
41. Troubleshoot IFF systems to malfunctioning assemblies		○	○②③④⑤⑥⑦⑧⑨
42. Troubleshoot ILS systems to malfunctioning assemblies		○	○②③④⑤⑥⑦⑧⑨
43. Troubleshoot interphone systems to malfunctioning assemblies		○	○②③④⑤⑥⑦⑧⑨
44. Troubleshoot liaison systems to malfunctioning assemblies		○	○②③④⑤⑥⑦⑧⑨
45. Troubleshoot LORAN systems to malfunctioning assemblies		○	○②③④⑤⑥⑦⑧⑨
46. Troubleshoot marker beacon buoys or tactical training beacons to malfunctioning assemblies		○	○②③④⑤⑥⑦⑧⑨
47. Troubleshoot marker beacon systems to malfunctioning assemblies		○	○②③④⑤⑥⑦⑧⑨
48. Troubleshoot multiplexing systems to malfunctioning assemblies		○	○②③④⑤⑥⑦⑧⑨
49. Troubleshoot radar altimeter systems to malfunctioning assemblies		○	○②③④⑤⑥⑦⑧⑨
50. Troubleshoot radar navigation systems to malfunctioning assemblies		○	○②③④⑤⑥⑦⑧⑨
51. Troubleshoot radio altimeter systems to malfunctioning assemblies		○	○②③④⑤⑥⑦⑧⑨
52. Troubleshoot secure voice systems to malfunctioning assemblies		○	○②③④⑤⑥⑦⑧⑨
53. Troubleshoot TACAN systems to malfunctioning assemblies		○	○②③④⑤⑥⑦⑧⑨
54. Troubleshoot UHF radio systems to malfunctioning assemblies		○	○②③④⑤⑥⑦⑧⑨
55. Troubleshoot VHF radio systems to malfunctioning assemblies		○	○②③④⑤⑥⑦⑧⑨
56. Troubleshoot VHF-FM telephone systems to malfunctioning assemblies		○	○②③④⑤⑥⑦⑧⑨
57. Troubleshoot VOR systems to malfunctioning assemblies		○	○②③④⑤⑥⑦⑧⑨
		○	○②③④⑤⑥⑦⑧⑨
NOTE: If any task you perform under this task is not listed, write it on the blank page at the end of the booklet.		○	○②③④⑤⑥⑦⑧⑨
		○	○②③④⑤⑥⑦⑧⑨
(Continued on next page)		○	○②③④⑤⑥⑦⑧⑨
		○	○②③④⑤⑥⑦⑧⑨
		○	○②③④⑤⑥⑦⑧⑨
		○	○②③④⑤⑥⑦⑧⑨

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CODE 01, TYPE 1-9-B

FIRST: READ each task – BLACKEN THE CIRCLE (○) in column 1 if you do the task now.

SECOND: WRITE IN TASKS you do if not listed.

THIRD: RATE each task you do – BLACKEN THE CIRCLE (○) in column 2 to make your rating, using the "TIME SPENT" scale.

J. PLANNING FLIGHT MISSIONS

	COL 1	COLUMN 2
	Blacken IF DONE NOW	TIME SPENT Present Job 1. Very small amount. 2. Much below average. 3. Below average. 4. Slightly below average. 5. About average. 6. Slightly above average. 7. Above average. 8. Much above average. 9. Very large amount.
1. Check out or receive classified information for flights	○	①②③④⑤⑥⑦⑧⑨
2. Coordinate with aeronautical stations on very important person (VIP) flights	○	①②③④⑤⑥⑦⑧⑨
3. Coordinate with other units or agencies on obtaining orders, passports, or visas	○	①②③④⑤⑥⑦⑧⑨
4. Follow up Joint Message forms (DD Form 173)	○	①②③④⑤⑥⑦⑧⑨
5. Prepare and forward Joint Message forms (DD Form 173)	○	①②③④⑤⑥⑦⑧⑨
6. Prepare flight plans or trip itineraries	○	①②③④⑤⑥⑦⑧⑨
7. Prepare flight publication kits	○	①②③④⑤⑥⑦⑧⑨
8. Prepare radio operator's kits	○	①②③④⑤⑥⑦⑧⑨
9. Prepare requests for orders, passports, or visas	○	①②③④⑤⑥⑦⑧⑨
10. Receive or review trip itineraries	○	①②③④⑤⑥⑦⑧⑨
11. Review flight crew information files (FCIF)	○	①②③④⑤⑥⑦⑧⑨
12. Sign out spare or necessary radio or navigation equipment	○	①②③④⑤⑥⑦⑧⑨
	○	①②③④⑤⑥⑦⑧⑨
NOTE: If any task you perform under this task is not listed, write it on the blank page at the end of the booklet.	○	①②③④⑤⑥⑦⑧⑨
	○	①②③④⑤⑥⑦⑧⑨
(Continued on next page)	○	①②③④⑤⑥⑦⑧⑨
	○	①②③④⑤⑥⑦⑧⑨
	○	①②③④⑤⑥⑦⑧⑨
	○	①②③④⑤⑥⑦⑧⑨
	○	①②③④⑤⑥⑦⑧⑨
	○	①②③④⑤⑥⑦⑧⑨
	○	①②③④⑤⑥⑦⑧⑨
	○	①②③④⑤⑥⑦⑧⑨
	○	①②③④⑤⑥⑦⑧⑨

FIRST: READ each task -- BLACKEN THE CIRCLE (○) in column 1 if you do the task now.

SECOND: WRITE IN TASKS you do if not listed.

THIRD: RATE each task you do -- BLACKEN THE CIRCLE (○) in column 2 to make your rating using the "TIME SPENT" scale.

K. PERFORMING CREW DUTIES

	COL 1 Blacken IF DONE NOW	COLUMN 2 TIME SPENT Present Job
1. Arrange for lodging or transportation of crew members	○	
2. Assist in refueling of aircraft	○	
3. Clean exterior of aircraft	○	
4. Clean interior of aircraft	○	
5. Load or unload baggage, cargo, or food	○	
6. Practice or perform aircraft ditching procedures	○	
7. Practice or perform bailout procedures	○	
8. Practice or perform cabin fire procedures	○	
9. Practice or perform cargo jettisoning procedures	○	
10. Practice or perform crash landing procedures	○	
11. Practice or perform egress procedures	○	
12. Practice or perform electrical fire procedures	○	
13. Practice or perform lower compartment fire procedures	○	
14. Practice or perform smoke elimination procedures	○	
15. Practice survival procedures	○	
16. Serve as flight safety man	○	
17. Serve as flight steward	○	
18. Serve as loadmaster	○	
19. Set up aircraft security	○	
20. Stow crew gear on aircraft	○	
NOTE: If any task you perform under this duty is not listed, write it on the blank page at the end of the booklet. → GO TO PAGE x1 AND FOLLOW PROCEDURE B	○	
→ When you have completed all ratings in this column on pages 1 - 19, you have completed this job inventory. Place the inventory in the enclosed envelope and seal it. Then complete the indicated information on the envelope and return it to your CBPO.	○	

1 Very small amount
2 Much below average
3 Below average
4 Slightly below average
5 About average
6 Slightly above average
7 Above average
8 Much above average
9 Very large amount

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USE THIS PAGE TO ADD ANY TASKS YOU DO, BUT

ARE NOT LISTED ANYWHERE IN THE INVENTORY.

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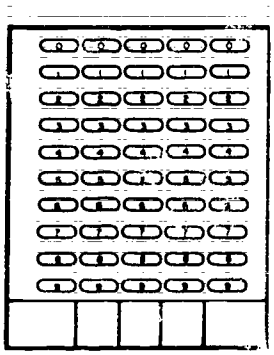

PLACE THE COMPLETED BOOKLET IN THE ENCLOSED ENVELOPE AND SEAL IT. THEN COMPLETE THE INFORMATION ON THE ENVELOPE AND RETURN IT TO YOUR CBPO WHO WILL INSURE THAT IT GETS MAILED TO THE CORRECT OFFICE.

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APPENDIX B: JOB TYPING ANALYSIS RESULTS

Job Typing Analysis

The radio operator job survey was developed by the Occupational Measurement Center (OMC) at Lackland Air Force Base, Texas, from August 1973 to November 1974. Survey booklets were administered during November and December 1974 to 1,501 radio operators. Results from the CODAP hierarchical clustering are shown in Table B-1. Table B-2 presents corresponding results from the two job typing analyses conducted for the time 1 and time 2 samples of 709 radio operators, which were extracted from the larger 1,501 group. Comparing the OMC job types with the time 1 subset indicates that the 709 subset is fairly representative of job types identified in the larger group. The time 1 and time 2 job types arrayed by group membership are presented in Figure B-1. The length of each horizontal bar on the graph indicates the number of individuals in that job type. In order to assess the fidelity of the job typing procedure at two points in time, zero order correlations based upon the percentage of time spent on tasks were calculated for all job types across the 345 tasks. Percent - time spent and percent - members performing are standard CODAP job analysis results. Coefficients for matched sets of job types are indicated in Figure B-1. Table B-3 presents the full matrix of correlations for all job types. As shown in the table, the highest coefficients are invariably between matched job types, while lower coefficients reflect differing amounts of time spent on tasks between two job types. The overall pattern indicates the stability of the larger types (ground- to-air, point-to-point, supervisor, and airborne) over time. Table B-4 presents averages for several variables for both time 1 and time 2 surveys. As would be expected, the average grade tended to increase over the 17 month period, as well as the average number of duty months. The job difficulty index changed slightly upward for ground-to-air and supervisors, while point- to-point and Staff NCO difficulty indices decreased. The Airborne difficulty index remained unchanged over the 17 months. Criteria averages are also presented by way of summarization and are discussed in the main body of the report.

Table B-1. Job Typing Results from OMC Survey 1974

N	Percent	Job Type
267	17.8	1 Airborne radio operator/supv
238	15.9	2 Point-to-point radio operator
405	27.0	3 Ground-to-air radio operator
36	2.4	4 Apprentice ground-to-air operator
358	23.8	5 Ground radio operations supervisor
20	1.3	6 Staff NCO
58	3.9	7 Tactical communications specialist/dispatcher
119	7.9	8 Isolates
1,501	100.0	

Table B-2. Time 1 and Time 2 Job Typing Results

Time 1			Time 2		
N	Percent	Job Type	N	Percent	Job Type
152	21.44	Airborne	163	22.99	Airborne
63	8.89	Point-to-point	58	8.18	Point-to-point
69	9.73	Point-to-point apprentice	180	25.39	Ground-to-Air
157	22.14	Ground-to-air	100	14.10	Supervisor (On-line)
156	22.00	Supervisor	77	10.86	Supervisor (Admin)
55	7.76	Staff NCO	63	8.89	Staff NCO
26	3.67	Tactical Specialist	10	1.41	Mobile Unit
31	4.37	Isolates	58	8.18	Isolates
709	100.00		709	100.00	

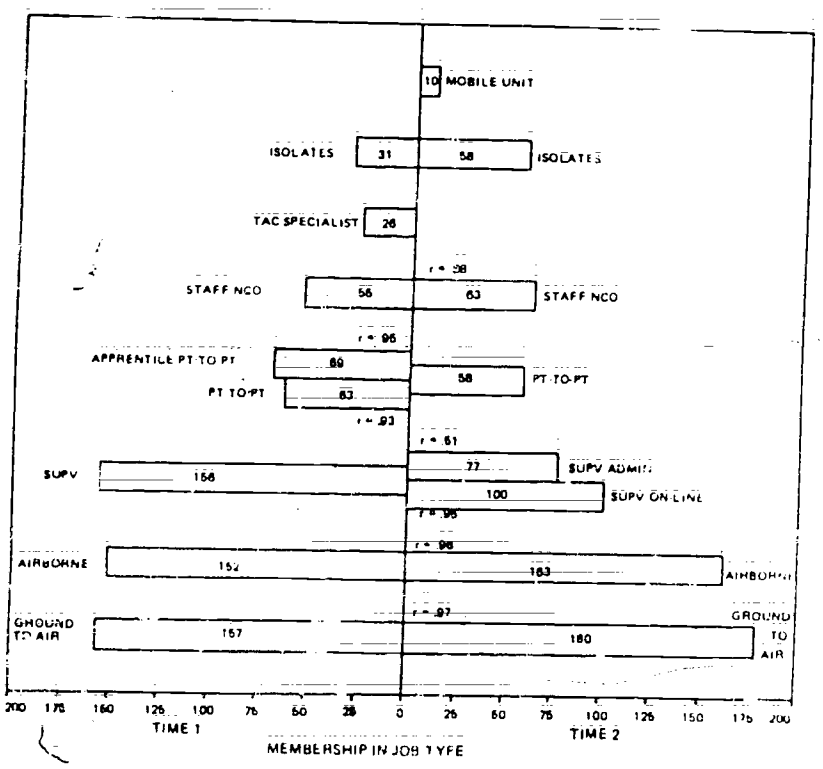

Figure B-1. Diagram aligning Time 1 — Time 2 job types by number of members in each group. Phi coefficients are based on % time spent on 345 tasks.

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Table B-3. Percent Time Spent Correlations for Time 1 - Time 2 Job Types

Time 2 Job Types	Time 1 Job Types						
	Ground-to-Air	Point-to-Point	Pt-to-Pt (App)	Supv	Airborne	Staff NCO	T S
Ground-to-Air	.97	.66	.68	.79	.31	-.00	.13
Point-to-Point	.69	.93	.95	.76	.24	.1	.19
Supv (On-line)	.54	.76	.65	.95	.08	.57	.37
Supv (Admin)	-.05	.14	.03	.51	-.05	.92	.63
Airborne	.31	.16	.26	.21	.96	.04	.16
Mobile Unit	.25	.51	.55	.42	.07	.06	.10
Staff NCO	-.12	.08	-.02	.29	-.07	.88	.59

Table B-4. Characteristics Associated with Radio Operator Job Types at Time 1 and Time 2

Job Type	Average Grade[a]	Duty Months	Job Difficulty Index	Criteria		
				Job Interest	Job Utilization	Overall Job Satisfaction
Time 1 Survey - November 1974						
Ground-to-Air	3.98	32.97	10.36	3.04	3.36	—
Airborne	5.91	59.41	15.99	5.20	4.72	—
Supervisor	5.12	47.22	17.29	5.17	3.61	—
Point-to-Point Apprentice	3.91	37.76	7.52	3.94	2.90	—
Staff NCO	6.31	51.02	16.65	4.93	3.89	—
Tactical Specialist	4.04	2[illegible]46	9.50	3.54	2.08	—
Time 2 Survey - April 1976						
Ground-to-Air	4.32	53.67	11.06	4.19	3.40	4.42
Airborne	6.01	66.16	15.99	5.28	4.37	5.23
Supervisor (On-line)	5.17	79.73	18.45	4.43	3.66	4.64
Supervisor (Admin)	6.08	72.[illegible]	[illegible].79	4.64	3.43	4.58
Point-to-Point	4.33	50.[illegible]	[illegible].05	3.26	2.58	3.55
Staff NCO	5.98	61.[illegible]	[illegible].92	4.35	3.11	4.29
Mobile Unit	4.70	89.[illegible]	[illegible].41	3.70	2.60	3.22

[a]Average Grade - 1 =Airman Basic, 2 =Airman, 3 =Airman first-class, 4 =Sergeant, 5 =Staff Sergeant, 6 =Technical Sergeant, 7 =Master Sergeant, 8 =Senior Master Sergeant, 9 =Chief Master Sergeant

Table B-5 presents a comparison of the percentage of members performing values for three selected tasks in each job type at both time 1 and time 2. The average number of tasks performed for each job type is also presented. The average number of tasks performed generally increased for all job types.

Table B-5. Representative Tasks Associated with Radio Operator Job Types at Time 1 and Time 2

Job Type	Mean Nr. of Tasks	% Memb Partic	Item	Representative Tasks
		Time 1 Survey - November 1974		
Ground-to-Air	42.09	91%	185	Maintain watch on designated frequencies
		86%	203	Relay communications-traffic between fixed stations and ACFT
		84%	173	Coordinate air-to-ground traffic
Airborne	104.74	94%	254	Perform preflight or postflight inspections of UHF radios
		92%	243	Perform preflight or postflight inspections of ACFT oxygen systems
		91%	228	Operationally check ACFT HF transceivers
Supervisor	86.67	94%	185	Maintain watch on designated frequencies
		92%	186	Make phone patches
		81%	93	Indoctrinate newly assigned personnel
Point-to-Point	51.35	97%	186	Make phone patches
		92%	118	Maintain position or circuit logs
		92%	164	Tune or change transceiver frequencies manually
Point-to-Point Apprentice	27.33	96%	186	Make phone patches
		78%	172	Communicate with other stations
		74%	185	Maintain watch on designated frequencies
Staff NCO	56.31	89%	9	Develop or improve work methods and procedures
		87%	4	Coordinate work activities w/other units or sections
		85%	30	Direct preparation of maintenance of records, reports, or logs
Tactical Specialist	16.04	62%	127	Type correspondence
		62%	128	Type records, reports, or forms
		54%	126	Store, research, or maintain inventory lists of classified documents
		Time 2 Survey - April 1976		
Ground-to-Air	49.82	92%	185	Maintain watch on designated frequencies
		84%	203	Relay communications traffic between fixed stations and ACFT
		83%	173	Coordinate air-to-ground traffic
Airborne	122.34	93%	243	Perform preflight or postflight inspections of ACFT oxygen systems
		89%	232	Operationally check ACFT UHF receivers
		88%	223	Operationally check ACFT HF transceivers
Supervisor (On-line)	94.12	90%	30	Direct preparation or maintenance of records, reports, forms, or logs
		90%	186	Make phone patches
		89%	185	Maintain watch on designated frequencies
Supervisor	65.21	88%	9	Develop or improve work methods or procedures
		87%	33	Draft, edit, or review correspondence
		87%	9	Indoctrinate newly assigned personnel
Point-to-Point	41.41	90%	186	Make phone patches
		90%	118	Maintain position or circuit logs
		90%	164	Tune or change transceiver frequencies manually
Staff NCO	26.94	79%	4	Coordinate work activities w/other units or sections
		68%	33	Draft, edit, or review correspondence
		65%	18	Plan or prepare briefings
Mobile Unit	33.90	90%	174	Set up field radio equipment
		80%	164	Tune or change transceiver frequency manually
		80%	141	Construct or orient antennas for mobile or portable ops

APPENDIX C: DESCRIPTION OF VARIABLES

Individual Inputs[a]

Aptitude Index (AI)—average percentile standing of measures of mechanical, administrative, general, and electronic aptitude.

Career status—first-term (FT) or career (C) airmen at time 2 (T2). Airmen with 48 months or more of service are career airmen.

Total months active Federal military service (TAFMS) at T2.

Grade at time 2—pay grade ranging from Airman = 1 to Chief Master Sergeant = 9.

Education level (ED)—actual years of formal education from 8 to 18 at T2.

Months on the current job (MOJ)—number of months individual has been in the current specific job.

Age—age in years at T2.

Sex—male or female.

Situational Inputs[b]

Number of tasks performed (NRTSK)—number of tasks which the job incumbent indicated having performed among the 345 tasks in the radio-operator task inventory.

Average task difficulty per unit time spent performing the task (ATDPUT)-sum of the products of relative time spent performing each task times the rated relative difficulty level of the task.

Job difficulty index (JDI)—weighted sum of ATDPUT, NRTSK, and NRTSK squared.

Number of individuals supervised (NRSPV)—number of individuals who come under the immediate supervision of the job incumbent.

Skill level of work—apprentice, journeyman, technician, independent.

Group Inputs[c]

Membership in a particular job type as identified by CODAP analyses.

Criteria[d]

Job interest, felt utilization, and overall job satisfaction.

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[a] Variables 1 through 39 are individual inputs as of Time 2.

[b] Variables 40 through 69 are situational inputs as of Time 2, and variables 70 through 82 are situational inputs at Time 1.

Variables 87 through 102 and 104 through 161 are job information, perceived changes in the job, and specific attitude items pertaining to the job which were collected at time 2.

[c] Variables 162 through 241 are group inputs reflecting membership at both Time 1 and Time 2.

[d] Variables 83 and 85 are job interest at Time 1 and Time 2 respectively. Variables 84 and 86 are felt utilization at Time 1 and Time 2 respectively. Variable 103 is overall job satisfaction at Time 2 only.

Variable	
V1	First-termer (FT) (1 if TAFMS <48 months; 0 otherwise)
V2	Career (C) (1 if V1 =0; 0 otherwise)
V3	Aptitude Index (AI)
V4	AI Squared (V3 * V3)
V5	FT AI (V1 * V3)
V6	C AI (V2 * V3)
V7	FT [illegible] (V1 * V4)
V8	C AI [illegible] (V2 * V4)
V9	Months [illegible] 2 (TAFMS)
V10	TAFMS Squared (V9 * V9)
V11	FT TAFMS (V1 * V9)
V12	C TAFMS (V2 * V9)
V13	FT TAFMS Squared (V1 * V10)
V14	C TAFMS Squared (V2 * V10)
V15	Grade at Time 2
V16	Grade Squared (V15 * V15)
V17	FT Grade (V1 * V15)
V18	C Grade (V2 * V15)
V19	FT Grade Squared (V1 * V16)
V20	C Grade Squared (V2 * V16)
V21	Education Level (ED)
V22	ED Squared (V21 * V21)
V23	FT ED (V1 * V21)
V24	C ED (V2 * V21)
V25	FT ED Squared (V1 * V22)
V26	C ED Squared (V2 * V22)
V27	Months on Job (MOJ)
V28	MOJ Squared (V27 * V27)
V29	FT MOJ (V1 * V27)
V30	C MOJ (V2 * V27)
V31	FT MOJ Squared (V1 * V28)
V32	C MOJ Squared (V2 * V28)
V33	Age at Time 2 (T2)
V34	Age Squared (V33 * V33)
V35	FT Age (V1 * V33)
V36	C Age (V2 * V33)
V37	FT Age Squared (V1 * V34)
V38	C Age Squared (V2 * V34)
V39	Sex (1 if male; 0 if female)
V40	Number of Tasks (NRTSK)
V41	NRTSK Squared (V40 * V40)
V42	FT NRTSK (V1 * V40)
V43	C NRTSK (V2 * V40)
V44	FT NRTSK Squared (V1 * V41)
V45	C NRTSK Squared (V2 * V41)
V46	Task Difficulty (ATDPUT)
V47	ATDPUT Squared (V46 * V46)
V48	FT ATDPUT (V1 * V46)
V49	C ATDPUT (V2 * V46)

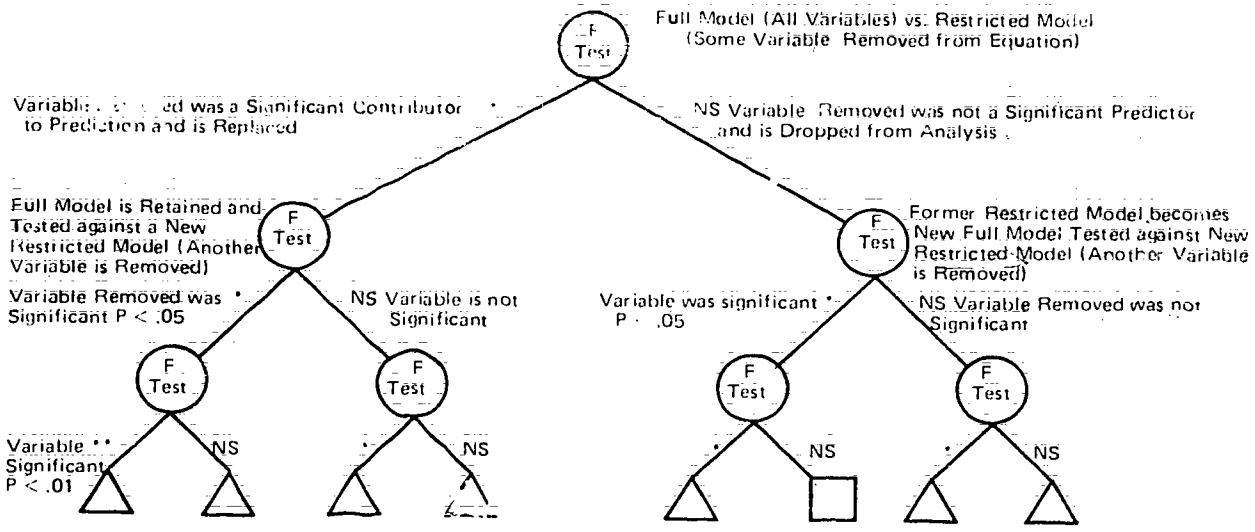
V50 FT ATDPUT Squared (V1 * V47)
V51 C ATDPUT Squared (V2 * V47)
V52 Job Difficulty (JDI)
V53 JDI Squared (V52 * V52)
V54 FT JDI (V1 * V52)
V55 C JDI (V2 * V52)
V56 FT JDI Squared (V1 * V53)
V57 C JDI Squared (V2 * V53)
V58 Number Supervised (NRSPV)
V59 NRSPV Squared (V58 * V58)
V60 FT NRSPV (V1 * V58)
V61 C NRSPV (V2 * V58)
V62 FT NRSPV Squared (V1 * V59)
V63 C NRSPV Squared (V2 * V59)
V64 Blank
V65 Blank
V66 Apprentice (1 =yes; 0 =no)
V67 Journeyman (1 =yes; 0 =no)
V68 Technician (1 =yes; 0 =no)
V69 Superintendent (1 =yes; 0 =no)
V70 NRTSK (T1)
V71 NRTSK Squared (T1)
V72 ATDPUT (T1)
V73 FT ATDPUT (T1)
V74 C ATDPUT (T1)
V75 JDI (T1)
V76 FT JDI (T1)
V77 C JDI (T1)
V78 FT JDI Squared (T1)
V79 C JDI Squared (T1)
V80 Grade (T1)
V81 NRSPV (T1)
V82 MOJ (T1)
V83 Job Interest (T1)
V84 Utilization (T1)
V85 Job Interest (T2)
V86 Utilization (T2)
V87 =Present Duty Position - Aeronautical Station
V88 =Present Duty Position - Airborne Command and Control Post
V89 =Present Duty Position - Airborne Radio Countermeasures Unit
V90 =Present Duty Position - Field Radio Operations Unit
V91 =Present Duty Position - Mars Net Control Station
V92 =Present Duty Position - Mars Station
V93 =Present Duty Position - Mobile Communications Unit
V94 =Present Duty Position - Radio Operations Headquarters
V95 =Present Duty Position - SAC A and B Net Station
V96 =Present Duty Position - TACT and Control Unit Station
V97 =Present Duty Position - Technical School Training Course
V98 =Present Duty Position - Other
V99 =Completed 3 ABR29330 Radio Operator (VOICE) Course
V100 =Are you 7-level or 9-level
V101 =How many 293X3/A/B Type as part of their job

V102 =Minimum typing speed needed by 293X3/A/B personnel
V103 =Satisfaction with work in present job (Scale 1-7)
V104 =Compared to other jobs in career fld my job is? (Scale 1-7)
V105 =Work experience gained from last asgmt to present job was?
V106 =Changes in present job last 1 1/2 yrs - re-asgd new base
V107 =Changes in present job last 1 1/2 yrs - new job same base
V108 =Changes in present job last 1 1/2 yrs - greater variety of tsks
V109 =Changes in present job last 1 1/2 yrs - smaller variety of tsks
V110 =Changes in present job last 1 1/2 yrs - larger number of tsks
V111 =Changes in present job last 1 1/2 yrs - smaller number of tsks
V112 =Changes in present job last 1 1/2 yrs - more difficult duties
V113 =Changes in present job last 1 1/2 yrs - easier duties
V114 =Changes in present job last 1 1/2 yrs - more meaningful work
V115 =Changes in present job last 1 1/2 yrs - less meaningful work
V116 =Changes in present job last 1 1/2 yrs - asgd more responsibilities
V117 =Changes in present job last 1 1/2 yrs - asgd less responsibilities
V118 =Changes in present job last 1 1/2 yrs - asgd supervisory job
V119 =Changes in present job last 1 1/2 yrs - change in responsibility
V120 =Changes in present job last 1 1/2 yrs - no significant changes
V121 =Changes in present job last 1 1/2 yrs - other
V122 =Job attitude - Assignment policy assigning add duties
V123 =Job attitude - Cost of living in area assigned
V124 =Job attitude - Condition tools or equipment used
V125 =Job attitude - Training provided on AF promotions
V126 =Job attitude - PX/Commissary at your base
V127 =Job attitude - Chance to help people
V128 =Job attitude - Chance to tell others what to do
V129 =Job attitude - Geographical area assigned
V130 =Job attitude - Work space available
V131 =Job attitude - Opportunity to meet new people
V132 =Job attitude - Your effort compared to effort co-workers
V133 =Job attitude - Economic security you have in the AF
V134 =Job attitude - Recognition received from your family
V135 =Job attitude - Responsibile for your work
V136 =Job attitude - Competence of instrs you have encountered
V137 =Job attitude - Level of danger in your job
V138 =Job attitude - Chance to remain on ad until retirement
V139 =Job attitude - Chance to do things not violate sense right & wrong
V140 =Job attitude - Educational Opportunities in community
V141 =Job attitude - Friendliness of co-workers
V142 =Job attitude - Engage in physical activity on job
V143 =Job attitude - Change for promotion to others
V144 =Job attitude - Quality of quarters which you live
V145 =Job attitude - Required telephone communication
V146 =Job attitude - Attention to safety in work area
V147 =Job attitude - Attitude of civ near base toward AF
V148 =Job attitude - Way your supervisor handles subordinates
V149 =Job attitude - Living & working conditions on TDY
V150 =Job attitude - normal temperature in work area
V151 =Job attitude - PCS opportunities in your specialt
V152 =Job attitude - Demand for job-obtained skill in civ life

V153 =Job attitude - Leave time allowed
V154 =Job attitude - Challenge provided by job
V155 =Job attitude - Your work schedule
V156 =Job attitude - Chance to supervise others
V157 =Job attitude - Contribution of work toward national defense
V158 =Job attitude - Fairness [illegible] visor asign work
V159 =Job attitude - Challe[illegible]d by your job
V160 =Job attitude - Distanc[illegible]e of record
V161 =Job attitude - Frequency of slack periods on job
V162 =1 if in grp 050 (T1); 0 otherwise Ground to air
V163 =1 if in grp 063 (T1); 0 otherwise Point to point
V164 =1 if in grp 065 (T1); 0 otherwise Supervisor
V165 =1 if in grp 036 (T1); 0 otherwise Apprentice point to point
V166 =1 if in grp 027 (T1); 0 otherwise Airborne
V167 =1 if in grp 019 (T1); 0 otherwise Staff NCO
V168 =1 if in grp 003 (T1); 0 otherwise Tactical specialist
V169 =1 if in grp ISOL(T1); 0 otherwise Isolates - Time 1
V170 =1 if in grp 052 (T2); 0 otherwise Ground to air
V171 =1 if in grp 056 (T2); 0 otherwise Point to point
V172 =1 if in grp 089 (T2); 0 otherwise Supervisor - working
V173 =1 if in grp 079 (T2); 0 otherwise Supervisor - administrative
V174 =1 if in grp 030 (T2); 0 otherwise Airborne
V175 =1 if in grp 028 (T2); 0 otherwise Mobile unit
V176 =1 if in grp 011 (T2); 0 otherwise Staff NCO
V177 =1 if in grp ISOL(T2); 0 otherwise Isolates - Time 2
V178 =Grp 050 (T1) and grp 052 (T2) - (V162 * V170)
V179 =Grp 050 (T1) and grp 056 (T2) - (V162 * V171)
V180 =Grp 050 (T1) and grp 089 (T2) - (V162 * V172)
V181 =Grp 050 (T1) and grp 079 (T2) - (V162 * V173)
V182 =Grp 050 (T1) and grp 030 (T2) - (V162 * V174)
V183 =Grp 050 (T1) and grp 028 (T2) - (V162 * V175)
V184 =Grp 050 (T1) and grp 011 (T2) - (V162 * V176)
V185 =Grp 050 (T1) and grp ISOL(T2) - (V162 * V177)
V186 =Grp 063 (T1) and grp 052 (T2) - (V163 * V170)
V187 =Grp 063 (T1) and grp 056 (T2) - (V163 * V171)
V188 =Grp 063 (T1) and grp 089 (T2) - (V163 * V172)
V189 =Grp 063 (T1) and grp 079 (T2) - (V163 * V173)
V190 =Grp 063 (T1) and grp 030 (T2) - (V163 * V174)
V191 =Grp 063 (T1) and grp 028 (T2) - (V163 * V175)
V192 =Grp 063 (T1) and grp 011 (T2) - (V163 * V176)
V193 =Grp 063 (T1) and grp ISOL(T2) - (V163 * V177)
V194 =Grp 065 (T1) and grp 052 (T2) - (V164 * V170)
V195 =Grp 065 (T1) and grp 056 (T2) - (V164 * V171)
V196 =Grp 065 (T1) and grp 089 (T2) - (V164 * V172)
V197 =Grp 065 (T1) and grp 079 (T2) - (V164 * V173)
V198 =Grp 065 (T1) and grp 030 (T2) - (V164 * V174)
V199 =Grp 065 (T1) and grp 028 (T2) - (V164 * V175)
V200 =Grp 065 (T1) and grp 011 (T2) - (V164 * V176)
V201 =Grp 065 (T1) and grp ISOL(T2) - (V164 * V177)
V202 =Grp 036 (T1) and grp 052 (T2) - (V165 * V170)
V203 =Grp 036 (T1) and grp 056 (T2) - (V165 * V171)

V204 =Grp 036 (T1) and grp 089 (T2) - (V165 * V172)
V205 =Grp 036 (T1) and grp 079 (T2) - (V165 * V173)
V206 =Grp 036 (T1) and grp 030 (T2) - (V165 * V174)
V207 =Grp 036 (T1) and grp 028 (T2) - (V165 * V175)
V208 =Grp 036 (T1) and grp 011 (T2) - (V165 * V176)
V209 =Grp 036 (T1) and grp ISOL(T2) - (V165 * V177)
V210 =Grp 027 (T1) and grp 052 (T2) - (V166 * V170)
V211 =Grp 027 (T1) and grp 056 (T2) - (V166 * V171)
V212 =Grp 027 (T1) and grp 089 (T2) - (V166 * V172)
V213 =Grp 027 (T1) and grp 079 (T2) - (V166 * V173)
V214 =Grp 027 (T1) and grp 030 (T2) - (V166 * V174)
V215 =Grp 027 (T1) and grp 028 (T2) - (V166 * V175)
V216 =Grp 027 (T1) and grp 011 (T2) - (V166 * V176)
V217 =Grp 027 (T1) and grp ISOL(T2) - (V166 * V177)
V218 =Grp 019 (T1) and grp 052 (T2) - (V167 * V170)
V219 =Grp 019 (T1) and grp 056 (T2) - (V167 * V171)
V220 =Grp 019 (T1) and grp 089 (T2) - (V167 * V172)
V221 =Grp 019 (T1) and grp 079 (T2) - (V167 * V173)
V222 =Grp 019 (T1) and grp 030 (T2) - (V167 * V174)
V223 =Grp 019 (T1) and grp 028 (T2) - (V167 * V175)
V224 =Grp 019 (T1) and grp 011 (T2) - (V167 * V176)
V225 =Grp 019 (T1) and grp ISOL(T2) - (V167 * V177)
V226 =Grp 003 (T1) and grp 052 (T2) - (V168 * V170)
V227 =Grp 003 (T1) and grp 056 (T2) - (V168 * V171)
V228 =Grp 003 (T1) and grp 089 (T2) - (V168 * V172)
V229 =Grp 003 (T1) and grp 079 (T2) - (V168 * V173)
V230 =Grp 003 (T1) and grp 030 (T2) - (V168 * V174)
V231 =Grp 003 (T1) and grp 028 (T2) - (V168 * V175)
V232 =Grp 003 (T1) and grp 011 (T2) - (V168 * V176)
V233 =Grp 003 (T1) and grp ISOL(T2) - (V168 * V177)
V234 =Grp ISOL(T1) and grp 052 (T2) - (V169 * V170)
V235 =Grp ISOL(T1) and grp 056 (T2) - (V169 * V171)
V236 =Grp ISOL(T1) and grp 089 (T2) - (V169 * V172)
V237 =Grp ISOL(T1) and grp 079 (T2) - (V169 * V173)
V238 =Grp ISOL(T1) and grp 030 (T2) - (V169 * V174)
V239 =Grp ISOL(T1) and grp 028 (T2) - (V169 * V175)
V240 =Grp ISOL(T1) and grp 011 (T2) - (V169 * V176)
V241 =Grp ISOL(T1) and grp ISOL (T2) - (V169 * V177)

APPENDIX D: LOGIC OF F TESTING DURING REGRESSION MODEL-SEEKING EXERCISES



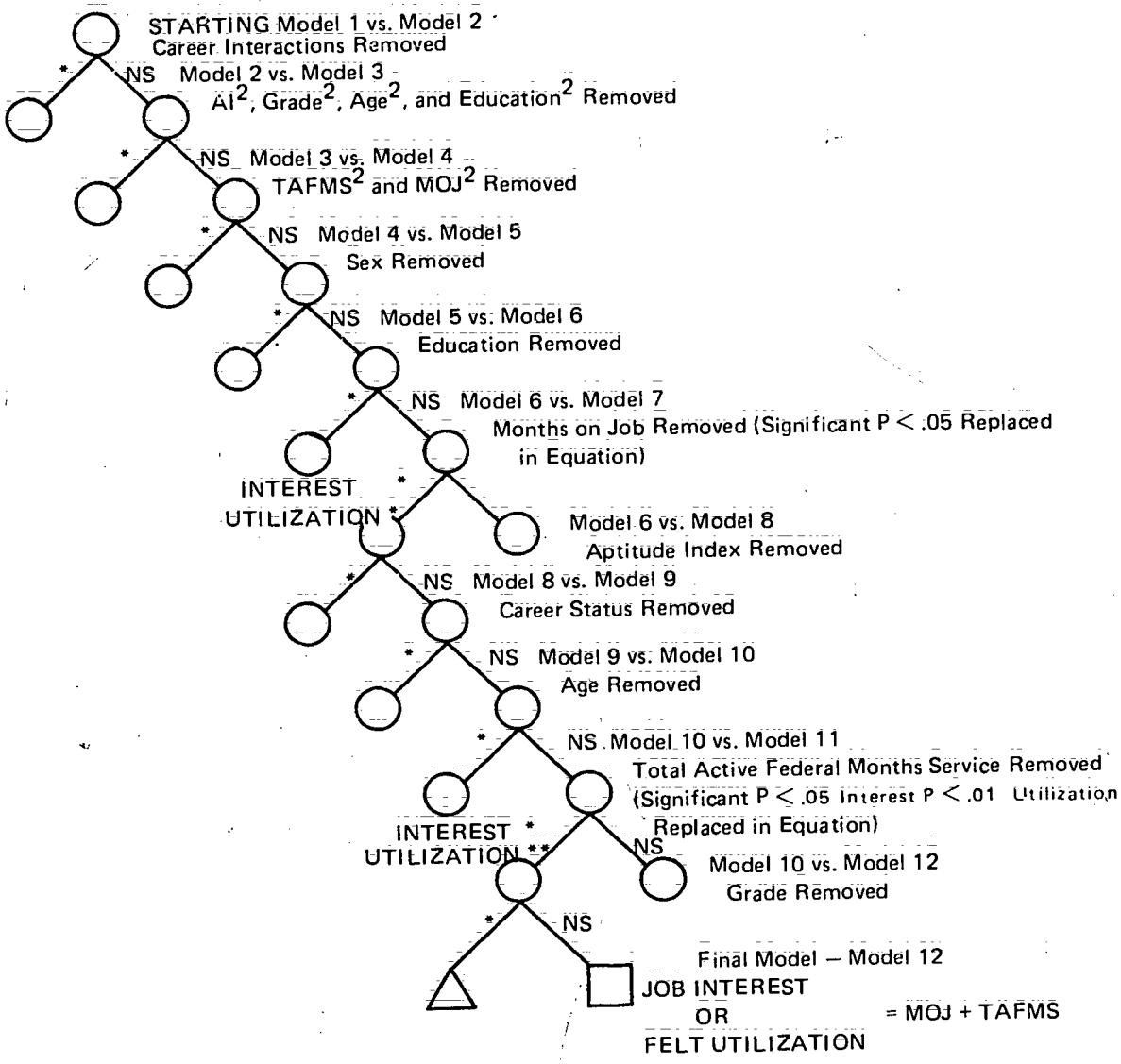
ONE OUT OF THESE ... SIBLE REGRESSION MODELS IS THE FINAL MODEL. THE SQUARE ... NED AS A FINAL MODEL OF PREDICTION.

Each node (indicated by a circle represents an F test between a full and restricted linear regression model. At each node, the variable or variables being removed are indicated. If the statistical F test is significant, the process moves downward to the left, retaining the full model, and generating a new restricted model by removing another variable. If the F test is nonsignificant, the process moves downward to the right, with the restricted model becoming the new full model and a new restricted model is then generated by removing another variable. The branching continues until all variables have been determined to be significant contributors to prediction of the criterion. This results in a final model (a square) opposed to less efficient alternative models (triangles).

The following diagrams portraying model-seeking exercises have been abbreviated in order to show only the pathways that result in statistically significant F tests. In the above 3 level example, the first level has two possible outcomes (2^1). At the second level, the possibilities grow to 2^2 or 4 outcomes. At the third level, the possibilities have grown to 2^3 or 8 outcomes (seven triangles and one square). The sequence 1 structure which follows has 11 levels which result in 2^{11} orders of magnitude, or 2048 outcomes. Since only significant ... re of interest, the remainder of the structure is not shown.

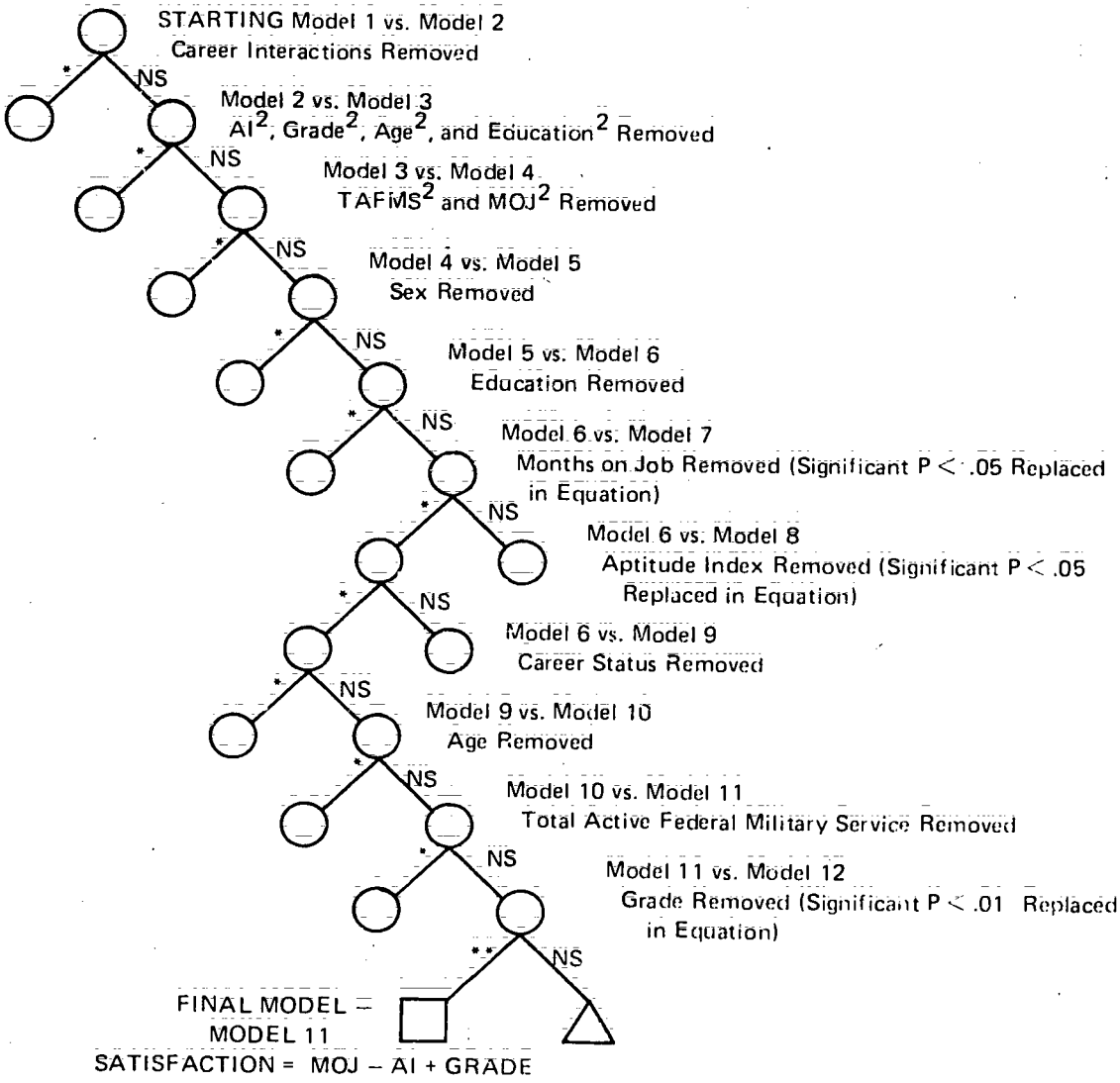
STARTING MODEL
JOB INTEREST
OR
FELT UTILIZATION

$$= FT + C + \frac{FT}{AI} + \frac{C}{AI^2} + \frac{FT}{TAFMS} + \frac{C}{TAFMS^2} + \frac{FT}{GRD} + \frac{C}{GRD^2} + \frac{FT}{ED} + \frac{C}{ED^2} + \frac{FT}{MOJ} + \frac{C}{MOJ^2} + \frac{FT}{AGE} + \frac{C}{AGE^2} + SEX$$



Sequence 1. Model-Seeking Exercise: Job Interest and Felt Utilization – Selection of Individual Input Variables

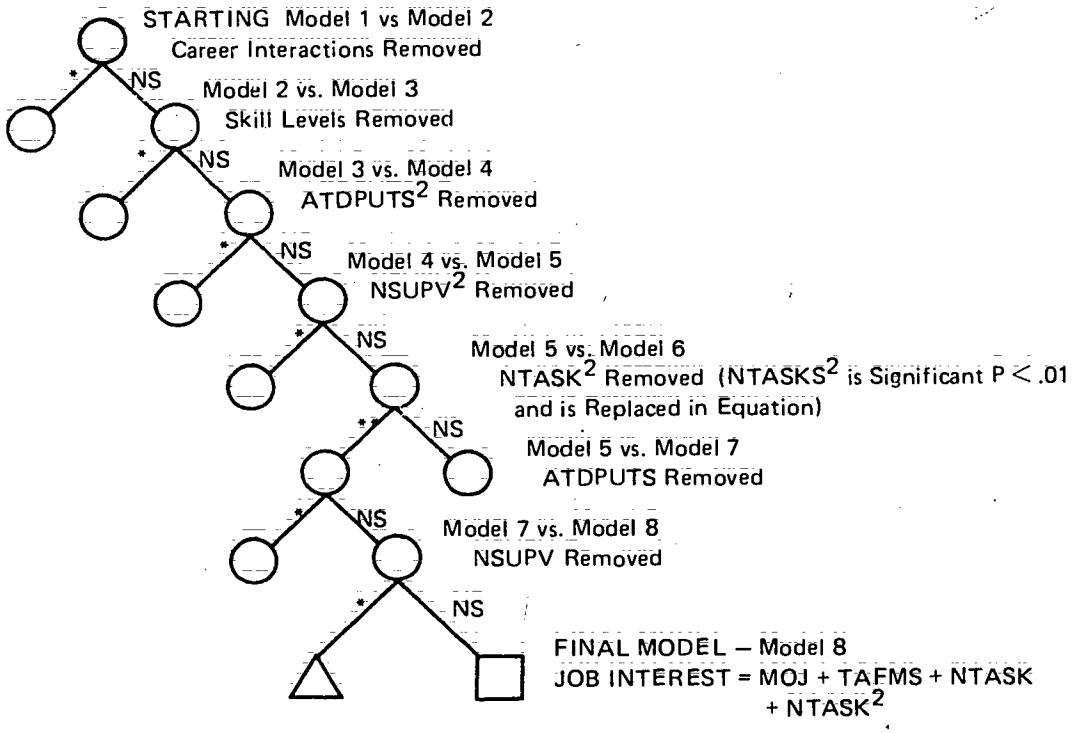
STARTING MODEL
SATISFACTION = SAME AS INTEREST AND UTILIZATION



Sequence 1. Model-Seeking Exercise: Job Satisfaction – Selection of Individual Input Variables

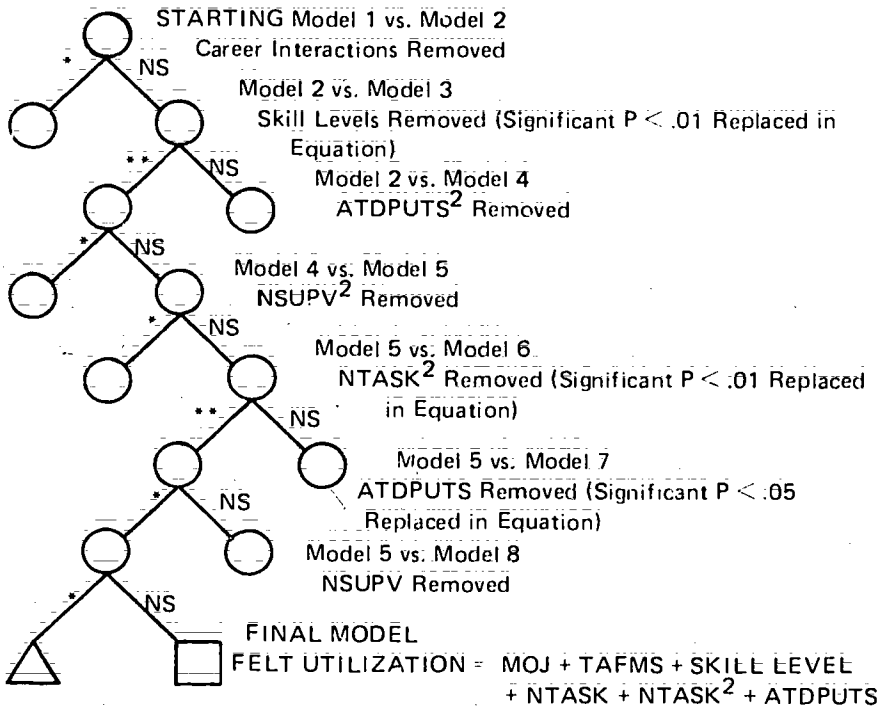
STARTING MODEL

$$\text{JOB INTEREST} = \text{MOJ} + \text{TAFMS} + \text{NTASK}_{FTC} + \text{NTASK}^2_{FTC} + \text{ATDPUT}_{FTC} + \text{ATDPUT}^2_{FTC} + \text{NSUPV}_{FTC} + \text{NSUPV}^2_{FTC} + \underset{\text{SKILL LEVEL}}{3 + 5 + 7 + 9}$$



Sequence 2. Model-Seeking Exercise: Job Interest – Selection of Situational Input Variables

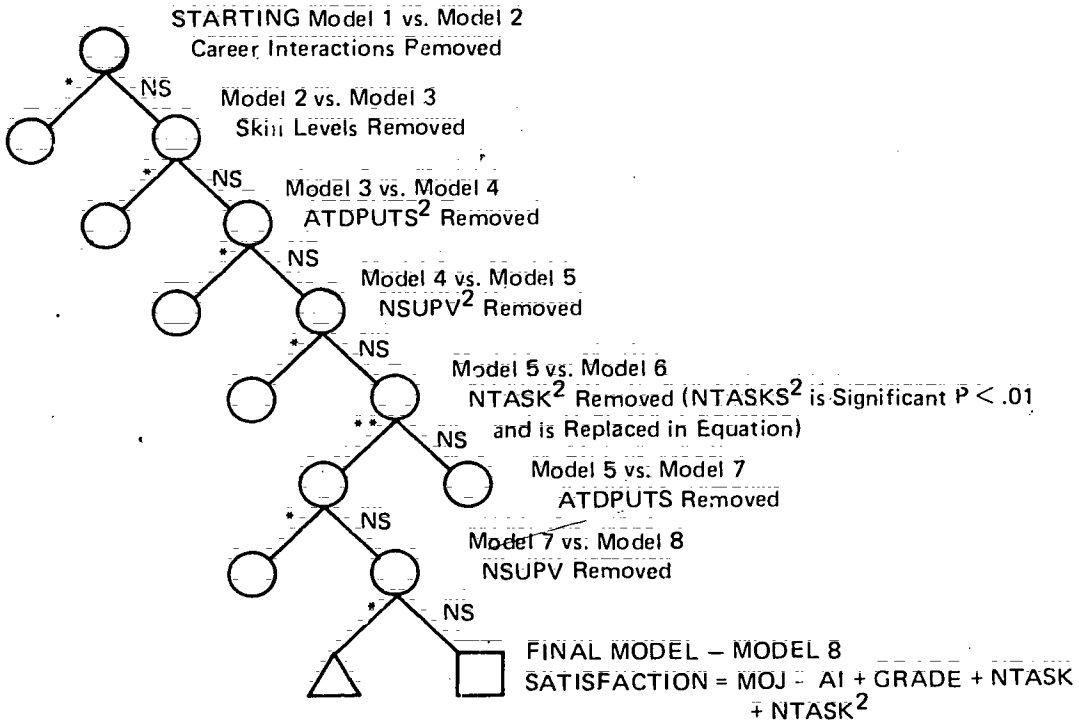
STARTING MODEL
FELT UTILIZATION = SAME AS INTEREST



Sequence 2. Model-Seeking Exercise: Felt Utilization – Selection of Situational Input Variables

STARTING MODEL

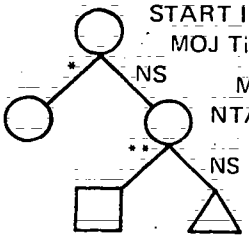
JOB SATISFACTION = MOJ + AI + GRADE + $\overset{FTC}{NTASK}$ + $\overset{FTC}{NTASK^2}$ + $\overset{FTC}{ATDPUT}$ + $\overset{FTC}{ATDPUT^2}$ + $\overset{FTC}{NSUPV}$ + $\overset{FTC}{NSUPV^2}$ + $\overset{SKILL\ LEVEL}{3 + 5 + 7 + 9}$



Sequence 2. Model-Seeking Exercise: Job Satisfaction – Selection of Situational Input Variables

STARTING MODEL

JOB INTEREST AT TIME 2 = MOJ Time 1 + MOJ Time 2 + TAFMS Time 1 & 2 + NTASK Time 1 + $NTASK^2$ Time 1 + NTASK Time 2 + $NTASK^2$ Time 2 + JOB INTEREST Time 1

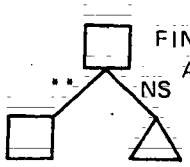


START ING Model 1 vs. Model 2
MOJ Time 2 Removed

Model 2 vs. Model 3
NTASK and $NTASK^2$ Time 2 Removed (Significant P < .01 Replaced in Equation)

FINAL MODEL = MODEL 3

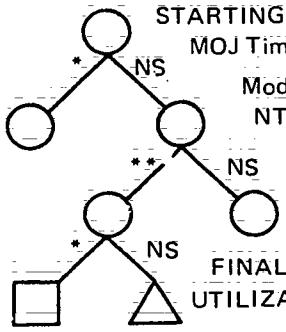
JOB INTEREST = MOJ Time 1 + TAFMS Time 1 & 2 + NTASK Time 1 + $NTASK^2$ Time 1 + NTASK Time 2 + $NTASK^2$ Time 2 + JOB INTEREST Time 1



FINAL MODEL 3 vs. MODEL 4
All Individual Inputs Removed (Significant P < .01 Replaced in Equation)

Sequence 3. Attitude Change Model-Seeking Exercise: Job Interest — Selection of Individual and Situational Input Variables at Both Time 1 and Time 2 Associated with Attitudes Change.

STARTING MODEL FELT UTILIZATION Time 2 = MOJ Time 1 + MOJ Time 2 + TAFMS Times 1&2 + NTASK Time 1 + $NTASK^2$ Time 1 + NTASK Time 2 + $NTASK^2$ Time 2 + ATDPUTS Time 1 + ATDPUTS Time 2 + SKILL LEVELS + FELT UTILIZATION Time 1



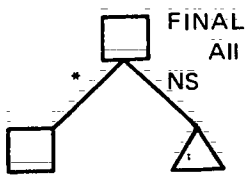
STARTING Model 1 vs. Model 2
MOJ Time 2 Removed

Model 2 vs. Model 3
NTASK and $NTASK^2$ Time 2 Removed (Significant $P < .01$ Replaced in Equation)

Model 2 vs. Model 4
ATDPUTS Time 2 Removed (Significant $P < .05$ Replaced in Equation)

FINAL MODEL – MODEL 4

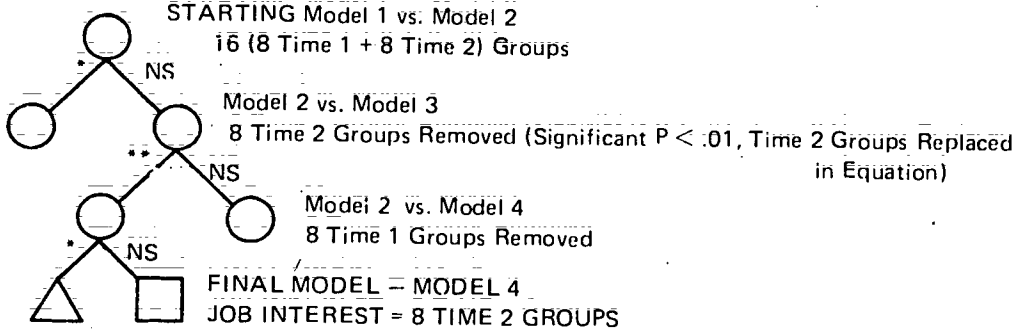
UTILIZATION = MOJ Time 1 + TAFMS Times 1&2 + NTASK Time 1 + $NTASK^2$ Time 1 + NTASK Time 2 + $NTASK^2$ Time 2 + ATDPUTS Time 1 + ATDPUTS Time 2 + SKILL LEVELS + FELT UTILIZATION Time 1



FINAL MODEL 4 vs. Model 5
All Individual Inputs Removed (Significant $P < .05$ Replaced in Equation)

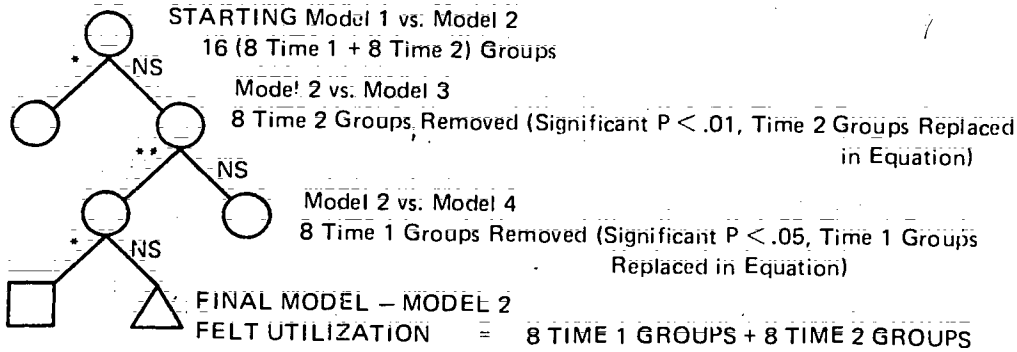
Sequence 3. Attitude Change Model-Seeking Exercise: Felt Utilization – Selection of Individual and Situational Input Variables at both Time 1 and Time 2 Associated with Attitude Change.

STARTING MODEL
JOB INTEREST = 8 GROUPS TIME 1 X 8 GROUPS TIME 2 = 64 INTERACTION GROUPS



Sequence 4. Model-Seeking Exercise: Job Interest – Selection of Job Types.

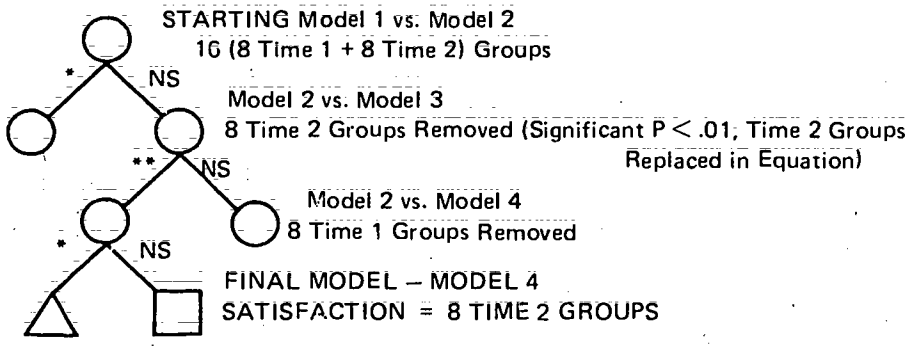
STARTING MODEL
FELT UTILIZATION = 8 GROUPS TIME 1 X 8 GROUPS TIME 2 = 64 INTERACTION GROUPS



Sequence 4. Model-Seeking Exercise: Felt Utilization – Selection of Job Types

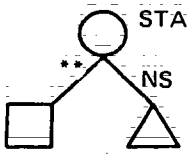
STARTING MODEL

SATISFACTION = 8 GROUPS TIME 1 X 8 GROUPS TIME 2 = 64 INTERACTION GROUPS



Sequence 4. Model-Seeking Exercise: Job Satisfaction – Selection of Job Types.

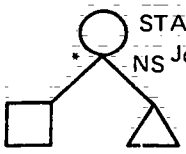
STARTING MODEL
INTEREST = INDIVIDUAL INPUTS + SITUATIONAL INPUTS + TIME 2 JOB TYPES



STARTING Model 1 vs. Model 2
Job Type Information Removed (Significant $P < .01$, Job Types Replaced in Equation)

FINAL MODEL – MODEL 1
SATISFACTION = INDIVIDUAL, SITUATIONAL AND JOB TYPE INPUTS

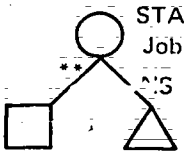
STARTING MODEL
UTILIZATION = INDIVIDUAL INPUTS + SITUATIONAL INPUTS + TIME 1 JOB TYPES + TIME 2 JOB TYPES



STARTING Model 1 vs. Model 2
Job Type Information (Time 1 and 2) Removed (Significant $P \leq .05$, Job Types Replaced in Equation)

FINAL MODEL – MODEL 1
UTILIZATION = INDIVIDUAL, SITUATIONAL AND JOB TYPE INPUTS

STARTING MODEL
SATISFACTION = INDIVIDUAL INPUTS + SITUATIONAL INPUTS + TIME 2 JOB TYPES



STARTING Model 1 vs. Model 2
Job Type Information Removed (Significant $P < .01$, Job Types Replaced in Equation)

FINAL MODEL – MODEL 1
SATISFACTION = INDIVIDUAL, SITUATIONAL AND JOB TYPE INPUTS

Sequence 5. Model-Seeking Exercise: All Three Criteria – Contribution of Job Type Information.

SPECIFICATION OF REGRESSION MODELS

Sequence 1. Individual Inputs

Model	Variance Source Removed	Predictor Variables
	Job Interest Criterion = Variable 85	
1	(Starting Model)	1-2, 5-8, 11-14, 17-20, 23-26, 29-32, 35-39
2	Career Interactions	1-4, 9-10, 15-16, 21-22, 27-28, 33-34, 39
3	AI^2, $Grade^2$, Age^2, $Education^2$	1-3, 9-10, 15, 21, 27-28, 33, 39
4	$TAFMS^2$, MOJ^2	1-3, 9, 15, 21, 27, 33, 39
5	Sex	1-3, 9, 15, 21, 27, 33
6	Education	1-3, 9, 15, 27, 33
7	Months on Job (MOJ)*	1-3, 9, 15, 33
8	Aptitude Index (AI)	1-2, 9, 15, 27, 33
9	Career Status	9, 15, 27, 33
10	Age	9, 15, 27
11	TAFMS*	15, 27
12[a]	Grade	9, 27
	Felt Utilization Criterion = Variable 86	
	Felt utilization follows the same pattern of variance removal as job interest (see above).	
	Overall Satisfaction Criterion = Variable 103	
1	(Starting Model)	1-2, 5-8, 11-14, 17-20, 23-26, 29-32, 35-39
2	Career Interactions	1-4, 9-10, 15-16, 21-22, 27-28, 33-34, 39
3	AI^2, $Grade^2$, Age^2, $Education^2$	1-3, 9-10, 15, 21, 27-28, 33, 39
4	$TAFMS^2$, MOJ^2	1-3, 9, 15, 21, 27, 33, 39
5	Sex	1-3, 9, 15, 21, 27, 33
6	Education	1-3, 9, 15, 27, 33
7	Months on Job (MOJ)*	1-3, 9, 15, 33
8	Aptitude Index (AI)*	1-2, 9, 15, 27, 33
9	Career Status	3, 9, 15, 27, 33
10	Age	3, 9, 15, 27
11[a]	TAFMS	3, 15, 27
12	Grade*	3, 27

*Variables replaced
[a]Final Model

Sequence 2. Situational Inputs

Model	Variance Source Removed	Predictor Variables
	Job Interest Criterion = Variable 85	
1	(Starting Model)	9, 27, 42-45, 48-51, 60-63, 66-69
2	Career Interactions	9, 27, 40-41, 46-47, 58-59, 66-69
3	Skill Levels	9, 27, 40-41, 46-47, 58-59
4	ATDPUTS^2	9, 27, 40-41, 46, 58-59
5	NSUPV^2	9, 27, 40-41, 46, 58
6	NTASK^2*	9, 27, 40, 46, 58
7	ATDPUTS	9, 27, 40-41, 58
8[a]	NSUPV	9, 27, 40-41
	Felt Utilization Criterion = Variable 86	
1	(Starting Model)	9, 27, 42-45, 48-51, 60-63, 66-69
2	Career Interactions	9, 27, 40-41, 46-47, 58-59, 66-69
3	Skill Levels*	9, 27, 40-41, 46-47, 58-59
4	ATDPUTS^2	9, 27, 40-41, 46, 58-59, 66-69
5	NSUPV^2	9, 27, 40-41, 46, 58, 66-69
6	NTASK^2*	9, 27, 40, 46, 58, 66-69
7	ATDPUTS*	9, 27, 40-41, 58, 66-69
8[a]	NSUPV	9, 27, 40-41, 46, 66-69
	Overall Satisfaction Criterion = Variable 103	
1	(Starting Model)	3, 15, 27, 42-45, 48-51, 60-63, 66-69
2	Career Interaction	3, 15, 27, 40-41, 46-47, 58-59, 66-69
3	Skill Levels	3, 15, 27, 40-41, 46-47, 58-59
4	ATDPUTS^2	3, 15, 27, 40-41, 46, 58-59
5	NSUPV^2	3, 15, 27, 40-41, 46, 58
6	NTASK^2*	3, 15, 27, 40, 46, 58
7	ATDPUTS	3, 15, 27, 40-41, 58
8[a]	NSUPV	3, 15, 27, 40-41

*Variables replaced
[a]Final model

Sequence 2. Situational Inputs

Model	Variance Source Removed	Predictor Variables
	Job Interest Criterion = Variable 85	
1	(Starting Model)	9, 27, 42-45, 48-51, 60-63, 66-69
2	Career Interactions	9, 27, 40-41, 46-47, 58-59, 66-69
3	Skill Levels	9, 27, 40-41, 46-47, 58-59
4	ATDPUTS^2	9, 27, 40-41, 46, 58-59
5	NSUPV^2	9, 27, 40-41, 46, 58
6	NTASK^2*	9, 27, 40, 46, 58
7	ATDPUTS	9, 27, 40-41, 58
8[a]	NSUPV	9, 27, 40-41
	Felt Utilization Criterion = Variable 86	
1	(Starting Model)	9, 27, 42-45, 48-51, 60-63, 66-69
2	Career Interactions	9, 27, 40-41, 46-47, 58-59, 66-69
3	Skill Levels*	9, 27, 40-41, 46-47, 58-59
4	ATDPUTS^2	9, 27, 40-41, 46, 58-59, 66-69
5	NSUPV^2	9, 27, 40-41, 46, 58, 66-69
6	NTASK^2*	9, 27, 40, 46, 58, 66-69
7	ATDPUTS*	9, 27, 40-41, 58, 66-69
8[a]	NSUPV	9, 27, 40-41, 46, 66-69
	Overall Satisfaction Criterion = Variable 103	
1	(Starting Model)	3, 15, 27, 42-45, 48-51, 60-63, 66-69
2	Career Interaction	3, 15, 27, 40-41, 46-47, 58-59, 66-69
3	Skill Levels	3, 15, 27, 40-41, 46-47, 58-59
4	ATDPUTS^2	3, 15, 27, 40-41, 46, 58-59
5	NSUPV^2	3, 15, 27, 40-41, 46, 58
6	NTASK^2*	3, 15, 27, 40, 46, 58
7	ATDPUTS	3, 15, 27, 40-41, 58
8[a]	NSUPV	3, 15, 27, 40-41

*Variables replaced
[a]Final model

Sequence 3. Attitude Change

Model	Variance Source Removed	Predictor Variables
	Job Interest Criterion = Variable 85	
1	(Starting Model)	9, 27, 40-41, 70-71, 82-83
2[a]	MOJ Time 2	9, 40-41, 70-71, 82-83
3	NTASK, $NTASK^2$ Time 2*	9, 70-71, 82-83
4	All individual inputs* both Time 1 and Time 2	40-41, 70-71, 83
	Felt Utilization Criterion = Variable 86	
1	(Starting Model)	9, 27, 40-41, 46, 66-69, 70-72, 82, 84
2[a]	MOJ time 2	9, 40-41, 46, 66-69, 70-72, 82, 84
3	NTASK, $NTASK^2$ time 2*	9, 46, 66-69, 70-72, 82, 84
4	VTDPUTS time 2*	9, 40-41, 66-69, 70-72, 82, 84
5	All individual inputs* both Time 1 and Time 2	40-41, 46, 66-69, 70-72, 84

*Variables replaced
[a]Final model

Sequence 4. Job Type Inputs

Model	Variance Source Removed	Predictor Variables
	Job Interest Criterion = Variable 85	
1	(Starting Model)	178-241
2	Job type interactions Time 1 and Time 2	162-177
3	Job types Time 2*	162-169
4[a]	Job types Time 1	170-177
	Felt Utilization Criterion = Variable 86	
1	(Starting Model)	178-241
2[a]	Job type interactions Time 1 and Time 2	162-177
3	Job types Time 2*	162-169
4	Job types Time 1*	170-177

	Overall Job Satisfaction = Variable 103	
1	(Starting Model)	178-241
2	Job type interactions	
	Time 1 and Time 2	162-177
3	Job types Time 2*	162-169
1[a]	Job types Time 1	170-177

*Variables replaced
[a]Final model

Sequence 5. Career Ladder Specific Prediction

Model	Variance Source Removed	Predictor Variables
	Job Interest Criterion = Variable 85	
1[a]	(Starting Model)	9, 27, 40-41, 170-177
2	All job types (Time 2)*	9, 27, 40-41
	Felt Utilization Criterion = Variable 86	
1[a]	(Starting Model)	9, 27, 40-41, 46, 66-69, 162-177
2	All job types (Time 1 and Time 2)*	9, 27, 40-41, 46, 66-69
	Overall Job Satisfaction = Variable 103	
1[a]	(Starting Model)	3, 15, 27, 40-41, 170-177
2	All job types (Time 2)*	3, 15, 27, 40-41

*Variables replaced
[a]Final Model

	Overall Job Satisfaction = Variable 103	
1	(Starting Model)	178-241
2	Job type interactions Time 1 and Time 2	162-177
3	Job types Time 2*	162-169
4[a]	Job types Time 1	170-177

*Variables replaced
[a]Final model

Sequence 5. Career Ladder Specific Prediction

Model	Variance Source Removed	Predictor Variables
	Job Interest Criterion = Variable 85	
1[a]	(Starting Model)	9, 27, 40-41, 170-177
2	All job types (Time 2)*	9, 27, 40-41
	Felt Utilization Criterion = Variable 86	
1[a]	(Starting Model)	9, 27, 40-41, 46, 66-69, 162-177
2	All job types (Time 1 and Time 2)*	9, 27, 40-41, 46, 66-69
	Overall Job Satisfaction = Variable 103	
1[a]	(Starting Model)	3, 15, 27, 40-41, 170-177
2	All job types (Time 2)*	3, 15, 27, 40-41

*Variables replaced
[a]Final Model