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A Job Analysis of a Complex Utilization Field

The R & D Management Officer

By

Joseph E. Morsh
M. Joyce Giorgia
Joseph M. Madden, LtCol USAF

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N O T I C E

A JOB ANALYSIS OF A COMPLEX UTILIZATION FIELD: THE R&D MANAGEMENT OFFICER

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FOREWORD

The present study was undertaken at the request of Headquarters Air Force Systems Command. It represents the first attempt to apply the job analysis procedures prescribed in Air Force Manual 35-2 in an analysis of an officer utilization field. The study also demonstrates the application of a new iterative grouping procedure developed in the Personnel Research Laboratory for the identification of job types from data derived from occupational surveys. The success of the enterprise attests to the fine cooperation of almost one thousand Research and Development Management officers.

This survey was carried out under Project 7734, Development of Methods for Describing, Evaluating, and Structuring Air Force Jobs; Task 773401, Development of Methods for Collecting, Analyzing, and Reporting Information Describing Air Force Specialties.

Computer programs for obtaining job types from job inventory data were prepared by Computer Sciences Corporation, Houston, Tex., under Contracts AF41 (609)1982 and AF41(609)2387.

This technical report has been reviewed and is approved.

John Patterson, Col USAF   A. Carp
Commander   Technical Director

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ABSTRACT

Using data collection procedures developed for airman career fields, the 6 specialties in the R & D Management Utilization Field were surveyed. A job inventory composed of 373 task statements and a Background Information Sheet was developed and mailed to all Air Force R & D Management officers. Analysis of 825 completed inventories by an iterative grouping technique allocated 675 of the officers' jobs to 27 job types, each including at least 5 jobs. The dominant job type (R & D Manager) included nearly half of the R & D Management officers. Most of the job types cut across grade levels and organization levels. Reported minimum academic requirements were a bachelor's degree with major in science or engineering. Some officers considered graduate training in management or administration desirable and some suggested additional experience in operational commands. The incumbent officers averaged more experience and education than they judged to be minimal. An appendix gives the computer printouts of job descriptions for two of the identified job types: R & D Project Staff Officer, Foreign Technology Staff Officer.

A JOB ANALYSIS OF A COMPLEX UTILIZATION FIELD:

THE R & D MANAGEMENT OFFICER

I. INTRODUCTION

The Research and Development Management Utilization Field encompasses command, staff, and administrative functions peculiar to the Air Force research and development mission. These functions include program formulation, policy planning, coordination, inspection, and direction pertinent to scientific and engineering research development. Air Force officers assigned to this Utilization Field are scientists and development engineers who have demonstrated administrative and managerial ability.

The Research and Development Director (2716)[1] formulates, monitors, evaluates, and coordinates research and development programs and projects for scientific and technological application to strategic and tactical requirements. The Research and Development Officer (2725)[2] manages research and development support activities. The System Manager (2756)[3] plans and manages an Air Force weapon, support, or command and control system during its conceptual and acquisition phases.

Officers assigned to the Research and Development (R & D) Management Utilization Field must hold a bachelor's degree in science, engineering, management, or administration; or must have completed a USAFIT two-year undergraduate resident engineering course. A master's degree in R & D management or business administration and completion of a senior Air Force or Joint Service School are desirable additional educational background.

Approximately three-fourths of all officers in the R & D Management Utilization Field are assigned to Air Force Systems Command, most of the rest being with Headquarters USAF, Air University, or the Office of Aerospace Research. Personnel planners in Headquarters Air Force Systems Command have expressed concern about a number of problems which are unique to the R & D Management Utilization Field. These problems include the formulation of efficient career plans which will insure adequate replacement of officers currently holding positions with a high level of responsibility; the development of an optimal reassignment system; and the identification of procedures for procuring and retaining officers with the requisite qualifications.

It was decided to conduct a job analysis of the R & D Management Utilization Field, applying an occupational analysis methodology which has proved effective in surveying airman career ladders. Thus the feasibility of applying the method to an officer population could be investigated and at the same time some light might be shed on operational problems that had arisen in the R & D Management area.

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[1] As of September 1964, AFSC 2716 has been restricted and the qualifying degrees have been limited to scientific and engineering. Some office positions previously identified by this AFSC are now classified as AFSC 2616, Staff Scientist, or AFSC 2816, Staff Development Engineer. System program management staff responsibilities have been transferred to the new System Program Management Career Area (29XX).

[2] Some of the functions of AFSC 2725 were transferred to the 29XX area. This specialty will be deleted in September 1965.

[3] AFSC 2756 has been restricted to System Program Directors and their Deputies or comparable positions. The specialty has been recoded and retitled as AFSC 2916, System Program Staff Officer, and AFSC 2926, System Program Manager.

Two previous survey: of officer jobs had been attempted. One of these was a survey of Communications Officers,[4] the other a survey of Supply Officers.[5] Experimental inventory formats were used in both the Communications Officer and Supply Officer surveys. The R & D Management survey was thus the first attempt to apply the procedures developed for airman specialties[6] to the analysis of an officer specialty.

II. CONSTRUCTION OF PRELIMINARY JOB INVENTORY

The preliminary R & D Management Job Inventory covered AFSCs 2711, 2721, 2751, 27 2725, and 2756. Procedures prescribed in AF Manua' 35-2 were followed with minor except[7] Source documents used in construction included the specialty descriptions in AF Manual [7] an Air Force Officer Management Inventory prepared for a survey of all utilization fields, a job descriptions which had been obtained by the Air Force Office of Manpower Organization the spring of 1961 during the Officer Grade Requirements Survey. A small sample of R & D Management officers were interviewed for additional information and orientation. Besides in structions for completion and a page for identification and background information, the preliminary inventory consisted of 276 task statements arranged alphabetically under each of 9 duty categories. The duties, each of which was briefly defined, were as follows: supervising: c manding, directing, and monitoring; evaluating and reviewing; planning and formulating; coordinating; developing; organizing; communicating, reporting, and recommending; and contract.

III. FIELD REVIEW AND REVISION OF JOB INVENTORY

The preliminary inventory was mailed to a representative sample of R & D Management officers for completion. These officers in the field were asked to check all tasks which the performed, to modify or expand task statements needing revision, to add any tasks they did were not listed, and to make comments or suggestions which might aid in attaining the objectives of the study.

The 77 officers participating in the field review included 25 colonels, 15 lieutenant co 19 majors, 12 captains, and 6 first lieutenants. As a result of this review the Background In mation Sheet was revised, 48 new tasks were added, a few task statements were eliminated a number of statements were modified or reworded.

Task statements of an Air Force Officer Management Inventory which had been develop earlier were collated with those of the R & D Management Inventory. Extreme care was exc cised in order to reduce inadvertent duplication and redundancy in the final version. The fi revision of the inventory (Appendix I) consisted of 373 task statements organized under the duties. The duty definitions were included as in the preliminary version but were greatly si plified. A new s ction, "Performing additional duties assigned by special orders," was

[4] Unpublished paper by L. N. Wiley & W. S. Jenkins "A task-duty list of the communications off :er specialty, AFSC 3034," 27 Apr 1961, Personnel Research Laboratory (PRB) Lackland Air Force Bas Texas.

[5] Report in preparation by Donald B. Gragg "An occupational survey of supply officers," Personnel Research Laboratory, Lackland Air Force Base, Texas.

[6] AF Manual 35-2. Occupational analysis procedures for conducting occupational surveys and job classifications. 10 Jan 63.

[7] AF Manual 36-1. Officer classification manual. 15 Apr 63.

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added. The officer incumbent used an 8-point scale to rate the extent to which each task is a part of his j b. Judgment was based on the importance of the task, the frequency with which it is performed, its relevance, or any other factor which determines the extent to which the task is part of the officer's job. For each task, values were recorded according to the following scale:

0 Definitely not a part of my job, does not apply
1 Under unusual circumstances may be a minor part of my job
2
3
4 A substantial part of my job
5
6
7 A most significant part of my job

This scale had been used successfully by Hemphill (1960) in determining dimensions of executive positions in business and industry.

IV. R & D MANAGEMENT OFFICER SURVEY

Inventories were mailed with self-addressed return envelopes to the 1479 officers in the Air Force Systems Command who were assigned in the R & D Management Utilization Field.

	INVENTORIES MAILED	INVENTORIES RETURNED
Colonel	261	140
Lieutenant Colonel	473	273
Major	387	251
Captain	305	215
First Lieutenant	26	21
Second Lieutenant	27	23
Total	1479	923

The returned booklets were scanned for completeness and responses were scrutinized to check incumbents' adherence to instructions. Of the 923 inventories returned, 97 were not usable because instructions had not been followed, the incumbent officer had been transferred, reclassified, retired, or a page was missing from the inventory booklet. This left 825 inventories acceptable for analysis.

V. IDENTIFICATION OF R & D MANAGEMENT JOB TYPES

Chriscal (1962) has developed an electronic computer technique, based on a generalized hierarchical grouping model proposed by Ward (1961), for identifying job types from inventory

data. A job type is found whenever several individuals perform essentially the same duties and tasks. By means of the iterative procedure, the tasks done by one man are compared with those performed by every man in the survey sample. The two persons performing the most similar jobs are identified and a single job description is developed which replaces the two previous job descriptions (in terms of tasks performed, time spent tasks, or other criterion). The iterative process continues by adding a third individual to the first pair or by locating a new pair of similar jobs, and so on. In this way all groups of incumbents with similar jobs, (job types) are identified and the tasks and duties performed by each job type are printed out in descending order of the grouping criterion used.

Using the extent to which each task is a "part of your job" (importance, frequency of performance, or relevance) as a criterion, the data from 825 job inventories completed by R & D Management officers were grouped into job types.

As a result of the computer grouping procedure, 675 of the 825 officers in the sample were grouped into 27 job types. The remaining 150 officers in the sample performed work so unique that they did not fall into any group of five or more.

In some respects all of the job types identified are similar. When duty categories are considered, 100 percent of officers in all 27 job types report doing one or more tasks in the Commanding and Supervising duties. With the exception of one or two officers in certain groups, officers in all job types perform at least one task in the Evaluating, Planning, Coordinating, and Developing duties. In other words, and not unexpectedly, all R & D Management job types are largely managerial in nature. Appendix II gives complete job descriptions for two of the job types.

Tables 1-6 give data derived from the Background Information Sheet by job-type clusters for the 675 officers grouped into job types.

Table 1 shows the distribution of grades and the percentage of task time described in each job type. Most job types include officers in three or four grades. R & D Test Manager, R & D Manager, and R & D Contract Manager each include 5 grades, while R & D Executive Officer and R & D Data Reduction Manager each have only two grades represented.

As shown in Table 2, all jobs types include Commanding tasks among the highest rated 25 tasks in each job type description. The largest number, 11, of these tasks were included in the R & D Test Facility Coordinator job type, ten tasks each were found in the R & D In-House Test Supervisor and the R & D In-House Test Manager job types and nine Commanding tasks each were done by the R & D Manager, R & D Test Manager, and R & D Contract Manager job types.

Considerable differences among R & D Management job types are shown in the Organizing, Developing, and Contracting duties. Contracting tasks form an important part of the R & D Contract Manager, R & D Project Officer, R & D Contract Monitor, and R & D Data Reduction Manager job types with 11, 10, 9, and 8 tasks respectively being included among the first 25 tasks in the job descriptions. Communicating tasks are emphasized by the R & D Project Staff Officer and R & D Liaison Officer job types (10 and 9 respectively among the first 25, but Communicating tasks are found among the highest rated 25 tasks in all job types except the R & D Test Facility Coordinator job type. Evaluating tasks are among the highest rated 25 in all except the R & D Configuration Manager job type. The R & D Management Analyst and Inspector job type has 11 and the R & D Systems Integrator job type has 10 of these tasks among the first 25. Evaluating tasks predominate in the R & D Management Analyst and Inspector and the R & D Systems Integrator job types but are found among the 25 highest rated tasks of all except the R & D Configuration Manager job type.

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Table 1. Distribution of Grades in R & D Management Job Types

% TASK TIME	JOB TYPE TITLE	COL	LT COL	MAJ	CAPT	1st LT	2nd LT	TOTAL
61.8	R & D Manager	94	176	76	28	4		378
56.6	R & D Test Manager	5	17	10	10	2		44
55.9	R & D Contract Manager	5	8	12	16	1		42
54.3	R & D Division Chief	7	12	6				25
53.8	R & D Planning Officer	3	6	8	3			20
53.3	R & D Project Staff Officer	2	5	8	1			16
58.5	R & D Program & Fin Mgr	1	3	7	2			13
50.8	R & D Contract Test Supvr		1	5	3	1		10
56.8	R & D Configuration Mgr		1	4	5			10
45.3	R & D Systems Integrator		2	2	4		2	10
50.3	R & D Program Eval Off		3	3	3			9
60.5	R & D Staff Coordinator			4	3	1		8
51.8	R & D Project Engineer		1	1	5		1	8
53.0	R & D New Proj Coordinator		1	1	4		1	7
57.3	R & D Project Officer			1	5	1		7
61.8	R & D Executive Officer		5	2				7
56.8	R & D Contract Monitor		2	2	2			6
55.5	Foreign Technology Staff Off	2	2	2				6
60.8	R & D Data Reduction Mgr			5	1			6
53.2	R & D Liaison Officer	1	2	2	1			6
56.7	R & D Test Facility Coord	1	1	1	3			6
57.0	R & D Mgt Analyst & Insp	1	4	1				6
60.9	R & D Test Director		2		2		1	5
54.1	R & D In-House Test Supvr	1	1	2	1			5
58.5	R & D In-House Test Mgr	1	1	1	2			5
57.4	R & D Program Support Off		2	1	2			5
54.2	R & D Management Analyst		1	3	1			5
	Total	124	259	170	107	10	5	675

Table 2. Distribution by Duty of the 25 Tasks Rated Highest in Each Job Type

TOTAL TASKS DONE	JOB TYPE TITLE	SUPERVISING	COMMANDING	EVALUATING	PLANNING	COORDINATING	DEVELOPING	ORGANIZING	COMMUNICATING	CONTRACTING
258	R & D Manager	5	9	5		1			7	
303	R & D Test Manager	7	9	5	1				3	2
307	R & D Contract Manager	1	9	5					5	9
279	R & D Division Chief	5	6	5		1			8	
267	R & D Planning Officer	2	4	2	5	3	1	1	6	1
231	R & D Project Staff Officer		6	1	1	7			10	
260	R & D Program & Fin Mgr	2	5	5	4	2			7	2
211	R & D Contract Test Supvr		5	3	1	4			6	6
229	R & D Configuration Mgr	2	6		1	4	1	2	4	5
196	R & D Systems Integrator		5	10					7	3
195	R & D Program Eval Off	5	5	2	3	3			7	
244	R & D Staff Coordinator		6	3		12			4	
219	R & D Project Engineer	3	5	4		9			2	2
197	R & D New Proj Coordinator		5	6	2	7			7	
189	R & D Project Officer		1	3	5	4			2	10
167	R & D Executive Officer	7	4	2	2	4		2	4	
210	R & D Contract Monitor	2	1	1	2				8	11
158	Foreign Technology Staff Off	6	7	3		2			7	
253	R & D Data Reduction Mgr	2	2	2		4		2	5	8
115	R & D Liaison Officer	2	5	1	1	6		1	9	
177	R & D Test Facility Coord	5	11	2	2	4		1		
159	R & D Mgt Analyst & Insp	2	3	11	1	2			6	
210	R & D Test Director	2	3	1	4	6		2	7	
143	R & D In-House Test Supvr	5	10	3	1	1			5	
199	R & D In-House Test Mgr	4	10	2	1	3			4	1
195	R & D Program Support Off		5	2	2	7			8	1
167	R & D Management Analyst	5	8	2	1	1	4		4	

Table 3. Distribution of Officers in R & D Management
Job Types by Organizational Level

JOB TYPE TITLE	HQ AFSC	DIV CENTER REGION	WING OR EQUIV	GROUP LAB, OR EQUIV	SQADR OR EQUIV	FLIGHT	SPEC ASGMT, OTHER	NO REPT	TOTAL
R & D Manager	58	253	42	18			5	2	378
R & D Test Manager		15	19	5	3		1	1	44
R & D Contract Manager	2	36	1	2			1		42
R & D Division Chief	10	12	2				1		25
R & D Planning Officer	5	13	1				1		20
R & D Project Staff Officer	13	2	1						16
R & D Program & Fin Mgr		13							13
R & D Contract Test Supvr		9				1			10
R & D Configuration Mgr		9					1		10
R & D Systems Integrator		10							10
R & D Program Eval Off		7	1	1					9
R & D Staff Coordinator	2	3	2					1	8
R & D Project Engineer			2		2		4		8
R & D New Proj Coordinator		4	1	2					
R & D Project Officer		6	1						7
R & D Executive Officer		6	1						7
R & D Contract Monitor		5		1					6
Foreign Technology Staff Off	2	4							6
R & D Data Reduction Mgr		4		2					6
R & D Liaison Officer	4	2							6
R & D Test Facility Coord		4	2						6
R & D Mgt Analyst & Insp	5			1					6
R & D Test Director		4			1				5
R & D In-House Test Supvr		2	1				2		5
R & D In-House Test Mgr		4	1						5
R & D Program Support Off	2	3							5
R & D Management Analyst		3	1	1					5
Total	103	433	79	33	6	1	16	4	675

Table 3 gives the organizational level of R & D Management officers by job type. With the exception of R & D Program and Financial Manager and R & D Systems Integrator, R & D Management job types tend to cut across organizational levels. Officers in three job types, R & D Manager, R & D Test Manager, R & D Contract Manager, are assigned at five levels of organization.

Table , shows the educational level of officers in R & D Management job types. Bachelor's and master's degrees are distributed across all job types. Doctorate degrees are held by some members of three job types, R & D Manager, R & D Division Chief, and R & D Planning Officer.

The R & D Management officers were asked to estimate the minimum experience in scientific or engineering assignments required to perform their jobs. The results are set forth by job type in Table 5.

Table 4. Distribution of Officers in R & D Management Job Types by Educational Level

JOB TYPE TITLE	HS GRAD	1 YR COLL	2 YR COLL	COLLEGE DEGREE BACH-ELOR	MAS-TER	DOC-TOR	NO REPT	TOTAL
R & D Manager	2	4	22	158	183	7	2	378
R & D Test Manager			3	25	16			44
R & D Contract Manager		1	2	16	23			42
R & D Division Chief			1	11	12	1		25
R & D Planning Officer				7	11	2		20
R & D Project Staff Officer				7	9			16
R & D Program & Fin Mgr			1	5	7			13
R & D Contract Test Supvr		1		5	4			10
R & D Configuration Mgr				6	4			10
R & D Systems Integrator				7	3			10
R & D Program Eval Off				6	3			9
R & D Staff Coordinator			1	4	3			8
R & D Project Engineer			1	6	1			8
R & D New Proj Coordinator			1	2	4			7
R & D Project Officer				4	3			7
R & D Executive Officer			1	4	2			7
R & D Contract Monitor				2	4			6
Foreign Technology Staff Off				2	4			6
R & D Data Reduction Mgr				2	4			6
R & D Liaison Officer		1		3	2			6
R & D Test Facility Coord				4	2			6
R & D Mgt Analyst & Insp				4	2			6
R & D Test Director		1		3	1			5
R & D In-House Test Supvr				2	3			5
R & D In-House Test Mgr			1	2	2			5
R & D Program Support Off				2	3			5
R & D Management Analyst				2	3			5
Total	2	8	34	301	318	10	2	675

Table 5. Distribution of Officers in R & D Job Types by Estimated Minimum Experience Required

JOB TYPE TITLE	NONE	1 YR	2 YR	3 YR	4 YR	5 YR	6 YR	7 YR	OVER 7 YR	NO REPT	TOTAL
R & D Manager	26	35	67	49	47	71	17	4	55	7	378
R & D Test Manager	5	6	15	7	3	4	1		2	1	44
R & D Contract Manager	2	10	10	9	5	5			1		42
R & D Division Chief	4	4	5	4	4	5		1	2		25
R & D Planning Officer	3	1	2	3	4	3	2		2		20
R & D Project Staff Officer	1	3	3	3	2	1		1	2		16
R & D Program & Fin Mgr	2	2	4	1	1	1			1	1	13
R & D Contract Test Supvr	2	1	3	2	1	1					10
R & D Configuration Mgr	3		4	1			1				10
R & D Systems Integrator	1	3	1	1			2	2			10
R & D Program Eval Off	3		2	2	1	1					9
R & D Staff Coordinator	2		5	1	2						8
R & D Project Engineer	3	5									8
R & D New Proj Coordinator	2		3		1				1		7
R & D Project Officer	2	4	1								7
R & D Executive Officer	5	1	1								7
R & D Contract Monitor	1	1		1		3					6
Foreign Technology Staff Off	1		1	1	1	1			1		6
R & D Data Reduction Mgr	1		3	1						1	6
R & D Liaison Officer	3		1	1					1		6
R & D Test Facility Coord		4	1			1					6
R & D Mgt Analyst & Insp	1	1	1	1		1			1		6
R & D Test Director	2	2		1							5
R & D In-House Test Supvr		1	1	1	1	1					5
R & D In-House Test Mgr		1	2				1		1		5
R & D Program Support Off	1	2		2							5
R & D Management Analyst	2	1	2								5
Total	78	88	134	92	73	100	23	6	71	10	675

In all job types there was considerable discrepancy in judgments with respect to the minimum experience needed to perform R & D Management jobs. The estimates varied from no experience at all to more than seven years experience.

With regard to minimum education required there was almost unanimity of opinion. As seen in Table 6, the great majority of officers in all job types felt that a bachelor's degree was required. This is in marked contrast with the educational level actually attained by R & D Officers. Almost half (318) of those for whom job type data were analyzed hold a master's degree.

Table 6. **Distribution of Officers in R & D Job Types by Estimated Minimum Education Required**

JOB TYPE TITLE	HS GRAD	2 YR COLL	BACH-ELOR	MAS-TER	DOC-TOR	NO REPT	TOTAL
R & D Manager	6	20	300	46		6	378
R & D Test Manager	2	4	38				44
R & D Contract Manager		5	34	3			42
R & D Division Chief	1	1	21	2			25
R & D Planning Officer		1	18		1		20
R & D Project Staff Officer			13	3			16
R & D Program & Fin Mgr			1	11	1		13
R & D Contract Test Supvr	1		9				10
R & D Configuration Mgr			2	8			10
R & D Systems Integrator				9	1		10
R & D Program Eval Off		2	7				9
R & D Staff Coordinator		1	7				8
R & D Project Engineer	2		6				8
R & D New Proj Coordinator		1	4	2			7
R & D Project Officer			7				7
R & D Executive Officer	1	3	3				7
R & D Contract Monitor			6				6
Foreign Technology Staff Off			5	1			6
R & D Data Reduction Mgr		2	3			1	6
R & D Liaison Officer		1	5				6
R & D Test Facility Coord			6				6
R & D Mgt Analyst & Insp		2	4				6
R & D Test Director		1	4				5
R & D In-House Test Supvr		1	4				5
R & D In-House Test Mgr		2	3				5
R & D Program Support Off		1	4				5
R & D Management Analyst		4	1				5
Total	13	52	515	85	3	7	675

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VI. CHARACTERISTICS OF R & D MANAGEMENT OFFICERS

The remaining analyses are based on all respondents, including officers not grouped into job types and those with incomplete data.

Experience of R & D Management Officers

Mean experience in the R & D Utilization Field and in Duty AFSC, and judged minimum experience in scientific and engineering assignments required are shown by grade in Table 7. As might be expected, the higher the grade the greater the experience, from a mean of 7.57 months for second lieutenants to a mean of 89.31 months for colonels. About one-third of the colonels and about one-fourth of the lieutenant colonels have had over 10 years' experience in the R & D field.

Table 7. **Months of Experience of R & D Management Officers**

GRADE	REPORTED MONTHS OF EXPERIENCE				ESTIMATED MINIMUM REQUIRED IN SCIENCE OR ENGINEERING	
	UTILIZATION FIELD		DUTY AFSC			
	MEAN	SD	MEAN	SD	MEAN	SD
Colonel	89.31	64.23	52.26	41.96	55.56	17.88
Lt Colonel	77.91	52.89	52.90	60.50	45.60	16.68
Major	61.17	40.36	49.37	39.35	29.28	10.32
Captain	33.77	28.64	27.96	22.84	18.60	7.68
1st Lieutenant	25.04	12.27	22.08	10.16	11.52	0.05
2nd Lieutenant	7.57	3.92	7.71	3.67	3.48	0.00
Total	63.91	51.32	45.30	46.66	35.88	16.80

Colonels, lieutenant colonels, and majors all reported mean experience of over four years in Duty AFSC. A comparison of months' experience officers have had in the utilization field with minimum experience judged by responding officers to be required for adequate performance of the job indicates in general that R & D Management officers have more than enough experience to do the job. Detailed statistics of the experience of R & D Management officers are given in Tables 15, 16, and 17, Appendix II.

Mean Working Hours per Week Spent by R & D Management Officers

Table 8 summarizes by grade the mean working hours per week spent by R & D Management officers in Duty AFSC, in other AFSCs, on additional duties and details, and on administrative tasks or unnecessary details. Over 70 percent of the officers report spending on the average more than 40 hours a week in Duty AFSC; two officers, one colonel and one lieutenant colonel, report spending 80 hours or more a week in Duty AFSC (Appendix III, Table 18). Most R & D Management officers do not spend any time in AFSCs other than their Duty AFSC. When time is spent in other AFSCs, officers usually average about half a day a week and rarely more than a day and a half a week in such activities (Appendix III, Table 19). R & D Management officers

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Table 8. Mean Hours per Week R & D Management Officer Work

	DUTY AFSC		OTHER AFSCs		ADDITIONAL DUTIES & DETAILS		ADMINISTRA- TIVE TASKS OR UNNECESSARY DETAILS	
GRADE	MEAN	SD	MEAN	SD	MEAN	SD	MEAN	SD
Colonel	46.08	11.15	4.29	8.36	6.01	6.21	6.23	6.77
Lt Colonel	42.35	11.01	3.55	7.51	4.32	4.90	4.99	5.77
Major	41.94	10.69	3.20	5.13	4.86	6.10	5.39	6.28
Captain	41.68	11.47	4.31	7.81	4.94	5.66	4.86	6.26
1st Lieutenant	38.08	7.59	2.95	4.86	4.83	4.05	4.44	3.95
2nd Lieutenant	37.77	11.92	0.20	0.60	3.00	2.37	4.15	4.24
Total	42.47	11.11	3.64	7.08	4.83	5.56	5.22	6.3

report spending on the average over five hours a week on additional duties and details assigned by special orders. Second lieutenants average six hours a week on these duties. Only-nin :fi cers reported spending 20 hours a week or more on additional duties and details (Appendix III Table 20). Almost half of the R & D Management officers report spending from 4 to 15 hours pe week on administrative tasks or unnecessary details. Over 200 of the officers, however, report no time spent unnecessarily (Appendix III, Table 21). This is in marked contrast to three offi- cers who report spending 40 hours or more on administrative tasks or unnecessary details. R & Management officers, in general, work more than 40 hours a week. The higher the grade, the n· hours are worked. All grades spend a significant amount of time on additional duties.

Education Attained by R & D Management Officers

In Table 9, the educational level attained by R & D Management officers is given. Only 4 of the officers surveyed do not hold a college degree and almost half (374) have a master's degi

Table 9. Education Attained by R & D Management Officers

EDUCATION ATTAINED	COL		LT COL		MAJOR		CAPT		1st LT		2nd LT		T
	N	%	N	%	N	%	N	%	N	%	N	%	N
Less than 2 yrs college	1	0.8	4	1.4	1	0.5	1	0.6	0	0.0	0	0.0	7
2 Yrs college, no degree	11	9.0	18	6.5	7	3.4	1	0.6	0	0.0	0	0.0	3
Bachelor degree	40	32.8	130	46.8	90	44.1	82	52.9	13	52.0	14	100.0	369
Master degree	64	52.5	123	44.2	101	51.0	71	45.8	12	48.0	0	0.0	374
Doctoral degree	6	4.9	3	1.1	2	1.0	0	0.0	0	0.0	0	0.0	11
Total	122	100.0	278	100.0	204	100.0	155	99.9	25	100.0	14	100.0	798

Education Required by R & D Management Officers to Perform Job

Table 10 shows the minimum education required to perform R & D Management jobs in the Air Force as judged by the officers themselves. Most officers say a bachelor's degree is required but for 12.1 per cent of the jobs, a college degree is considered to be unnecessary. While 46.9 per cent of R & D Management officers hold a master's degree, this level of education is estimated as required in only 8.3 per cent of R & D management jobs.

Table 10. **Estimated Minimum Education Required by R & D Management Officers**

EDUCATION REQUIRED	COL		LT COL		MAJOR		CAPT		1st LT		2nd LT		TOTAL	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
HS Graduation	0	0.0	8	2.9	9	4.4	6	3.9	0	0.0	1	7.1	24	3.0
2 Yrs college, no degree	7	5.7	24	8.6	23	11.3	17	11.0	2	8.0	0	0.0	73	9.1
Bachelor degree	97	79.5	221	79.5	157	77.0	124	80.0	22	88.0	13	92.9	634	79.4
Master degree	17	13.9	25	9.0	15	7.4	8	5.2	1	4.0	0	0.0	66	8.3
Doctoral degree	1	0.8	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.1
Total	122	99.9	278	100.0	204	100.1	155	100.1	25	100.0	14	100.0	798	99.9

Utilization of Talents

Table 11 summarizes the responses of R & D Management officers to the question, "How well does your job utilize your talents?" The higher the grade the better used are talents. Some officers in all grades, except second lieutenant, think they are utilized perfectly. Mean ratings indicate that the job utilizes the talents of colonels and lieutenant colonels "very well," while talents of majors, captains, and first lieutenants are utilized "quite well." The mean rating of the 14 second lieutenants falls midway between "fairly well" and "quite well."

Table 11. **Distribution of Responses to "How Well Does Your Job Utilize Your Talents?"**

TALENTS UTILIZED	RAT-ING	COL		LT COL		MAJOR		CAPT		1st LT		2nd LT		TOTAL	
		N	%	N	%	N	%	N	%	N	%	N	%	N	%
Not at all!	1	0	0.0	1	0.4	1	0.5	1	0.6	0	0.0	1	7.1	4	0.5
Very Little	2	4	3.3	16	5.8	17	8.3	22	14.2	1	4.0	2	14.3	62	7.8
Fairly Well	3	14	11.5	49	17.6	50	24.5	31	20.0	10	40.0	3	21.4	157	19.7
Quite Well	4	13	10.7	32	11.5	39	19.1	30	19.4	5	20.0	6	42.9	125	15.7
Very Well	5	24	19.7	62	22.3	46	22.6	42	27.1	7	28.0	1	7.1	182	22.8
Excellently	6	52	42.6	101	36.3	42	20.6	23	14.8	1	4.0	1	7.1	220	27.6
Perfectly	7	15	12.3	17	6.1	9	4.4	6	3.9	1	4.0	0	0.0	48	6.0
Total		122	100.1	278	100.0	204	100.0	155	100.0	25	100.0	14	9.9	798	100.1
Mean Rating		5.24		4.83		4.34		4.18		4.00		3.50		4.59	
SD		1.31		1.40		1.40		1.42		1.17		1.24		1.44	

An R & D officer needs wide knowledge of the Air Force acquired through operational experience.

Personal attributes are the important things in the higher grades — education is irrelevant.

The important thing you must need to know about engineering is the language.

This inventory de-emphasizes support systems.

VIII. CONCLUSIONS

1. In the R & D Management Field, 27 distinguishable job types were identified. One of these was a dominant job type which included almost half of all assigned officers. A significant number of the remaining job types were composed of only 5 to 10 members. Some of these small job types do not fit well into the R & D Management field.

2. All job types tended to be largely managerial in nature. There is thus much in common among the job types identified. All officers in all job types perform tasks listed in the Commanding and Supervising duties and almost all officers also perform tasks in the Evaluating, Planning, Coordinating, and Communicating duties.

3. Considerable differences among R & D Management job types are found in the Organizing, Developing, and Contracting duties.

4. Most R & D Management job types include officers in three or four grades.

5. Jobs within a job type may have widely varying titles. The job title is not always descriptive of the work performed.

6. R & D Management job types tend to cut across organizational levels. Thus the same job type may have members assigned at Headquarters, Division, or lower organizational level.

7. Recent changes in the educational qualifications of Research and Development Directors specified in Air Force Manual 36-1 are supported by findings of the survey. R & D Management officers report that they need a bachelor's degree in engineering or science but not in a specific field of either science or engineering.

8. Since R & D Management officers are primarily managers and not scientists or engineers they must have thorough knowledge and understanding of research and development policies, procedures, and management practices. The specialized training in management needed suggests the advisability of graduate work in management or business administration.

9. Experience in Air Force management jobs is important for the higher grades of R & D managers. Consequently, most R & D Management officers should probably be procured from commands other than Air Force Systems Command after they have gained operational experience. In order to function most effectively in some job type positions, the R & D Management officers should also have experience as scientists or engineers. There is some question as to whether lieutenants should be assigned to the Research and Development Management Utilization Field.

10. In line with survey results which suggested that certain job types should be separated from the R & D Management Field, the new System Program Management Career Area (29XX) has been included in the Air Force officer classification system.

11. Most R & D Management officers report spending more than 40 hours a week in their Duty AFSC but few spend any appreciable time in specialties other than their Duty AFSC. The higher the grade the more hours are reported worked.

12. R & D Management officers on the average spend over five hours a week in additional duties and details assigned by special orders.

13. Many officers report spending from 4 to 15 hours a week on details or administrative tasks which they consider unnecessary. However, over 200 officers report no time spent unnecessarily.

14. Almost all R & D Management officers are college graduates. About half hold a master's degree. There is general agreement that a bachelor's degree is required for effective performance of the job but a master's degree is considered necessary in only 8 percent of R & D Management jobs.

15. Judgments differed with respect to the minimum experience needed to perform R & D Management jobs. However, R & D Management officers in general have considerable more experience than they judge to be minimal.

16. Most of the R & D Management officers reporting in this survey are of the opinion that their talents are well used by their jobs.

17. Headquarters AFSC accounts for 14 percent of R & D Management jobs; 63 percent are at division level or equivalent, while only 10 percent are at group level or below.

APPENDIX I.

R & D MANAGEMENT UTILIZATION FIELD JOB INVENTORY

Instructions

This booklet contains the job inventory being used to study your utilization field. The purpose of the study is to obtain accurate and comprehensive information concerning the tasks performed by officers in all grades in R & D management.

Please complete the inventory as follows:

1. Fill in the background information sheet.

2. Note that the inventory consists of a series of duty statements each of which has task statements listed below it. Read through each duty and the corresponding tasks to become acquainted with the nature and scope of the inventory.

3. Now you are to make a judgment concerning each task in the inventory. Read each task again and decide whether or not it is a part of your job. Base your judgment upon its importance, the frequency with which you perform it, its relevance, or any other factor which determines to what extent the task is part of your job. For each task, record a value according to the following scale:

   0 Definitely not a part of my job, does not apply
   1 Under unusual circumstances may be a minor part of my job
   2
   3
   4 A substantial part of my job
   5
   6
   7 A most significant part of my job

   Be sure to enter a value for every task in the inventory. Make your judgments only in terms of your regular job; disregard temporary variations. For this study disregard the standard instructions at the top of each page which ask you to check the tasks which you perform.

4. At the end of each duty, add any tasks which you perform but which are not listed. When adding task statements, word them in such a way that their meaning is clear to an officer outside of your utilization field and make each statement similar in detail to those already in the inventory.

5. On the last page of the inventory, make comments or suggestions which might aid in attaining the objectives of the study, might contribute to a better understanding of your job, or might be useful in any phase of management of R & D officers.

BACKGROUND INFORMATION SHEET

LAST NAME – FIRST NAME – MIDDLE INITIAL	LEAVE BLANK
	CASE CONTROL NR (1-4) CARD 1 (5)

DATE	AF SERVICE NUMBER			ORGANIZATION
	PREFIX (6-7)	NUMBER (8-14)	SUFFIX (15)	

TOTAL FEDERAL COMMISSION SERVICE DATE (ADJUSTED)

MONTH JAN ☐1 FEB ☐2 MAR ☐3 APR ☐4 MAY ☐5 JUN ☐6 JUL ☐7 AUG ☐8 SEP ☐9 OCT ☐71 NOV ☐J DEC ☐K   19___ YEAR (17-18)   (16)

AF BASE OR INSTALLATION

PRIMARY AFSC			DUTY AFSC			TOTAL MONTHS EXPERIENCE IN UTILIZATION FIELD
PREFIX (19)	NUMBER (20-23)	SUFFIX (24)	PREFIX (25)	NUMBER (26-29)	SUFFIX (30)	(31-33)

TOTAL MONTHS EXPERIENCE IN DUTY AFSC (34-36)	HOURS PER WEEK YOU NORMALLY SPEND ON ADDITIONAL DUTIES & DETAILS (37-38)	HOURS PER WEEK YOU NORMALLY SPEND WORKING IN YOUR DAFSC (39-40)

PRESENT POSITION TITLE (abbreviate) (41-62)	HOURS PER WEEK YOU NORMALLY SPEND WORKING IN OTHER AFSCs (64-65)

YOUR GRADE (66)

2ND LIEUTENANT	☐ 1
1ST LIEUTENANT	☐ 2
CAPTAIN	☐ 3
MAJOR	☐ 4
LT COLONEL	☐ 5
COLONEL	☐ 6

YOUR EDUCATION (67)

NON-HIGH SCHOOL GRAD	☐ 1
HIGH SCHOOL GRAD (OR GED)	☐ 2
HS GRAD + LESS THAN 2 YR. COLL	☐ 3
2 YR OR MORE COLL-NO DEGREE	☐ 4
BACHELOR'S DEGREE	☐ 5
MASTER'S DEGREE	☐ 6
DOCTOR'S DEGREE	☐ 7

WHAT IS THE MINIMUM FORMAL EDUCATION REQUIRED TO PERFORM YOUR JOB? (68)

HIGH SCHOOL GRAD	☐ 1
2 YR OR MORE COLL-NO DEGREE	☐ 2
BACHELOR'S DEGREE	☐ 3
MASTER'S DEGREE	☐ 4
DOCTOR'S DEGREE	☐ 5

ORIGINAL SOURCE OF COMMISSION (69-70)

USMA	☐ 01
USNA	☐ 02
USAFA	☐ 03
ROTC	☐ 04
OTS	☐ 05
OCS	☐ 06
AV CAD	☐ 07
ANG	☐ 08
DIR (MIL)	☐ 09
DIR (CIV)	☐ 10
OTHER	☐ 11

ORGANIZATIONAL LEVEL IN WHICH POSITION IS LOCATED (71)

HQ AFSC	☐ 1
DIVISION, CENTER, REGION, AGENCY	☐ 2
WING, LABORATORIES, NAMED HOSPITAL	☐ 3
GROUP, LABORATORY, DISTRICT, SCHOOL, NUMBERED HOSPITAL	☐ 4
SQUADRON, DISPENSARY, BAND	☐ 5
FLIGHT	☐ 6
SPECIAL ASSIGNMENT, OTHER	☐ 7

WHAT IS THE MINIMUM EXPERIENCE IN SCIENTIFIC OR ENGINEERING ASSIGNMENTS REQUIRED TO PERFORM YOUR JOB? (72)

NONE	☐ 1
1 YEAR	☐ 2
2 YEARS	☐ 3
3 YEARS	☐ 4
4 YEARS	☐ 5
5 YEARS	☐ 6
6 YEARS	☐ 7
7 YEARS	☐ 8
MORE THAN 7 YEARS	☐ 9

HOW WELL DOES YOUR JOB UTILIZE YOUR TALENTS? (73)

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

HOW MANY HOURS PER WEEK DO YOU SPEND DOING AVOIDABLE DETAIL WORK OR ADMINISTRATIVE TASKS WHICH YOU CONSIDER UNNECESSARY?

☐☐ (74-75)

PLEASE PRINT YOUR AIR FORCE MAILING ADDRESS AND TELEPHONE NR. BELOW:

JOB INVENTORY

(Duty — Task List)

LISTED BELOW ARE A DUTY AND THE TASKS WHICH IT INCLUDES. CHECK ALL TASKS WHICH YOU PERFORM. ADD ANY TASKS YOU DO WHICH ARE NOT LISTED.	PAGE 1 OF 23 PAGES
DUTY: A SUPERVISING: directly observing and controlling persons or their work	0 NOT A PART OF MY JOB 1 MINOR PART OF MY JOB 2 3 4 SUBSTANTIAL PART OF MY JOB 5 6 7 MOST SIGNIFICANT PART OF MY JOB

TASKS INCLUDED IN ABOVE DUTY	
1. Assign airmen to jobs	
2. Assign civilians to jobs	
3. Assign officers to jobs	
4. Assign work to civilians	
5. Assign work to NCOs and airmen	
6. Assign work to officers	
7. Counsel subordinates on performance	
8. Counsel subordinates on personal affairs or personal problems	
9. Counsel subordinates on professional development	
10. Prepare airmen performance reports	
11. Prepare civilian performance reports	
12. Prepare officer effectiveness reports	
13. Supervise classroom instruction	
14. Supervise conduct of inspections	
15. Supervise courts-martial or courts of inquiry investigations	
16. Supervise design of instrumentation system for airborne test vehicles	
17. Supervise flying training	
18. Supervise laboratory and functional checks of instrumentation systems	
19. Supervise maintenance of central documentation files	
20. Supervise military test operations of range instrumentation system	
21. Supervise military test operations of support systems	
22. Supervise military test operations of weapons systems	

JOB INVENTORY

(Duty – Task List)

LISTED BELOW ARE A DUTY AND THE TASKS WHICH IT INCLUDES. CHECK ALL TASKS WHICH YOU PERFORM. ADD ANY TASKS YOU DO WHICH ARE NOT LISTED.

DUTY: A SUPERVISING (Continued)

0 NOT A PART OF MY JOB
1 MINOR PART OF MY JOB
2
3
4 SUBSTANTIAL PART OF MY JOB
5
6
7 MOST SIGNIFICANT PART OF JOB

TASKS INCLUDED IN ABOVE DUTY

Task	
23. Supervise preparation of fiscal summary reports	
24. Supervise preparation of organizational plans	
25. Supervise preparation of population forecasts	
26. Supervise preparation of progress or activity reports	
27. Supervise preparation of site and station plans	
28. Supervise procurement of major instrumentation components	
29. Supervise production of technical studies dealing with capabilities of foreign nations to produce aerospace weapon systems	
30. Supervise screening of applicants for aerospace research	
31. Supervise security program	
32. Supervise work of civilian and/or military personnel on loan for a project	
33. Supervise work of non-profit corporation personnel	

JOB INVENTORY

(Duty – Task List)

LISTED BELOW ARE A DUTY AND THE TASKS WHICH IT INCLUDES. CHECK ALL TASKS WHICH YOU PERFORM. ADD ANY TASKS YOU DO WHICH ARE NOT LISTED.

DUTY: B COMMANDING:
exercising leadership and power of decision to effect unity of effort in achieving an objective; managing; directing; giving general supervision to an activity; monitoring; exercising general surveillance over a project, program, or operation without exercising direct supervision or control.

0 NOT A PART OF MY JOB
1 MINOR PART OF MY JOB
2
3
4 SUBSTANTIAL PART OF MY JOB
5
6
7 MOST SIGNIFICANT PART OF MY JOB

TASKS INCLUDED IN ABOVE DUTY

1. Analyze periodic or special reports	
2. Appoint committees to study major problems	
3. Assign and adjust priorities	
4. Assign facilities and equipment to projects	
5. Conduct scientific meetings and symposiums	
6. Conduct staff meetings	
7. Control system configuration during testing	
8. Direct establishment of R&D programs and projects	
9. Direct facilities planning for advanced or proposed systems	
10. Direct IG inspections	
11. Direct launchings of vertical probes and re-entry vehicles	
12. Direct major analysis program involving all foreign weapon systems and technology	
13. Direct major aerospace weapon system planning efforts	
14. Direct overall aerospace support system testing	
15. Direct overall aerospace weapon system testing in accordance with AFR 80-14	
16. Direct planning for collection and evaluation of foreign aid intelligence	
17. Direct preparation of budgets	
18. Direct preparation of requests for proposals	
19. Direct test planning and scheduling	
20. Identify key points of control that require close supervision	
21. Identify status indicators for key points of operational control	
22. Interpret concepts or policies	

23

JOB INVENTORY

(Duty – Task List)

LISTED BELOW ARE A DUTY AND THE TASKS WHICH IT INCLUDES. CHECK ALL TASKS WHICH YOU PERFORM. ADD ANY TASKS YOU DO WHICH ARE NOT LISTED.	
DUTY: B COMMANDING (Continued)	0 NOT A PART OF MY JOB 1 MINOR PART OF MY JOB 2 3 4 SUBSTANTIAL PART OF MY 5 6 7 MOST SIGNIFICANT PAR... JOB

TASKS INCLUDED IN ABOVE DUTY

23. Interpret or supplement orders, directives, or courses of action	
24. Issue orders and instructions in the name of the commander	
25. Issue written or oral directives, orders, letters, schedules, manuals	
26. Make important managerial decisions without consulting superiors	
27. Manage and direct weapon system design and development	
28. Manage a service activity	
29. Manage a staff activity or agency	
30. Manage collection of data to evaluate operational effectiveness	
31. Manage development and maintenance of specialized test facilities	
32. Manage facilities or equipment	
33. Manage real property	
34. Monitor management improvement studies	
35. Monitor personnel management function of branches within organization	
36. Monitor preparation of visual aid materials	
37. Monitor progress and conduct of tests	
38. Monitor R&D programs and projects	
39. Provide guidance on future areas of planning emphasis throughout the command	
40. Provide guidance on modification of range support equipment	

24

JOB INVENTORY

(Duty — Task List)

LISTED BELOW ARE A DUTY AND THE TASKS WHICH IT INCLUDES. CHECK ALL TASKS WHICH YOU PERFORM. ADD ANY TASKS YOU DO WHICH ARE NOT LISTED.

DUTY: C EVALUATING:
appraising information or persons; reviewing, modifying, or critically examining reports, judgments, or other information; inspecting personnel, activities, installations, or materiel; estimating effectiveness, inadequacy, or compliance

0 NOT A PART OF MY JOB
1 MINOR PART OF MY JOB
2
3
4 SUBSTANTIAL PART OF MY JOB
5
6
7 MOST SIGNIFICANT PART OF MY JOB

TASKS INCLUDED IN ABOVE DUTY

1. Analyze and distribute reports of inquiry	
2. Collect data to evaluate operational effectiveness	
3. Conduct administrative investigations and inquiries	
4. Conduct inspections on special subjects for investigation	
5. Estimate cost of proposed aerospace systems	
6. Estimate cost of proposed support systems	
7. Estimate development time of proposed aerospace systems	
8. Estimate scientific and technical personnel requirements for project commitments	
9. Estimate technical feasibility of proposed aerospace systems	
10. Evaluate adequacy of drones, targets, scorers, or aerial tow systems	
11. Evaluate adequacy of facilities and equipment	
12. Evaluate adequacy of research support	
13. Evaluate and recommend changes in data collection plans	
14. Evaluate and recommend changes in data reduction methods	
15. Evaluate budget estimates	
16. Evaluate effectiveness of air weapons control system	
17. Evaluate effectiveness of foreign aid weapon systems	
18. Evaluate effectiveness of guns, bombs, rockets, launches, ammunition and munitions handling, or release equipment	
19. Evaluate foreign ballistic and anti-ballistic missile capabilities	
20. Evaluate impact of legislation upon objectives and programs	
21. Evaluate implementation of safety measures	
22. Evaluate implementation of security measures	

JOB INVENTORY

(Duty – Task List)

LISTED BELOW ARE A DUTY AND THE TASKS WHICH IT INCLUDES. CHECK ALL TASKS WHICH YOU PERFORM. ADD ANY TASKS YOU DO WHICH ARE NOT LISTED.	
DUTY: C EVALUATING (Continued)	0 NOT A PART OF MY JOB 1 MINOR PART OF MY JOB 2 3 4 SUBSTANTIAL PART OF MY J 5 6 7 MOST SIGNIFICANT PART OF JOB

TASKS INCLUDED IN ABOVE DUTY

23. Evaluate individuals for promotion and upgrading	
24. Evaluate need for supporting services and resources	
25. Evaluate new weapon system and project requirements	
26. Evaluate operating or performance reports	
27. Evaluate operational procedures	
28. Evaluate overall effectiveness of a program or project	
29. Evaluate performance of civilian employees	
30. Evaluate plans for implementation of established policy	
31. Evaluate potential effectiveness of enemy weapon systems	
32. Evaluate programs in terms of available funds	
33. Evaluate progress of subsystem development	
34. Evaluate progress toward unit objectives	
35. Evaluate proposals for increasing unit effectiveness	
36. Evaluate reports of research progress	
37. Evaluate requests for emergency funds	
38. Evaluate significance of deviations from standards	
39. Evaluate statistical reports	
40. Evaluate test reports	
41. Evaluate training methods	
42. Evaluate unit compliance with plans or policies	
43. Evaluate utilization of foreign technology	
44. Evaluate utilization of resources	

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JOB INVENTORY

(Duty – Task List)

LISTED BELOW ARE A DUTY AND THE TASKS WHICH IT INCLUDES. CHECK ALL TASKS WHICH YOU PERFORM. ADD ANY TASKS YOU DO WHICH ARE NOT LISTED.	PAGE 7 OF 23 PAGES
DUTY: C EVALUATING (Continued)	0 NOT A PART OF MY JOB 1 MINOR PART OF MY JOB 2 3 4 SUBSTANTIAL PART OF MY JOB 5 6 7 MOST SIGNIFICANT PART OF MY JOB

TASKS INCLUDED IN ABOVE DUTY	
45. Evaluate weapon system capabilities	
46. Evaluate support system development against projected schedules	
47. Evaluate weapon system development against projected schedules	
48. Evaluate work standards	
49. Inspect facilities or equipment	
50. Inspect materials to determine quality, quantity, or compliance with standards	
51. Make financial audits	
52. Make manpower surveys	
53. Review and approve program implementation	
54. Review and edit research proposals	
55. Review and verify entries in program status reports	
56. Review complaints and action requests submitted by subordinate commanders	
57. Review development and system package program plans prepared by AFSC divisions	
58. Review operations research studies	
59. Review progress of in-house research tasks	

JOB INVENTORY

(Duty — Task List)

LISTED BELOW ARE A DUTY AND THE TASKS WHICH IT INCLUDES. CHECK ALL TASKS WHICH YOU PERFORM. ADD ANY TASKS YOU DO WHICH ARE NOT LISTED.

DUTY: D PLANNING:
formulating a plan, policy, program, or procedure;
devising or projecting a course of action

0 NOT A PART OF MY JOB
1 MINOR PART OF MY JOB
2
3
4 SUBSTANTIAL PART OF MY JOB
5
6
7 MOST SIGNIFICANT PART OF MY JOB

TASKS INCLUDED IN ABOVE DUTY

1. Estimate funding needs

2. Estimate requirements for facilities and equipment

3. Estimate unit manning requirements

4. Formulate and disseminate command program authorizations

5. Formulate in-house studies and evaluation of weapon concepts

6. Formulate long-range R&D objectives and programs for guided missiles

7. Formulate long-range R&D objectives and programs for military applications of atomic energy

8. Formulate long-range R&D objectives and programs for space programs

9. Formulate office instructions and procedures

10. Formulate on-the-job or classroom training programs

11. Formulate plans for new space systems

12. Formulate plans, policies, and programs for management of scientific and specialized personnel

13. Formulate policies and procedures for systems development

14. Formulate policies for systems test and systems test support

15. Formulate policy for a group or laboratory

16. Formulate policy for Air Force Systems Command

17. Formulate policy for a center or the equivalent

18. Formulate policy for a division or the equivalent

19. Formulate policy for a squadron or the equivalent

20. Formulate procedures for interchange of scientific information

21. Identify areas for futher research

22. Perform staff studies

JOB INVENTORY
(Duty — Task List)

LISTED BELOW ARE A DUTY AND THE TASKS WHICH IT INCLUDES. CHECK ALL TASKS WHICH YOU PERFORM. ADD ANY TASKS YOU DO WHICH ARE NOT LISTED.	PAGE 9 OF 23 PAGES
DUTY: D PLANNING (Continued)	0 NOT A PART OF MY JOB 1 MINOR PART OF MY JOB 2 3 4 SUBSTANTIAL PART OF MY JOB 5 6 7 MOST SIGNIFICANT PART OF MY JOB

TASKS INCLUDED IN ABOVE DUTY	
23. Plan and allocate resources for evaluation of new ideas	
24. Plan and schedule inspections	
25. Plan defense and disaster control programs	
26. Plan for system acquisition and testing	
27. Plan items to be used as indicators of operational status	
28. Plan long-range objectives and SOPs for attaining them	
29. Plan mathematical and physical studies in celestial mechanics	
30. Plan meetings on new projects	
31. Plan procurement of major facilities or equipment	
32. Plan progress reports to higher echelons	
33. Plan unit work flow to meet deadlines	
34. Plan use of electronic computer programs	
35. Plan use of facilities or equipment	
36. Plan weapon system logistic support	
37. Propose modification of system programs	
38. Provide staff monitoring of development planning	
39. Provide staff monitoring of operational planning	
40. Schedule planning to meet requirements	
41. Schedule production of space vehicles to meet requirements of using programs	
42. Schedule use of test facilities and equipment	

JOB INVENTORY
(Duty -- Task List)

LISTED BELOW ARE A DUTY AND THE TASKS WHICH IT INCLUDES. CHECK ALL TASKS WHICH YOU PERFORM. ADD ANY TASKS YOU DO WHICH ARE NOT LISTED,	PAGE 10 OF 23 PAGES

DUTY: D PLANNING (Continued)	0 NOT A PART OF MY JOB 1 MINOR PART OF MY JOB 2 3 4 SUBSTANTIAL PART OF MY JOB 5 6 7 MOST SIGNIFICANT PART OF MY JOB

TASKS INCLUDED IN ABOVE DUTY	

JOB INVENTORY

(Duty – Task List)

LISTED BELOW ARE A DUTY AND THE TASKS WHICH IT INCLUDES. CHECK ALL TASKS WHICH YOU PERFORM. ADD ANY TASKS YOU DO WHICH ARE NOT LISTED.	
DUTY: E COORDINATING: promoting harmonious action; adjusting a course of action to be congruent with that of another person or agency; informing a person or agency of a proposed course of action	0 NOT A PART OF MY JOB 1 MINOR PART OF MY JOB 2 3 4 SUBSTANTIAL PART OF MY JOB 5 6 7 MOST SIGNIFICANT PART OF MY JOB

TASKS INCLUDED IN ABOVE DUTY

1. Coordinate administrative actions with parallel organizations	
2. Coordinate budget estimates	
3. Coordinate dissemination and use of scientific and technical data	
4. Coordinate facility or equipment requirements	
5. Coordinate logistical support requirements	
6. Coordinate manning or personnel requirements	
7. Coordinate planning and policy formulation with higher echelons	
8. Coordinate planning or conduct of training	
9. Coordinate program or project implementation with higher echelons	
10. Coordinate project documentation	
11. Coordinate proposed operational support projects	
12. Coordinate proposed programs	
13. Coordinate research projects with program engineers, directors, technical boards, and committees	
14. Coordinate test priority order with project engineers and branch chiefs	
15. Coordinate the functional evaluation of aircraft weapon systems, equipment, and components	
16. Coordinate the implementation of directives	
17. Coordinate the implementation of methods and procedures	
18. Coordinate work standards or performance criteria	
19. Distribute information on foreign developments to other foreign countries	
20. Maintain liaison between an Air Force unit and foreign agencies	
21. Maintain liaison between units in an organization	
22. Maintain liaison with higher echelons of command	

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JOB INVENTORY

(Duty — Task List)

<table>
<tr>
<td rowspan="2">LISTED BELOW ARE A DUTY AND THE TASKS WHICH IT INCLUDES. CHECK ALL TASKS WHICH YOU PERFORM. ADD ANY TASKS YOU DO WHICH ARE NOT LISTED.</td>
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DUTY: E COORDINATING (Continued)	0 NOT A PART OF MY JOB
	1 MINOR PART OF MY JOB
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	4 SUBSTANTIAL PART OF MY JOB
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	6
	7 MOST SIGNIFICANT PART OF MY JOB

TASKS INCLUDED IN ABOVE DUTY	
23. Maintain liaison with lower echelons of command	
24. Maintain liaison with other commands	
25. Maintain liaison with planning offices of AF, DOD, other government, or civilian agencies	
26. Make recommendations on design and development of weapon system configurations and allied test equipment	
27. Participate in staff visits	
28. Prepare memoranda for the chief of staff	
29. Provide staff guidance and support for foreign technology program at AFSC divisions and AFSC centers	
30. Represent the command in formulation of joint command working agreements and regulations	
31. Represent the command in formulation of NASA/DOD working agreements	
32. Represent the command in inter-command reviews of missile and space programs and policies	
33. Represent the commander outside the organization	
34. Serve as representative on scientific and technical boards and committees	

JOB INVENTORY
(Duty — Task List)

LISTED BELOW ARE A DUTY AND THE TASKS WHICH IT INCLUDES. CHECK ALL TASKS WHICH YOU PERFORM. ADD ANY TASKS YOU DO WHICH ARE NOT LISTED.	PAGE 13 OF 23 PAGES
DUTY: F DEVELOPING: working out and extending theoretical and practical applications of design, ideas, discoveries; building up a body of information from raw facts or basic sources	0 NOT A PART OF MY JOB 1 MINOR PART OF MY JOB 2 3 4 SUBSTANTIAL PART OF MY JOB 5 6 7 MOST SIGNIFICANT PART OF MY JOB

TASKS INCLUDED IN ABOVE DUTY	
1. Develop concepts for advanced aerospace weapon or support systems	
2. Develop engineering designs	
3. Develop equipment for flight testing aircraft	
4. Develop formats and charts for management data book	
5. Develop ideas for new equipment	
6. Develop ideas for new services	
7. Develop job performance standards	
8. Develop management information systems	
9. Develop methods for obtaining information or data	
10. Develop methods for weapon systems testing	
11. Develop performance characteristics for range instrumentation systems	
12. Develop procedures for evaluating effectiveness and economy of activities	
13. Develop procedures for funding of systems	
14. Develop procedures for test documentation	
15. Develop requirements for inspections and surveys	
16. Develop standardization documents for electrical-electronic systems	

JOB INVENTORY
(Duty – Task List)

LISTED BELOW ARE A DUTY AND THE TASKS WHICH IT INCLUDES. CHECK ALL TASKS WHICH YOU PERFORM. ADD ANY TASKS YOU DO WHICH ARE NOT LISTED.	PAGE 14 OF 23 PAGES

DUTY: G ORGANIZING: arranging orderly structural and functional relationships among persons, materiel, and equipment; modifying such relationships	0 NOT A PART OF MY JOB 1 MINOR PART OF MY JOB 2 3 4 SUBSTANTIAL PART OF MY JOB 5 6 7 MOST SIGNIFICANT PART OF MY JOB

TASKS INCLUDED IN ABOVE DUTY	
1. Allocate facilities among units	
2. Allocate funding to research subtask elements	
3. Allocate materiel among units	
4. Allocate personnel among units	
5. Establish activities needed to accomplish mission	
6. Establish an effective span of control	
7. Modify organizational structure to meet new requirements	
8. Organize a sub-unit of a System Program Office	
9. Organize a System Program Office	
10. Organize large conferences to do detailed technical planning	
11. Organize reproduction and distribution of data or reports	
12. Organize scheduling and phasing of training programs	
13. Organize special task groups to study, plan, and analyze future weapon system requirements	
14. Organize the personnel functions of a unit or activity	
15. Organize the processing of information	
16. Organize work of unit and schedule work flow	
17. Prescribe relationships between directorates and divisions	
18. Prescribe relationships between staff and subordinate commands	
19. Prescribe relationships between staff groups	
20. Schedule use of facilities	

JOB INVENTORY

(Duty – Task List)

LISTED BELOW ARE A DUTY AND THE TASKS WHICH IT INCLUDES. CHECK ALL TASKS WHICH YOU PERFORM. ADD ANY TASKS YOU DO WHICH ARE NOT LISTED.

DUTY: G ORGANIZING (Continued)

0 NOT A PART OF MY JOB	
1 MINOR PART OF MY JOB	
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4 SUBSTANTIAL PART OF MY JOB	
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7 MOST SIGNIFICANT PART OF MY JOB	

TASKS INCLUDED IN ABOVE DUTY

JOB INVENTORY
(Duty – Task List)

LISTED BELOW ARE A DUTY AND THE TASKS WHICH IT INCLUDES. CHECK ALL TASKS WHICH YOU PERFORM. ADD ANY TASKS YOU DO WHICH ARE NOT LISTED.	PAGE 16 OF 23 PAGES
DUTY: H COMMUNICATING: conveying written or verbal information; reporting; recommending; advising consideration, acceptance, or adoption	0 NOT A PART OF MY JOB 1 MINOR PART OF MY JOB 2 3 4 SUBSTANTIAL PART OF MY JOB 5 6 7 MOST SIGNIFICANT PART OF MY JOB

TASKS INCLUDED IN ABOVE DUTY	
1. Brief HQ USAF and DOD agencies	
2. Brief subordinate units or personnel	
3. Draft correspondence for official signature	
4. Draft organizational charts	
5. Edit copy for publication	
6. Give briefings to superior officers	
7. Give lectures to military or civilian groups	
8. Give oral reports to military organizations outside the immediate chain of command	
9. Initiate or review captive and flight test plans on a weapon system or subsystem	
10. Maintain a current status account on inspection and surveys	
11. Participate in scientific meetings and symposiums	
12. Perform intelligence advisory service	
13. Prepare agenda for meetings	
14. Prepare and submit management improvement reports	
15. Prepare and submit progress reports on special projects	
16. Prepare charts or briefing aids	
17. Prepare computer programs	
18. Prepare data for use at briefings	
19. Prepare foreign technology studies on aerospace weapon systems, subsystems, and components	
20. Prepare for higher echelons recommendations for the development of new aerospace systems	
21. Prepare instructional materials	
22. Prepare justification of requirements for funds	

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LISTED BELOW ARE A DUTY AND THE TASKS WHICH IT INCLUDES. CHECK ALL TASKS WHICH YOU PERFORM. ADD ANY TASKS YOU DO WHICH ARE NOT LISTED.	PAGE 17 OF 23 PAGES
DUTY: H COMMUNICATING (Continued)	0 NOT A PART OF MY JOB 1 MINOR PART OF MY JOB 2 3 4 SUBSTANTIAL PART OF MY JOB 5 6 7 MOST SIGNIFICANT PART OF MY JOB
TASKS INCLUDED IN ABOVE DUTY	

23. Prepare management reports	
24. Prepare materials for manuals	
25. Prepare memoranda for the commander	
26. Prepare operating reports or statements of unit accomplishment	
27. Prepare oral and written briefings	
28. Prepare project documentation	
29. Prepare project histories	
30. Prepare requests for R&D to be performed by specialized Federal agencies	
31. Prepare targeting or geodetics reports	
32. Present scientific papers to professional groups	
33. Present technical information to higher echelons	
34. Promote exchange of technical intelligence with other nations	
35. Provide commander with technical advice, plans, or recommendations	
36. Read technical periodicals, reports, or books	
37. Recommend plans and policies	
38. Recommend research studies	
39. Recommend revisions of directives	
40. Recommend special projects or programs	
41. Relay commander's plans to subordinate units	
42. Report intelligence information to appropriate agencies	
43. Report site survey data	
44. Review minutes of conferences or official proceedings	

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JOB INVENTORY
(Duty – Task List)

LISTED BELOW ARE A DUTY AND THE TASKS WHICH IT INCLUDES. CHECK ALL TASKS WHICH YOU PERFORM. ADD ANY TASKS YOU DO WHICH ARE NOT LISTED.	

DUTY: H. COMMUNICATING (Continued)

0 NOT A PART OF MY JOB
1 MINOR PART OF MY JOB
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4 SUBSTANTIAL PART OF MY JOB
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7 MOST SIGNIFICANT PART OF MY JOB

TASKS INCLUDED IN ABOVE DUTY

45. Review or revise directives or regulations

46. Review or revise operating reports or statements

47. Review or revise technical articles or manuscripts

48. Review or revise technical orders or manuals

49. Review or revise training manuals or syllabuses

50. Review outgoing correspondence

51. Review reports or staff studies

52. Review test result press releases for technical accuracy

53. Translate programming data into financial requirements

54. Transmit test results for review and action

55. Write information papers for the commanders use

56. Write regulations, directives, or SOPs

57. Write reports of staff studies

58. Write technical articles

59. Write technical orders

JOB INVENTORY
(Duty – Task List)

LISTED BELOW ARE A DUTY AND THE TASKS WHICH IT INCLUDES. CHECK ALL TASKS WHICH YOU PERFORM. ADD ANY TASKS YOU DO WHICH ARE NOT LISTED	
DUTY: I CONTRACTING participating in negotiations with civilian agencies	0 NOT A PART OF MY JOB 1 MINOR PART OF MY JOB 2 3 4 SUBSTANTIAL PART OF MY JOB 5 6 7 MOST SIGNIFICANT PART OF MY JOB

TASKS INCLUDED IN ABOVE DUTY

1. Conduct negotiation meetings with contractors	
2. Consolidate the evaluations of unsolicited proposals	
3. Coordinate the combined efforts of contractors and AF agencies	
4. Direct contractor in the reduction of data	
5. Direct preparation of contract specifications	
6. Direct preparation of work statements	
7. Distribute unsolicited contract proposals to appropriate technical organizations	
8. Estimate costs of contract over-runs	
9. Evaluate contract proposals	
10. Evaluate need for contract over-runs	
11. Evaluate performance of contractors	
12. Evaluate plans written by contractors	
13. Inform submitters of unsolicited contract proposals of final decisions regarding their proposals	
14. Provide contractors with technical information and guidance	
15. Provide guidance in preparation of studies for contracts	
16. Review solicited contractor proposals	
17. Review unsolicited contractor proposals	
18. Supervise the efforts of contractors	
19. Supervise the efforts of various contractor support organizations	
20. Write contracts for bidding by civilian agencies	
21. Write contract work statements	

JOB INVENTORY

(Duty – Task List)

LISTED BELOW ARE A DUTY AND THE TASKS WHICH IT INCLUDES. CHECK ALL TASKS WHICH YOU PERFORM. ADD ANY TASKS YOU DO WHICH ARE NOT LISTED.

DUTY: J   PERFORMING ADDITIONAL DUTIES ASSIGNED BY SPECIAL ORDERS

0 NOT A PART OF MY JOB
1 MINOR PART OF MY JOB
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4 SUBSTANTIAL PART OF MY JOB
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7 MOST SIGNIFICANT PART OF MY JOB

TASKS INCLUDED IN ABOVE DUTY

Task	
1. Accident Investigation Board Member	
2. Athletic or Recreation Officer	
3. Billeting Officer	
4. CBR Team Commander	
5. Certifying Officer	
6. Charity Drives Project Officer (AF Aid, Red Cross, United Fund)	
7. Classification Board Member	
8. Classified Documents Custodian	
9. Classified Materials Destruction Officer	
10. Conservation Officer	
11. Disaster Control Officer	
12. Discharge Board Member	
13. Flying Training Officer	
14. Food Services Officer	
15. Ground Safety Officer	
16. Historical Officer	
17. Incentive Awards Committee Member	
18. Inspector, Emergency Medical Treatment Unit	
19. Instructor Pilot (Flight Examiner)	
20. Inventory Officer	
21. Investigation Officer (LOU, Special Investigations, etc.)	
22. Library Officer	

JOB INVENTORY

(Duty – Task List)

LISTED BELOW ARE A DUTY AND THE TASKS WHICH IT INCLUDES. CHECK ALL TASKS WHICH YOU PERFORM. ADD ANY TASKS YOU DO WHICH ARE NOT LISTED.	PAGE 22 OF 23 PAGES

DUTY: J PERFORMING ADDITIONAL DUTIES ASSIGNED BY SPECIAL ORDERS (Continued)

0 NOT A PART OF MY JOB
1 MINOR PART OF MY JOB
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4 SUBSTANTIAL PART OF MY JOB
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6
7 MOST SIGNIFICANT PART OF MY JOB

TASKS INCLUDED IN ABOVE DUTY

23. Member of Courts Martial	
24. Mobility Officer	
25. Mortuary (Casualty) Officer	
26. Officers Club Board of Governors Member	
27. OJT Officer	
28. Pay Officer (Class "A" Agent)	
29. Personal Affairs Officer	
30. Physical Training Officer	
31. Postal Officer	
32. Promotion Board Member	
33. Property (Building, Equipment) Custodian	
34. Publications and Distribution Officer	
35. Public Information Officer	
36. Records Management Officer	
37. Report of Survey Officer	
38. Savings Bond Project Officer	
39. Secretary-Treasurer, Officers Open Mess	
40. Security Officer	
41. Small Arms Marksmanship Training Officer	
42. Standardization Board Member	
43. Supply Officer	
44. Test Control Officer	

JOB INVENTORY

(Duty – Task List)

LISTED BELOW ARE A DUTY AND THE TASKS WHICH IT INCLUDES. CHECK ALL TASKS WHICH YOU PERFORM. ADD ANY TASKS YOU DU WHICH ARE NOT LISTED.

DUTY: J PERFORMING ADDITIONAL DUTIES ASSIGNED BY SPECIAL ORDERS (Continued)

0 NOT A PART OF MY JOB
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3
4 SUBSTANTIAL PART OF MY JOB
5
6
7 MOST SIGNIFICANT PART OF MY JOB

TASKS INCLUDED IN ABOVE DUTY

45. Top Secret Control Officer	
46. Unit Fire Warden (Marshall)	
47. Unit Fund Custodian	
48. Unit Retention Officer	
49. Voting Officer	

APPENDIX II.

TASK-LEVEL JOB DESCRIPTIONS OF TWO JOB TYPES

TASK-LEVEL JOB DESCRIPTION OF R & D PROJECT STAFF OFFICER

(16 members; 53.27 percent time on tasks perfectly described)

DUTY	TASK	TASK TITLE	% OF MEMBERS PERFORMING	AVERAGE % TIME SPENT BY MEMBERS PERFORMING	AVERAGE % TIME SPENT BY ALL MEMBERS	CUMULATIVE AVERAGE % TIME SPENT BY ALL MEMBERS
H	3	DRAFT CORRESPONDENCE FOR OFFICIAL SIGNATURE	100.00	3.07	3.07	3.07
H	25	PREPARE RESEARCH FOR THE COMMANDER	100.00	2.14	2.14	5.21
H	6	GIVE BRIEFINGS TO SUPERIOR OFFICERS	100.00	2.06	2.06	7.27
E	23	INTERPRET OR SUPPLEMENT ORDERS DIRECT OR COURSES OF ACTION	93.75	2.15	2.01	9.28
B	35	MONITOR R AND D PROGRAMS AND PROJECTS	81.25	2.47	2.01	11.29
B	1	ANALYZE PERIODIC OR SPECIAL REPORTS	100.00	1.86	1.86	13.15
B	25	ISSUE WRITTEN OR ORAL DIRECT ORDERS LETTERS SCHED MANUALS	87.50	2.09	1.83	14.99
E	23	MAINTAIN LIAISON WITH LOWER ECHELONS OF COMMAND	91.25	2.03	1.65	16.63
H	35	PROVIDE CMDR WITH TECHNICAL ADVICE PLANS OR RECOMMENDATIONS	87.50	1.88	1.64	18.28
H	50	READ TECHNICAL PERIODICALS, REPORTS, OR BOOKS	97.50	1.63	1.60	19.88
H	27	PREPARE ORAL AND WRITTEN BRIEFINGS	100.00	1.56	1.56	21.43
B	22	INTERPRET CONCEPTS OR POLICIES	91.25	1.86	1.51	22.94
H	18	PREPARE DATA FOR USE AT BRIEFINGS	100.00	1.50	1.50	24.44
B	24	ISSUE ORDERS AND INSTRUCTIONS IN THE NAME OF THE COMMANDER	62.75	2.18	1.50	25.94
E	25	MAINT LIAISON WITH PLAN OFF OF AF DOD OTHER GOV OR CIV AGENC	75.00	1.93	1.45	27.39
E	27	PARTICIPATE IN STAFF VISITS	81.25	1.65	1.34	28.73
E	22	MAINTAIN LIAISON WITH HIGHER ECHELONS OF COMMAND	68.75	1.91	1.31	30.05
H	2	BRIEF SUBORDINATE UNITS OR PERSONNEL	81.25	1.61	1.31	31.35
H	37	RECOMMEND PLANS AND POLICIES	81.25	1.40	1.14	32.49
C	22	PERFORM STAFF STUDIES	75.00	1.44	1.08	33.57
C	57	REVIEW DEV AND SYS PACKAGE PROG PLANS PREPARED BY AFSC DIV	50.00	2.16	1.08	34.65
H	1	BRIEF AS USAF AND DOD AGENCIES	75.00	1.43	1.07	35.73
E	7	COORDINATE PLANNING AND POL FORMUL WITH HIGHER ECHELONS	56.25	1.91	1.07	36.80
E	1	COORDINATE ADMIN ACTIONS WITH PARALLEL ORGANIZATION	50.25	1.89	1.06	37.86
E	10	COORDINATE PROJECT DOCUMENTATION	62.50	1.69	1.06	38.92
H	16	PREPARE CHARTS OR BRIEFING AIDS	93.75	1.08	1.01	39.93
B	37	MONITOR PROGRESS AND CONDUCT OF TESTS	62.50	1.62	1.01	40.94
C	8	PROVIDE STAFF MONITORING OF DEVELOPMENT PLANNING	62.50	1.59	1.00	41.94
E	9	COORDINATE PROG OR PROJ IMPLEMENTATION WITH HIGHER ECHELONS	56.25	1.73	0.97	42.91
E	12	COORDINATE PROPOSED PROGRAMS	68.75	1.35	0.93	43.84
H	50	REVIEW OUTGOING CORRESPONDENCE	75.00	1.24	0.93	44.77
A	4	ASSIGN WORK TO CIVILIANS	68.75	1.32	0.91	45.68
H	51	REVIEW REPORTS OR STAFF STUDIES	75.00	1.17	0.88	46.56
H	55	WRITE INFORMATION PAPERS FOR THE COMMANDERS USE	62.75	1.27	0.87	47.43
B	26	MAKE IMPORTANT MANAGERIAL DECISIONS WITHOUT CONSULT SUPERIOR	56.25	1.52	0.85	48.28
C	33	EVALUATE PROGRESS OF SUBSYSTEM DEVELOPMENT	50.00	1.70	0.85	49.13
H	44	REVIEW MINUTES OF CONFERENCES OR OFFICIAL PROCEEDINGS	81.25	1.03	0.83	49.97
H	13	PREPARE AGENDA FOR MEETINGS	81.25	1.02	0.83	50.80
H	41	RELAY COMMANDER'S PLANS TO SUBORDINATE UNITS	62.50	1.31	0.82	51.62
H	11	PARTICIPATE IN SCIENTIFIC MEETINGS AND SYMPOSIUMS	68.75	1.19	0.81	52.43
E	24	MAINTAIN LIAISON WITH OTHER COMMANDS	66.75	1.16	0.80	53.23
C	47	EVALUATE WEAPON SYS DEVELOPMENT AGAINST PROJECTED SCHEDULES	50.00	1.59	0.79	54.02
A	23	SUPERVISE PREPARATION OF PROGRESS OR ACTIVITY REPORTS	56.25	1.39	0.78	54.80
C	55	EVALUATE REPORTS OF RESEARCH PROGRESS	62.50	1.18	0.74	55.54
C	37	EVALUATE PROGRAMS IN TERMS OF AVAILABLE FUNDS	56.25	1.27	0.72	56.25
B	30	IDENTIFY KEY POINT OF CONTROL THAT REQUIRE CLOSE SUPERVISION	50.00	1.41	0.70	56.96
E	21	MAINTAIN LIAISON BETWEEN UNITS IN AN ORGANIZATION	63.75	1.60	0.70	57.66

DUTY	TASK	TASK TITLE	% OF MEMBERS PERFORMING	AVERAGE % TIME SPENT BY MEMBERS PERFORMING	AVERAGE % TIME SPENT BY ALL MEMBERS	CUMULATIVE AVERAGE % TIME SPENT BY ALL MEMBERS
C	25	PRESENT AND VERIFY ENTRIES IN PROGRAM STATUS REPORTS	50.00	1.40	0.70	53.36
H	33	PRESENT TECHNICAL INFORMATION TO HIGHER ECHELONS	50.00	1.34	0.67	59.03
B	3	ASSIGN AND ADJUST PRIORITIES	50.00	1.33	0.67	59.70
E	16	COORDINATE THE IMPLEMENTATION OF DIRECTIVES	56.25	1.18	0.66	60.36
H	42	EVALUATE WEAPON SYSTEM CAPABILITIES	43.75	1.49	0.65	61.01
H	22	PREPARE JUSTIFICATION OF REQUIREMENTS FOR FUNDS	50.00	1.22	0.61	61.62
H	47	REVIEW OR REVISE TECHNICAL ARTICLES OR MANUSCRIPTS	56.25	1.00	0.56	62.18
C	24	EVALUATE NEED FOR SUPPORTING SERVICES AND RESOURCES	50.00	1.12	0.56	62.74
C	15	EVALUATE BUDGET ESTIMATES	50.00	1.11	0.56	63.31
B	39	PROVIDE GUIDE ON FUTURE AREAS PLAN EMPHASIS THROUGH THE CMD	43.75	1.25	0.55	63.85
C	25	REVIEW AND APPROVE WEAPON SYSTEM AND PROJECT REQUIREMENTS	50.00	1.09	0.55	64.39
H	57	WRITE REPORTS OF STAFF STUDIES	50.00	1.09	0.54	64.94
C	28	EVALUATE OVERALL EFFECTIVENESS OF A PROGRAM OR PROJECT	50.00	1.08	0.54	65.48
D	1	ESTIMATE FUNDING NEEDS	43.75	1.20	0.53	66.01
C	40	EVALUATE TEST REPORTS	43.75	1.20	0.53	66.53
B	36	MONITOR PREPARATION OF VISUAL AID MATERIALS	50.00	1.05	0.53	67.06
C	53	REVIEW AND APPROVE PROGRAM IMPLEMENTATION	31.25	1.68	0.53	67.58
D	16	FORMULATE POLICY FOR AIR FORCE SYSTEMS COMMAND	43.75	1.19	0.52	68.11
E	28	PREPARE MEMORANDA FOR THE CHIEF OF STAFF	43.75	1.19	0.52	68.63
H	15	PREPARE AND SUBMIT PROGRESS REPORTS ON SPECIAL PROJECTS	56.25	0.92	0.52	69.15
A	14	FORMULATE POL FOR SYS TEST AND SYS TEST SUPPORT	31.25	1.65	0.52	69.66
A	6	ASSIGN WORK TO OFFICERS	37.50	1.30	0.49	70.15
C	2	COORDINATE BUDGET ESTIMATES	31.25	1.53	0.48	70.62
C	30	EVALUATE PLANS FOR IMPLEMENTATION OF ESTABLISHED POLICY	37.50	1.25	0.47	71.09
D	32	PLAN PROGRESS REPORTS TO HIGHER ECHELONS	43.75	1.06	0.46	71.56
B	27	MANAGE AND DIRECT WEAPON SYS DESIGN AND DEVELOPMENT	25.00	1.82	0.46	72.01
H	5	EDIT COPY FOR PUBLICATION	31.25	1.45	0.45	72.47
H	29	PREPARE PROJECT DOCUMENTATION	25.00	1.81	0.45	72.92
H	23	PREPARE MANAGEMENT REPORTS	37.50	1.19	0.45	73.37
B	9	DIRECT ESTABLISHMENT OF R AND D PROGRAMS AND PROJECTS	25.00	1.79	0.45	73.81
C	20	EVALUATE IMPACT OF LEGISLATION UPON OBJECTIVES AND PROGRAMS	37.50	1.19	0.45	74.26
E	3	COORDINATE DISSEMINATION USE OF SCIENTIFIC AND TECH DATA	31.25	1.41	0.44	74.70
H	45	REVIEW OR REVISE DIRECTIVES OR REGULATIONS	56.25	0.76	0.43	75.13
C	9	ESTIMATE TECH FEASIBILITY OF PROPOSED AERO SYSTEMS	31.25	1.37	0.43	75.56
H	4	COORDINATE FACILITY OR EQUIPMENT REQUIREMENTS	25.00	1.64	0.41	75.97
C	44	EVALUATE UTILIZATION OF RESOURCES	37.50	1.07	0.40	76.37
T	17	REVIEW UNSOLICITED CONTRACTOR PROPOSALS	43.75	0.87	0.38	76.75
B	34	MONITOR MANAGEMENT IMPROVEMENT STUDIES	25.00	1.51	0.38	77.13
H	52	REVIEW TEST RESULT PRESS RELEASES FOR TECHNICAL ACCURACY	37.50	1.00	0.38	77.50
D	9	FORMULATE OFFICE INSTRUCTIONS AND PROCEDURES	31.25	1.19	0.37	77.88
E	17	COORDINATE THE IMPLEMENTATION OF METHODS AND PROCEDURES	31.25	1.16	0.36	78.24
A	33	SUPERVISE WORK OF NON-PROFIT CORPORATION PERSONNEL	6.25	5.80	0.36	78.60
H	26	PLAN FOR SYSTEM ACQUISITION AND TESTING	18.75	1.90	0.36	78.96
H	40	RECOMMEND SPECIAL PROJECTS OR PROGRAMS	43.75	0.80	0.35	79.31
A	1	COUNSEL SUBORDINATES ON PERFORMANCE	37.50	0.90	0.34	79.65
C	58	REVIEW OPERATIONS RESEARCH STUDIES	31.25	1.08	0.34	79.99
E	13	COORDINATE RES PROJ WITH PROG ENG DIR TECH BOARDS COMMITTEES	31.25	1.07	0.34	80.32
E	6	COORDINATE MANNING OR PERSONNEL REQUIREMENTS	43.75	0.76	0.33	80.66

DUTY	TASK	TASK TITLE	% OF MEMBERS PERFORMING	AVERAGE % TIME SPENT BY MEMBERS PERFORMING	AVERAGE % TIME SPENT BY ALL MEMBERS	CUMULATIVE AVERAGE % TIME SPENT BY ALL MEMBERS
C	55	REVIEW COMPLAINTS ACTION REQ SUBMIT BY SUBORDINATE CMDRS	31.25	1.05	0.33	80.99
A	9	COUNSEL SUBORDINATES ON PROFESSIONAL DEVELOPMENT	37.50	0.84	0.31	81.30
H	56	WRITE REGULATIONS, DIRECTIVES, OR SOPS	37.50	0.81	0.30	81.60
C	54	REVIEW PROGRESS OF IN-HOUSE RESEARCH TASKS	25.00	1.21	0.30	81.90
C	34	EVALUATE PROGRESS TOWARD UNIT OBJECTIVES	25.00	1.19	0.30	82.20
I	16	REVIEW SOLICITED CONTRACTOR PROPOSALS	18.75	1.56	0.29	82.49
D	3	ESTIMATE UNIT MANNING REQUIREMENTS	37.50	0.78	0.29	82.78
E	26	RECOMMEND ON DESIGN DEV & SYS CONFIGURATIONS ALLIED TEST EQ	18.75	1.53	0.29	83.07
E	34	SERVE AS REPRESENT ON SCIENTIFIC TECH BOARDS COMMITTEES	31.25	0.90	0.28	83.35
E	33	REPRESENT THE COMMANDER OUTSIDE THE ORGANIZATION	31.25	0.90	0.28	83.64
C	30	PLAN MEETINGS ON NEW PROJECTS	37.50	0.75	0.28	83.92
B	2	APPOINT COMMITTEES TO STUDY MAJOR PROBLEMS	18.75	1.46	0.27	84.19
H	39	RECOMMEND REVISIONS OF DIRECTIVES	37.50	0.73	0.27	84.46
G	11	ORGANIZE REPRODUCTION AND DISTRIBUTION OF DATA OR REPORTS	18.75	1.45	0.27	84.74
G	18	PRESCRIBE RELATION BETWEEN STAFF AND SUBORDINATE CMD	18.75	1.44	0.27	85.01
G	21	IDENTIFY STAT INDICATORS FOR KEY PTS OF OPERATIONAL CONTROL	18.75	1.43	0.27	85.27
C	37	EVALUATE REQUESTS FOR EMERGENCY FUNDS	18.75	1.42	0.27	85.54
H	38	RECOMMEND RESEARCH STUDIES	31.25	0.85	0.26	85.80
I	14	PROVIDE CONTRACTORS WITH TECHNICAL INFORMATION AND GUIDANCE	31.25	0.84	0.26	86.07
D	8	FORMULATE LONG-RANGE R+D OBJECT AND PROG FOR SPACE PROG	25.00	1.04	0.26	86.33
B	6	CONDUCT STAFF MEETINGS	25.00	1.04	0.26	86.58
C	12	EVALUATE ADEQUACY OF RESEARCH SUPPORT	25.00	1.02	0.26	86.84
D	2	ESTIMATE REQUIREMENTS FOR FACILITIES AND EQUIPMENT	25.00	1.00	0.25	87.09
B	29	MANAGE A STAFF ACTIVITY OR AGENCY	12.50	1.92	0.24	87.33
A	8	COUNSEL SUBORDINATES ON PERSONAL AFFAIRS OR PERSONAL PROB	25.00	0.97	0.24	87.58
F	9	DEVELOP METHODS FOR OBTAINING INFORMATION OR DATA	18.75	1.22	0.23	87.80
C	7	ESTIMATE SCIENTIFIC AND TECH PERS REQUIRE FOR PROJECT COMMIT	31.25	0.73	0.23	88.03
G	10	ORGANIZE LARGE CONFERENCES TO DO DETAILED TECH PLANNING	18.75	1.22	0.23	88.26
D	13	FORMULATE POLICIES AND PROCEDURES FOR SYSTEMS DEVELOPMENT	18.75	1.21	0.23	88.49
A	24	SUPERVISE PREPARATION OF ORGANIZATIONAL PLANS	18.75	1.19	0.22	88.71
C	11	FORMULATE PLANS FOR NEW SPACE SYSTEMS	13.75	1.18	0.22	88.93
H	4	DRAFT ORGANIZATIONAL CHARTS	25.00	0.88	0.22	89.15
H	8	GIVE ORAL REPORTS TO MIL ORGAN OUTSIDE IMMED CHAIN OF CMD	18.75	1.17	0.22	89.37
H	20	PREPARE FOR HIGHER ECHELONS RECOMMEND FOR DEV NEW AERO SYS	18.75	1.16	0.22	89.59
F	1	DEVELOP CONCEPTS FOR ADVANCED AERO WEAPON OR SUP SYSTEMS	18.75	1.11	0.21	89.80
A	3	ASSIGN OFFICERS TO JOBS	18.75	1.07	0.20	90.00
C	2	COLLECT DATA TO EVALUATE OPERATIONAL EFFECTIVENESS	18.75	1.05	0.20	90.19
D	21	IDENTIFY AREAS FOR FURTHER RESEARCH	25.00	0.79	0.20	90.39
C	42	EVALUATE UNIT COMPLIANCE WITH PLANS OR POLICIES	25.00	0.77	0.19	90.58
A	12	PREPARE OFFICER EFFECTIVENESS REPORTS	13.75	1.00	0.19	90.77
A	5	ASSIGN WORK TO NCOS AND AIRMEN	18.75	1.00	0.19	90.96
E	31	REPRESENT THE CMD IN FORMULATION OF NASA/DOD WORKING AGREE	18.75	0.99	0.18	91.15
H	7	GIVE LECTURES TO MILITARY OR CIVILIAN GROUPS	18.75	0.98	0.18	91.33
A	19	SUPERVISE MAINTENANCE OF CENTRAL DOCUMENTATION FILES	12.50	1.46	0.18	91.51
B	30	MANAGE COLLECTION OF DATA TO EVALUATE OPERATIONAL EFFECT	6.25	2.90	0.18	91.69
B	9	CONDUCT SCIENTIFIC MEETINGS AND SYMPOSIUMS	18.75	0.94	0.18	91.87
C	31	EVALUATE DATA WITH EFFECTIVENESS OF ENEMY WEAPON SYSTEMS	12.50	1.40	0.18	92.04

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DUTY	TASK	TASK TITLE	% OF MEMBERS PERFORMING	AVERAGE % TIME SPENT BY MEMBERS PERFORMING	AVERAGE % TIME SPENT BY ALL MEMBERS	CUMULATIVE AVERAGE % TIME SPENT BY ALL MEMBERS
C	21	EVALUATE IMPLEMENTATION OF SAFETY MEASURES	18.75	0.92	0.17	92.39
B	19	DIRECT TEST PLANNING AND SCHEDULING	12.50	1.38	0.17	92.56
H	9	INITIATE OR REVIEW CAPTIVE FLT TEST PLANS ON A W SYS SUBSYS	12.50	1.37	0.17	92.73
I	15	PROVIDE GUIDANCE IN PREPARATION OF STUDIES FOR CONTRACTS	12.50	1.35	0.17	92.90
G	19	PRESCRIBE RELATIONSHIPS BETWEEN STAFF GROUPS	12.50	1.31	0.16	93.07
A	23	SUPERVISE PREPARATION OF FISCAL SUMMARY REPORTS	12.50	1.29	0.16	93.23
A	31	SUPERVISE SECURITY PROGRAM	18.75	0.34	0.16	93.39
H	54	TRANSMIT TEST RESULTS FOR REVIEW AND ACTION	12.50	1.26	0.16	93.54
C	54	REVIEW AND EDIT RESEARCH PROPOSALS	18.75	0.83	0.16	93.70
H	29	PREPARE PROJECT HISTORIES	12.50	1.24	0.16	93.85
B	13	DIRECT MAJOR AEROSPACE WEAPON SYSTEM PLANNING EFFORTS	6.25	2.45	0.15	94.01
E	14	COORDINATE TEST PRIORITY ORDER WITH PROJECT ENGRS OR CHIEFS	12.50	1.22	0.15	94.16
C	40	SCHEDULE PLANNING TO MEET REQUIREMENTS	18.75	0.81	0.15	94.31
B	17	DIRECT PREPARATION OF BUDGETS	12.50	1.17	0.15	94.46
C	46	EVALUATE SUPPORT SYS DEVELOPMENT AGAINST PROJECTED SCHEDULES	18.75	0.78	0.15	94.60
E	32	REPRESENT CMD IN INTER-CMD REVIEWS OF MISSILE SPACE PROG POL	12.50	1.05	0.13	94.74
C	5	FORMULATE IN-HOUSE STUDIES AND EVAL OF WEAPON CONCEPTS	12.50	1.00	0.13	94.86
B	40	PROVIDE GUID ON MODIF OF RANGE SUPPORT EQUIPMENT	12.50	1.00	0.13	94.99
G	8	ORGANIZE A SUB-UNIT OF A SYSTEM PROGRAM OFFICE	12.50	0.97	0.12	95.11
H	46	REVIEW OR REVISE OPERATING REPORTS OR STATEMENTS	18.75	0.63	0.12	95.23
G	16	ORGANIZE WORK OF UNIT AND SCHEDULE WORK FLOW	12.50	0.90	0.11	95.34
D	12	FORM PLANS POL PROG FOR MANAGE OF SCIENTIFIC AND SPEC PERS	12.50	0.90	0.11	95.45
C	1	ANALYZE AND DISTRIBUTE REPORTS OF INQUIRY	6.25	1.79	0.11	95.56
C	26	EVALUATE OPERATING OR PERFORMANCE REPORTS	12.50	0.89	0.11	95.67
H	26	PREPARE OPERAT REPORTS OR STATEMENTS OF UNIT ACCOMPLISHMENT	12.50	0.99	0.11	95.77
B	18	EVAL EFFECT OF GUNS BOMBS ROCKETS LAUNCHES AMMUNIT MUNIT HAN	6.25	1.75	0.11	95.90
C	12	EVALUATE PLANS WRITTEN BY CONTRACTORS	12.50	0.87	0.11	96.00
G	13	ORGANIZE SPEC TASK GRPS TO STUDY PLAN ANAL FUTURE W SYS REQ	12.50	0.86	0.11	96.11
D	28	PLAN LONG-RANGE OBJECTIVES AND SOPS FOR ATTAINING THEM	12.50	0.84	0.10	96.22
A	22	SUPERVISE MILITARY TEST OPERATIONS OF WEAPONS SYSTEMS	6.25	1.63	0.10	96.32
H	77	SUPERVISE PREPARATION OF SITE AND STATION PLANS	6.25	1.63	0.10	96.42
F	13	DEVELOP PROCEDURES FOR FUNDING OF SYSTEMS	6.25	1.63	0.10	96.52
F	3	COORDINATE THE COMBINED EFFORTS OF CONT AND AF AGENCIES	6.25	1.63	0.10	96.62
F	11	EVALUATE PERFORMANCE OF CONTRACTORS	6.25	1.63	0.10	96.73
C	20	FORMULATE PROCEDURES FOR INTERCHANGE OF SCIENTIFIC INFO	12.50	0.81	0.10	96.83
F	15	DEVELOP REQUIREMENTS FOR INSPECTIONS AND SURVEYS	12.50	0.78	0.10	96.92
B	37	PROPOSE MODIFICATION OF SYSTEM PROGRAMS	12.50	0.74	0.09	97.02
C	22	EVALUATE IMPLEMENTATION OF SECURITY MEASURES	12.50	0.73	0.09	97.11
A	22	SUPERVISE PROCUREMENT OF MAJOR INSTRUMENTATION COMPONENTS	6.25	1.45	0.09	97.20
C	23	EVALUATE INDIVIDUALS FOR PROMOTION AND UPGRADING	6.25	1.45	0.09	97.29
C	27	EVALUATE OPERATIONAL PROCEDURES	6.25	1.45	0.09	97.38
B	7	FORMULATE LONG-RANGE R+D OBJECT AND PROG FOR MIL APPLIC ATOM	12.50	0.71	0.09	97.47
D	15	FORMULATE POLICY FOR A GROUP OR LABORATORY	12.50	0.71	0.09	97.56
C	5	ESTIMATE COST OF PROPOSED AEROSPACE SYSTEMS	12.50	0.71	0.09	97.65
C	6	ESTIMATE COST OF PROPOSED SUPPORT SYSTEMS	12.50	0.71	0.09	97.73
C	7	ESTIMATE DEVELOPMENT TIME OF PROPOSED AEROSPACE SYSTEMS	12.50	0.71	0.09	97.82
C	11	EVALUATE ADEQUACY OF FACILITIES AND EQUIPMENT	12.50	0.70	0.09	97.91
C	52	MAKE MANPOWER SURVEYS	5.25	1.32	0.08	97.99

Task-Level Job Description of R & D Project Staff Officer (*Continued*)

DUTY	TASK	TASK TITLE	% OF MEMBERS PERFORMING	AVERAGE % TIME SPENT BY MEMBERS PERFORMING	AVERAGE % TIME SPENT BY ALL MEMBERS	CUMULATIVE AVERAGE % TIME SPENT BY ALL MEMBERS
D	5	ESTABLISH ACTIVITIES NEEDED TO ACCOMPLISH MISSION	12.50	0.65	0.08	92.07
C	29	EVALUATE PERFORMANCE OF CIVILIAN EMPLOYEES	18.75	0.42	0.08	93.15
E	30	REPRESENT THE CMD IN FORMULATION OF JOINT CMD WORK AGREE REG	12.50	0.52	0.08	98.23
F	10	DEVELOP METHODS FOR WEAPON SYSTEMS TESTING	6.25	1.22	0.08	98.31
C	19	EVALUATE FOREIGN BALLISTIC AND ANTI-BALLISTIC MISSILE CAPABI	6.25	1.14	0.07	98.38
C	35	EVALUATE PROPOSALS FOR INCREASING UNIT EFFECTIVENESS	6.25	1.14	0.07	98.45
B	38	MONITOR PERSONNEL MANAGE FUNCT OF AN WITHIN ORGAN	6.25	0.98	0.06	98.51
D	6	FORMULATE LONG-RANGE R+D OBJECT AND PROG FOR GUIDED MISSILES	6.25	0.98	0.06	98.57
E	23	PLAN AND ALLOCATE RESOURCES FOR EVALUATION OF NEW IDEAS	6.25	0.98	0.06	98.63
E	8	COORDINATE PLANNING OR CONDUCT OF TRAINING	6.25	0.98	0.06	98.69
F	12	DEVELOP PROCS FOR EVAL EFFECT AND ECONOMY OF ACT	6.25	0.98	0.06	98.75
G	15	ORGANIZE THE PROCESSING OF INFORMATION	6.25	0.98	0.06	98.82
H	24	PREPARE MATERIALS FOR MANUALS	6.25	0.98	0.06	98.88
H	53	TRANSLATE PROGRAMMING DATA INTO FINANCIAL REQUIREMENTS	6.25	0.98	0.06	98.94
I	18	SUPERVISE THE EFFORTS OF CONTRACTORS	6.25	0.98	0.06	99.00
C	39	EVALUATE STATISTICAL REPORTS	6.25	0.88	0.05	99.05
E	5	COORDINATE LOGISTICAL SUPPORT REQUIREMENTS	6.25	0.88	0.05	99.11
F	2	DEVELOP ENGINEERING DESIGNS	6.25	0.82	0.05	99.16
F	11	DEVELOP PERFORM CHARACTER FOR RANGE INSTRUMENTATION SYS	6.25	0.82	0.05	99.21
G	7	MODIFY ORGANIZATIONAL STRUCTURE TO MEET NEW REQUIREMENTS	6.25	0.92	0.05	99.26
G	9	ORGANIZE A SYSTEM PROGRAM OFFICE	6.25	0.82	0.05	99.31
C	13	EVALUATE AND RECOMMEND CHANGES IN DATA COLLECTION PLANS	6.25	0.81	0.05	99.36
C	14	EVALUATE AND RECOMMEND CHANGES IN DATA REDUCTION METHODS	6.25	0.81	0.05	99.41
C	35	PLAN USE OF FACILITIES OR EQUIPMENT	6.25	0.81	0.05	99.47
C	14	DEVELOP PROCEDURES FOR TEST DOCUMENTATION	6.25	0.81	0.05	99.52
A	11	PREPARE CIVILIAN PERFORMANCE REPORTS	12.50	0.38	0.05	99.56
A	2	ASSIST CIVILIANS TO JOBS	6.25	0.65	0.04	99.60
F	5	DEVELOP IDEAS FOR NEW EQUIPMENT	6.25	0.65	0.04	99.65
E	11	COORDINATE PROPOSED OPERATIONAL SUPPORT PROJECTS	6.25	0.65	0.04	99.69
B	4	ASSIGN FACILITIES AND EQUIPMENT TO PROJECTS	6.25	0.60	0.04	99.72
H	49	INSPECT FACILITIES OR EQUIPMENT	6.25	0.60	0.04	99.76
H	14	PREPARE AND SUBMIT MANAGEMENT IMPROVEMENT REPORTS	6.25	0.60	0.04	99.80
C	3	CONDUCT ADMINISTRATIVE INVESTIGATIONS AND INQUIRIES	6.25	0.48	0.03	99.83
C	4	CONDUCT INSPECTIONS ON SPECIAL SUBJECTS FOR INVESTIGATION	6.25	0.48	0.03	99.86
D	17	FORMULATE POLICY FOR A CENTER OR THE EQUIVALENT	6.25	0.44	0.03	99.89
F	4	DEVELOP FORMATS AND CHARTS FOR MANAGEMENT DATA BOOK	6.25	0.44	0.03	99.91
H	30	CONDUCT NEGOTIATION MEETINGS WITH CONTRACTORS	6.25	0.41	0.03	99.94
H		PREPARE REQUESTS FOR R+D TO BE PERF BY SPECIAL FED AGENCIES	6.25	0.33	0.02	99.96
H	32	PRESENT SCIENTIFIC PAPERS TO PROFESSIONAL GROUPS	6.25	0.33	0.02	99.98
H	58	WRITE TECHNICAL ARTICLES	6.25	0.33	0.02	100.00

TASK-LEVEL JOB DESCRIPTION OF FOREIGN TECHNOLOGY STAFF OFFICER
(6 members; 55.54 percent time on tasks perfectly described)

DUTY	TASK	TASK TITLE	% OF MEMBERS PERFORMING	AVERAGE % TIME SPENT BY MEMBERS PERFORMING	AVERAGE % TIME SPENT BY ALL MEMBERS	CUMULATIVE AVERAGE % TIME SPENT BY ALL MEMBERS
A	2	SUPERVISE TECHNICAL STUDY OF CAPABILITY OF FOREIGN AEROSPACE SYSTEMS	100.00	2.86	2.86	2.86
E	26	REVIEW STAFF SUPPORT FOR TECHNOLOGY PROGRAMS AEROSPACE DIV ABSE STR	66.67	3.63	2.42	5.29
G	18	DIRECT ON AVAL PROG EVALUATION FOR ALL FOR. SYS AND TECHNOLOGY	83.33	2.58	2.15	7.43
G	47	EVALUATE UTILIZATION OF SYSTEMS IN TECHNOLOGY	66.67	3.03	2.02	9.45
H	5	DRAFT CORRESPONDENCE FOR SPECIAL SIGNATURE	100.00	1.96	1.96	11.41
G	46	INTERPRET CONCEPTS OR POLICIES	100.00	1.91	1.91	13.32
B	23	INTERPRET OR SUPPLEMENT ORDERS DIRECT OR COURSES OF ACTION	100.00	1.29	1.39	15.21
B	20	MAKE IMPORTANT MANAGERIAL DECISIONS WITHOUT CONSULT SUPERIOR	83.33	2.21	1.84	17.05
C	17	EVALUATE FOREIGN BALLISTIC AND ANTI-BALLISTIC MISSILE CAPABI	60.67	2.73	1.22	13.87
C	48	ASSIGN CIVILIAN OFFICERS	100.00	1.73	1.73	20.60
H	40	REPORT INTELLIGENCE INFORMATION TO APPROPRIATE AGENCIES	83.33	1.99	1.66	22.26
C	31	EVALUATE POTENTIAL EFFECTIVENESS OF ENEMY WEAPON SYSTEMS	50.00	3.24	1.62	23.88
A	7	COUNSEL SUBORDINATES ON PERFORMANCE	83.33	1.90	1.58	25.46
H	6	GIVE BRIEFINGS TO SUPERIOR OFFICERS	100.00	1.56	1.55	27.01
E	25	ISSUE WRITTEN OR ORAL DIRECT ORDERS LETTERS SCHED MANUALS	66.67	2.28	1.52	29.53
H	27	PREPARE ORAL AND WRITTEN BRIEFINGS	100.00	1.41	1.41	29.94
E	3	ASSIGN AND ADJUST PRIORITIES	100.00	1.40	1.40	31.35
A	4	ASSIGN WORK TO CIVILIANS	83.33	1.52	1.35	32.70
H	28	PREPARE PROGRAMS FOR THE GOD ANGER	100.00	1.28	1.23	33.97
A	12	PREPARE OFFICER EFFECTIVENESS REPORTS	83.33	1.51	1.26	35.23
E	42	COORDINATE DISSEMINATION USE OF SCIENTIFIC AND TECH DATA	100.00	1.23	1.23	35.46
H	50	REVIEW OUTGOING CORRESPONDENCE	65.67	1.84	1.23	37.69
E	5	CONDUCT STAFF MEETINGS	83.33	1.47	1.22	38.91
A	13	PREPARE DATA FOR USE AT BRIEFINGS	66.33	1.42	1.18	40.09
E	26	SUPERVISE PREPARATION OF PROGRESS OR ACTIVITY REPORTS	100.00	1.18	1.18	41.27
A	1	COORDINATE ADJ ACTIONS WITH PARALLEL ORGANIZATION	83.33	1.41	1.17	42.45
H	24	ISSUE ORDERS AND INSTRUCTIONS IN THE NAME OF THE COMMANDER	50.00	2.34	1.17	43.62
H	8	ESTIMATE OR IT MANPOWER REQUIREMENTS	100.00	1.16	1.16	44.77
E	51	REVIEW REPORTS OR STAFF STUDIES	65.67	1.69	1.13	45.90
A	2	ASSIGN CIVILIANS TO JOBS	83.33	1.35	1.13	47.02
A	3	ASSIGN OFFICERS TO JOBS	83.33	1.35	1.13	48.15
H	7	GIVE LECTURES TO MILITARY OR CIVILIAN GROUPS	50.00	2.22	1.11	49.26
E	10	DIRECT PLAN FOR COLLECT AND EVAL OF FOREIGN AIR INTELLIGENCE	65.57	1.64	1.09	50.32
H	35	READ TECHNICAL PERIODICALS, REPORTS, OR BOOKS	83.33	1.24	1.04	51.39
E	23	MAINTAIN LIAISON WITH LOCAL SCHELOS OF COMMAND	50.00	1.87	0.93	52.32
E	33	SUPERVISE WORK OF NON-PROFIT CORPORATION PERSONNEL	33.33	2.79	0.93	53.25
B	1	ANALYZE PERIODIC OR SPECIAL REPORTS	50.00	1.76	0.88	54.13
E	14	PROVIDE CONTRACTORS WITH TECHNICAL INFORMATION AND GUIDANCE	50.00	1.99	0.99	55.01
E	12	COORDINATE PROPOSED PROGRAMS	66.57	1.29	0.86	55.57
E	12	PERFORM INTELLIGENCE ADVISORY SERVICE	60.67	1.27	0.35	56.72
A	6	COUNSEL SUBORDINATES ON PROFESSIONAL DEVELOPMENT	83.33	1.02	0.85	57.57
H	11	PREPARE CIVILIAN PERFORMANCE REPORTS	53.33	1.50	0.74	58.40
C	25	EVALUATE PERFORMANCE OF CIVILIAN EMPLOYEES	43.33	1.60	0.74	59.24
H	31	SUPERVISE SECURITY PROGRAM	65.57	1.15	0.77	60.01
C	22	EVALUATE INDIVIDUALS FOR PROMOTION AND UPGRADING	69.67	1.14	0.76	60.53
C	7	PREPARE EDITORIAL STANDARDS FOR TECHNICAL NEW REQUIREMENTS	55.00	1.51	0.75	61.32
G	32	REVIEW UTILIZATION OF VISUAL AID MATERIALS	55.67	1.12	0.75	62.27

Task-Level Job Description of Foreign Technology Staff Officer (*Continued*)

DUTY	TASK	TASK TITLE	% MEMBERS PERFORMING	AVERAGE % TIME SPENT BY MEMBERS PERFORMING	AVERAGE % TIME SPENT BY ALL MEMBERS	CUMULATIVE AVERAGE % TIME SPENT BY ALL MEMBERS
E	47	RECOMMEND PLANS AND POLICIES	65.67	1.72	0.75	63.02
E	27	PARTICIPATE IN STAFF VISITS	50.00	1.48	0.74	53.76
E	16	SUPERVISE THE EFFORTS OF CONTRACTORS	33.33	2.19	0.73	64.49
E	6	COORDINATE MANNING OR PERSONNEL REQUIREMENTS	50.00	1.42	0.71	65.20
A	41	RELAY COMMANDER'S PLANS TO SUBORDINATE UNITS	33.33	2.05	0.68	65.89
A	19	SUPERVISE MAINTENANCE OF CENTRAL DOCUMENTATION FILES	33.33	2.01	0.67	65.55
C	3	ESTIMATE SCIENTIFIC AND TECH PERS REQUIRE FOR PROJECT COMMIT	50.00	1.28	0.64	67.19
C	24	EVALUATE NEED FOR SUPPORTING SERVICES AND RESOURCES	50.00	1.28	0.64	67.83
H	5	EST COPY FOR PUBLICATION	50.00	1.23	0.64	67.47
H	1	BRIEF HQ USAF AND COC AGENCIES	50.00	1.23	0.61	69.09
C	16	PREPARE CHARTS OR BRIEFING AIDS	66.67	0.91	0.61	69.69
C	44	EVALUATE UTILIZATION OF RESOURCES	33.33	1.80	0.60	70.30
H	19	PREPARE FTD TECHNOLOGY STD ON AERO & SYS SUBSYS COMPONENTS	33.33	1.80	0.60	70.90
H	47	REVIEW OR REVISE TECHNICAL ARTICLES OR MANUSCRIPTS	33.33	1.80	0.60	71.50
A	22	MAINTAIN LIAISON WITH HIGHER ECHELONS OF COMMAND	50.00	1.18	0.59	72.09
A	24	SUPERVISE PREPARATION OF ORGANIZATIONAL PLANS	66.67	0.85	0.57	72.65
G	29	ADVISE A STAFF ACTIVITY OR AGENCY	33.33	1.69	0.56	73.22
G	11	ORGANIZE REPRODUCTION AND DISTRIBUTION OF DATA OR REPORTS	33.33	1.69	0.56	73.78
H	45	REVIEW OR REVISE DIRECTIVES OR REGULATIONS	50.00	1.09	0.55	74.33
E	7	COORDINATE PLANNING A/O POL FORMUL WITH HIGHER ECHELONS	33.33	1.60	0.53	74.86
H	18	ORGANIZE WORK OF UNIT AND SCHEDULE WORK FLOW	16.67	3.18	0.53	75.39
C	28	EVALUATE OVERALL EFFECTIVENESS OF A PROGRAM OR PROJECT	33.33	1.57	0.52	75.91
E	25	RELAY LIAISON WITH PLAN OFF OF AF AND OTHER GOV OR CIV AGENC	33.33	1.55	0.52	76.43
A	5	ASSIGN WORK TO ACCS A/O AFMEA	33.33	1.50	0.50	76.93
C	34	EVALUATE PROGRESS TOWARD UNIT OBJECTIVES	33.33	1.50	0.50	77.43
E	9	COORDINATE PROG OR PROJ IMPLEMENTATION WITH HIGHER ECHELONS	33.33	1.46	0.49	77.92
H	12	FOR PLANS POL PROG FOR MANAGE OF SCIENTIFIC AND SPEC PERS	50.00	0.94	0.47	78.39
A	23	SUPERVISE PREPARATION OF FISCAL SUMMARY REPORTS	50.00	0.93	0.47	78.86
G	3	ESTABLISH AN EFFECTIVE SPAN OF CONTROL	50.00	0.93	0.47	79.32
A	8	COUNSEL SUBORDINATES ON PERSONAL AFFAIRS OR PERSONAL PROB	66.67	0.68	0.45	79.78
E	10	COORDINATE PROJECT DOCUMENTATION	33.33	1.35	0.45	80.23
H	22	PREPARE JUSTIFICATION OR OF REQUIREMENTS FOR FUNDS	33.33	1.35	0.45	80.68
H	2	BRIEF SUBORDINATE UNITS OR PERSONNEL	33.33	1.34	0.45	81.12
H	55	WRITE INFORMATION PAPERS FOR THE COMMANDERS USE	33.33	1.34	0.45	81.57
H	35	RECOMMEND REVISIONS OF DIRECTIVES	50.00	0.69	0.44	82.01
D	1	ESTIMATE FUNDING NEEDS	50.00	0.85	0.42	82.44
D	2	ESTIMATE REQUIREMENTS FOR FACILITIES AND EQUIPMENT	50.00	0.85	0.42	82.85
C	13	EVALUATE A/O RECOMMEND CHANGES IN DATA COLLECTION PLANS	33.33	1.19	0.40	83.25
C	22	EVALUATE IMPLEMENTATION OF SECURITY MEASURES	33.33	1.19	0.40	83.65
F	9	DEVELOP METHODS FOR OBTAINING INFORMATION OR DATA	33.33	1.19	0.40	84.05
E	24	MAINTAIN LIAISON WITH OTHER CTRY COPY ADS	50.00	0.79	0.39	84.44
G	4	ALLOCATE PERSONNEL AMONG UNITS	33.33	1.17	0.39	84.83
C	38	REVIEW COMPLAINTS ACTION REP SUBMIT BY SUBORDINATE CMDRS	16.67	2.31	0.39	85.22
H	35	DRAFT ORGANIZATIONAL CHARTS	50.00	0.75	0.37	85.59
B	35	PLAN FD PERSONNEL MANAGE FORCE OF HR WITHIN ORGAN	15.67	2.20	0.37	85.96
C	42	EVALUATE WORK STANDARDS	16.67	2.20	0.37	86.32
E	17	COORDINATE WORK STANDARDS OR PERFORMA OR CRITERIA	1.67	2.20	0.37	86.69
F	21	MAINTAIN LIAISON BETWEEN UNITS IN AN ORGANIZATION	17.67	2.20	0.37	87.06

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DUTY	TASK	TASK TITLE	% OF MEMBERS PERFORMING	AVERAGE % TIME SPENT BY MEMBERS PERFORMING	AVERAGE % TIME SPENT BY ALL MEMBERS	CUMULATIVE AVERAGE % TIME SPENT BY ALL MEMBERS
L	1	FORMULATE POLICY FOR AIR FORC- SYSTEMS COMMAND	33.33	1.04	0.35	87.40
E	1b	COORDINATE THE IMPLEMENTATION OF DIRECTIVES	33.33	1.04	0.35	87.75
H	33	PRESENT TECHNICAL INFORMATION TO HIGHER ECHELONS	33.33	1.04	0.35	88.10
B	17	DIRECT PREPARATION OF BUDGETS	35.33	1.03	0.34	88.44
G	2C	SCHEDULE USE OF FACILITIES	16.67	1.22	0.30	88.75
H	22	PREPARE PROJECT DOCUMENTATION	19.67	1.52	0.30	89.05
C	17	EVALUATE EFFECTIVENESS OF FOREIGN AID WEAPON SYSTEMS	16.67	1.79	0.30	89.35
C	32	EVALUATE PROGRAMS IN TERMS OF AVAILABLE FUNDS	16.67	1.79	0.30	89.64
C	36	EVALUATE REPORTS OF RESEARCH PROGRESS	16.67	1.79	0.30	89.94
C	57	REVIEW DEV AND SYS PAKAGE PROG PLANS PREPARED BY AFSC DIV	16.67	1.79	0.30	90.24
E	15	DISTRIBUTE INFO ON FOR DEV TO OTHER FOREIGN COUNTRIES	33.53	0.89	0.30	90.54
G	17	PRESCRIBE RELATIONSHIPS BETWEEN DIRECTORATES AND DIVISIONS	16.67	1.79	0.30	90.84
H	57	WRITE REPORTS OF STAFF STUDIES	16.67	1.79	0.30	91.13
G	5	ESTABLISH ACTIVITIES NEEDED TO ACCOMPLISH MISSION	33.33	0.88	0.29	91.43
H	35	PROVIDE CMDR WITH TECHNICAL ADVICE PLANS OR RECOMMENDATIONS	33.33	0.86	0.29	91.72
B	2	APPOINT COMMITTEES TO STUDY MGR PROBLEMS	16.67	1.73	0.29	92.01
3	4	ASSIGN FACILITIES AND EQUIPMENT TO PROJECTS	33.33	0.82	0.27	92.29
C	30	EVALUATE PLANS FOR IMPLEMENTATION OF ESTABLISHED POLICY	33.33	0.82	0.27	92.56
D	35	PLAN USE OF FACILITIES OR EQUIPMENT	33.33	0.82	0.27	92.83
D	9	FORMULATE OFFICE INSTRUCTIONS AND PROCEDURES	33.33	0.81	0.27	93.10
D	2-	PLAN LONG-RANGE OBJECTIVES AND SOPS FOR ATTAINING THEM	33.33	0.78	0.26	93.36
D	6	DIRECT PREPARATION OF WORK STATEMENTS	33.33	0.78	0.26	93.62
H	8	GIVE ORAL REPORTS TO MIL ORGAN OUTSIDE IMMED CHAIN OF CMD	33.33	0.74	0.25	93.87
B	32	MANAGE FACILITIES OR EQUIPMENT	16.67	1.36	0.23	94.10
E	2	COORDINATE BUDGET ESTIMATES	33.33	0.57	0.22	94.32
A	1	ASSIGN AIRMEN TO JOBS	16.67	1.19	0.20	94.52
B	20	IDENTIFY KEY POINT OF CONTROL THAT REQUIRE CLOSE SUPERVISION	16.67	1.19	0.20	94.72
B	3?	MONITOR R AND D PROGRAMS AND PROJECTS	16.67	1.19	0.20	94.92
B	35	PROVIDE GUID ON FUTURE AREAS PLAN EMPHASIS THROUGH THE CMD	16.67	1.19	0.20	95.11
C	11	EVALUATE ADEQUACY OF FACILITIES AND EQUIPMENT	16.67	1.19	0.20	95.31
C	59	REVIEW PROGRESS OF IN-HOUSE RESEARCH TASKS	16.67	1.19	0.20	95.51
C	23	PLAN AND ALLOCATE RESOURCES FOR EVALUATION OF NEW IDEAS	16.67	1.19	0.20	95.51
E	33	REPRESENT THE COMMANDER OUTSIDE THE ORGANIZATION	16.67	1.19	0.20	95.91
G	18	PRESCRIBE RELATION BETWEEN STAFF AND SUBORDINATE CMD	16.67	1.19	0.20	96.11
H	13	PREPARE AGENDA FOR MEETINGS	16.67	1.19	0.20	96.30
H	56	WRITE REGULATIONS, DIRECTIVES, OR SOPS	16.67	1.19	0.20	96.50
I	3	COORDINATE THE COMBINED EFFORTS OF CONT AND AF AGENCIES	16.67	1.19	0.20	96.70
H	23	PREPARE MANAGEMENT REPORTS	33.33	0.59	0.20	96.90
F	7	DEVELOP JOB PERFORMANCE STANDARDS	16.67	1.10	0.18	97.09
I	2	CONSOLIDATE THE EVALUATIONS OF UNSOLICITED PROPOSALS	16.67	1.10	0.19	97.26
I	9	EVALUATE CONTRACT PROPOSALS	16.67	1.10	0.13	97.45
I	15	PROVIDE GUIDANCE IN PREPARATION OF STUDIES FOR CONTRACTS	16.67	1.10	0.13	97.63
E	52	MAKE MANPOWER SURVEYS	33.33	0.52	0.17	97.80
C	20	FORMULATE PROCEDURES FOR INTERCHANGE OF SCIENTIFIC INFO	33.33	0.52	0.17	97.98
C	33	PLAN UNIT WORK FLOW TO MEET DEADLINES	33.33	0.52	0.17	98.15
E	17	COORDINATE THE IMPLEMENTATION OF METHODS AND PROCEDURES	33.33	0.52	0.17	98.32
C	4	FORMULATE AND DISSEMINATE CONTRACT PROGRAM AUTHORIZATIONS	16.67	0.89	0.15	98.48
H	11	PARTICIPATE IN SCIENTIFIC MEETINGS AND SYMPOSIUMS	16.67	0.89	0.15	98.63

Task-Level Job Description of Foreign Technology Staff Officer (*Continued*)

DUTY	TASK	TASK TITLE	% OF MEMBERS PERFORMING	AVERAGE % TIME SPENT BY MEMBERS PERFORMING	AVERAGE % TIME SPENT BY ALL MEMBERS	CUMULATIVE AVERAGE % TIME SPENT BY ALL MEMBERS
H	40	RECOMMEND SPECIAL PROJECTS OR PROGRAMS	16.67	0.89	0.15	96.78
C	20	EVALUATE IMPACT OF LEGISLATION UPON OBJECTIVES AND PROGRAMS	16.67	0.60	0.10	96.87
C	45	EVALUATE WEAPON SYSTEM CAPABILITIES	16.67	0.60	0.10	98.97
C	49	INSPECT FACILITIES OR EQUIPMENT	16.67	0.60	0.10	99.07
D	15	FORMULATE POLICY FOR A DIVISION OR THE EQUIVALENT	16.67	0.60	0.10	99.17
E	8	COORDINATE PLANNING OR CONDUCT OF TRAINING	16.67	0.60	0.10	99.27
H	24	PREPARE MATERIALS FOR MANUALS	9.67	0.60	0.10	99.37
H	34	PROVIDE EXCHANGE OF TECHNICAL INTELLIGENCE WITH OTHER NATION	6.67	0.60	0.10	99.47
A	10	PREPARE AIRMEN PERFORMANCE REPORTS	16.67	0.45	0.09	99.55
C	22	PERFORM STAFF STUDIES	16.67	0.45	0.08	99.62
E	31	PLAN PROCUREMENT OF MAJOR FACILITIES OR EQUIPMENT	16.67	0.45	0.08	99.70
E	4	COORDINATE FACILITY OR EQUIPMENT REQUIREMENTS	16.67	0.45	0.08	99.77
E	5	COORDINATE LOGISTICAL SUPPORT REQUIREMENTS	16.67	0.45	0.08	99.85
I	11	EVALUATE PERFORMANCE OF CONTRACTORS	16.67	0.45	0.08	99.92
I	12	EVALUATE PLANS WRITTEN BY CONTRACTORS	16.67	0.45	0.08	100.00

APPENDIX III

DISTRIBUTION OF EXPERIENCE AND WORKING TIME OF
R & D MANAGEMENT OFFICERS

Estimated Minimum Experience in Scientific or Engineering Assignments Required

NO. OF YEARS	COL		LT COL		MAJOR		CAPT		1st LT		2nd LT		TOTAL	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
0	10	8.2	25	9.0	31	15.2	47	30.3	10	40.0	11	78.6	134	16.8
1	3	2.5	27	9.7	34	16.7	42	27.1	9	36.0	2	14.3	117	14.7
2	15	12.3	38	13.7	55	27.0	36	23.2	4	16.0	1	7.1	149	18.7
3	2	9.8	43	15.5	34	16.7	14	9.0	1	4.0	0	0.0	104	13.0
4	11	9.0	39	14.0	27	13.2	4	2.6	1	4.0	0	0.0	82	10.3
5	35	28.7	52	18.7	9	4.4	9	5.8	0	0.0	0	0.0	105	13.2
6	5	4.1	11	4.0	6	2.9	0	0.0	0	0.0	0	0.0	22	2.8
7	1	0.8	3	1.1	2	1.0	0	0.0	0	0.0	0	0.0	6	0.8
More than 7	30	24.6	40	14.4	6	2.9	3	1.9	0	0.0	0	0.0	79	9.9
Total	122	100.0	278	100.1	204	100.0	155	99.9	25	100.0	14	100.0	798	100.2
Mean Months	55.56		45.60		29.28		18.60		11.52		3.48		35.88	
SD	17.88		16.68		10.32		7.68		0.05		0.00		16.80	

Table 18. **Distribution by Grade of Hours Per Week Spent in Duty AFSC**

NO. OF HOURS	COL		LT COL		MAJOR		CAPT		1st LT		2nd LT		TOTAL	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
No Report	2	1.6	7	2.5	5	2.5	2	1.3	0	0.0	1	7.1	17	2.1
0	1	0.8	3	1.1	1	0.5	2	1.3	0	0.0	1	7.1	8	1.0
1 – 7	0	0.0	2	0.7	2	1.0	1	0.6	0	0.0	0	0.0	5	0.6
8 – 15	0	0.0	4	1.4	1	0.5	2	1.3	0	0.0	0	0.0	7	0.9
16 – 23	2	1.6	7	2.5	5	2.5	4	2.6	0	0.0	0	0.0	18	2.3
24 – 31	8	6.6	10	3.6	13	6.4	8	5.2	5	20.0	0	0.0	44	5.5
32 – 39	8	6.6	38	13.7	38	18.6	27	17.4	12	48.0	4	28.6	127	15.9
40 – 47	39	32.0	122	43.9	82	40.2	69	44.5	2	8.0	6	42.9	320	40.1
48 – 55	40	32.8	70	25.2	44	21.6	29	18.7	6	24.0	2	14.3	191	23.9
56 – 63	19	15.6	11	4.0	7	3.4	5	3.2	0	0.0	0	0.0	42	5.3
64 – 71	1	0.8	3	1.1	5	2.5	5	3.2	0	0.0	0	0.0	14	1.8
72 – 79	1	0.8	0	0.0	1	0.5	1	0.6	0	0.0	0	0.0	3	0.4
80 and over	1	0.8	1	0.4	0	0.0	0	0.0	0	0.0	0	0.0		0.2
Total	122	100.0	278	100.1	204	100.2	155	99.9	25	100.0	14	100.0	798	100.0
Mean Hours	46.08		42.35		41.94		41.68		38.08		37.77		42.47	
SD	11.15		11.01		10.69		11.47		7.59		11.92		11.31	

Table 19. **Distribution by Grade of Hours Per Week Spent in Other Then Duty AFSC**

NO. OF HOURS	COL		LT COL		MAJOR		CAPT		1st LT		2nd LT		TOTAL	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
No Report	12	9.8	36	13.0	18	8.8	7	4.5	3	12.0	4	28.6	80	10.0
0	63	51.6	155	55.8	106	52.0	75	48.4	15	60.0	9	64.3	423	53.0
1 – 3	10	8.2	16	5.8	11	5.4	17	11.0	0	0.0	1	7.1	55	6.9
4 – 7	15	12.3	30	10.8	37	18.1	29	18.8	3	12.0	0	0.0	114	14.3
8 – 11	11	9.0	22	7.9	23	11.3	13	8.4	2	8.0	0	0.0	71	8.9
12 – 15	3	2.5	6	2.2	2	1.0	4	2.6	2	8.0	0	0.0	17	2.1
16 – 19	0	0.0	1	0.4	2	1.0	3	2.0	0	0.0	0	0.0	6	0.8
20 – 23	4	3.3	3	1.1	2	1.0	1	0.6	0	0.0	0	0.0	10	1.2
24 – 27	2	1.6	2	0.7	2	1.0	0	0.0	0	0.0	0	0.0	6	0.8
28 – 31	0	0.0	1	0.4	1	0.5	2	1.3	0	0.0	0	0.0	4	0.5
32 or more	2	1.6	6	2.2	0	0.0	4	2.6	0	0.0	0	0.0	12	1.5
Total	122	99.9	278	100.3	204	100.1	155	100.2	25	100.0	14	100.0	798	100.0
Mean Hours	4.29		3.55		3.20		4.31		2.95		0.20		3.64	
SD	8.36		7.51		5.13		7.81		4.86		0.60		7.08	

Table 20. Distribution by Grade of Hours Per Week Spent in Additional Duties and Details

NO. OF HOURS	COL		LT COL		MAJOR		CAPT		1st LT		2nd LT		TOTAL	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
No Report	5	4.1	11	4.0	5	2.5	5	3.2	1	4.0	3	21.4	30	3.8
0	31	25.4	66	23.7	40	19.6	26	16.8	2	8.0	2	14.3	167	20.9
1	6	4.9	24	8.6	20	9.8	10	6.5	3	12.0	2	14.3	65	8.1
2	10	8.2	30	10.8	23	11.3	17	11.0	5	20.0	1	7.1	86	10.8
3	3	2.5	11	4.0	8	3.9	14	9.0	1	4.0	1	7.1	38	4.8
4	5	4.1	30	10.8	28	13.7	22	14.2	4	16.0	2	14.3	91	11.4
5	13	10.7	42	15.1	24	11.8	22	14.2	1	4.0	2	14.3	104	13.0
6	6	4.9	7	2.5	10	4.9	11	7.1	1	4.0	0	0.0	35	4.4
7	1	0.8	2	0.7	0	0.0	0	0.0	0	0.0	0	0.0	3	0..
8	8	6.6	11	4.0	11	5.4	6	3.9	2	8.0	1	7.1	39	4.9
9	0	0.0	0	0.0	0	0.0	1	0.6	0	0.0	0	0.0	1	0.1
10	17	13.9	27	9.7	20	9.8	9	5.8	3	12.0	0	0.0	76	9.5
11	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
12	3	2.5	6	2.2	3	1.5	1	0.6	1	4.0	0	0.0	14	1.8
13	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
14	1	0.8	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.'
15	2	1.6	6	2.2	4	2.0	2	1.3	1	4.0	0	0.0	15	1.7
16	1	0.8	0	0.0	1	0.5	2	1.3	0	0.0	0	0.0	4	0.5
17 – 18	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0 0
19 – 20	8	6.6	2	0.7	5	2.5	5	3.2	0	0.0	0	0.0	20	2.5
Over 20	2	1.6	3	1.1	2	1.0	2	1.3	0	0.0	0	0.0	9	1.1
Total	122	100.0	278	100.1	204	100.2	155	100.0	25	100.0	14	99.9	798	100.0
Mean Hours	6.01		4.32		4.86		4.94		4.83		3.00		4.83	
SD	6.21		4.90		6.10		5.66		4.05		2.37		5.56	

Table 21. Distribution by Grade of Hours Per Week Spent
on Unnecessary Details or Administrative Tasks

NO. OF HOURS	COL		LT COL		MAJOR		CAPT		1st LT		2nd LT		TOTAL	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
No Report	3	2.5	10	3.6	8	3.9	3	1.9	0	0.0	1	7.1	25	3.1
0	28	23.0	74	26.6	51	25.0	48	31.0	4	16.0	1	7.1	206	25.8
1 – 3	17	13.9	57	20.5	30	14.7	32	20.5	7	28.0	7	50.0	150	18.8
4 – 7	31	25.4	63	22.7	59	28.9	31	20.2	9	36.0	2	14.3	195	24.4
8 – 11	28	22.9	54	19.4	43	21.1	26	16.9	3	12.0	2	14.3	156	19.5
12 – 15	8	6.6	7	2.5	2	1.0	6	3.9	2	8.0	1	7.1	26	3.3
16 – 19	0	0.0	1	0.4	1	0.5	1	0.6	0	0.0	0	0.0	3	0.4
20 – 23	5	4.1	7	2.5	5	2.5	6	3.9	0	0.0	0	0.0	23	2.9
24 – 31	1	0.8	4	1.4	4	2.0	1	0.6	0	0.0	0	0.0	10	1.3
32 – 39	0	0.0	1	0.4	0	0.0	0	0.0	0	0.0	0	0.0	1	0.1
40 or more	1	0.8	0	0.0	1	0.5	1	0.6	0	0.0	0	0.0	3	0.4
Total	122	100.0	278	100.0	204	100.1	155	100.1	25	100.0	14	99.9	798	100.0
Mean Hours	6.23		4.99		5.39		4.86		4.44		4.15		5.22	
SD	6.77		5.77		6.28		6.26		3.95		4.24		6.11	

ITEM NO.	DUTY	COL (128)	LT COL (289)	MAJOR (209)	CAPT (159)	1st LT (25)	2nd LT (14)	TOTAL (824)
6	Charity Drive Project Officer	23.4	37.0	44.0	50.3	48.0	21.4	39.2
9	Classified Materials Destruction Officer	3.1	22.5	40.6	40.9	40.0	28.6	28.2
5	Certifying Officer	31.2	32.5	20.1	10.1	12.0	7.1	23.7
8	Classified Documents Custodian	9.4	20.8	29.6	17.0	16.0	7.1	20.1
40	Security Officer	3.9	15.6	18.2	18.2	12.0	14.3	14.8
1	Accident Investigation Board Member	16.4	11.1	13.4	11.3	0.0	7.1	12.1
32	Promotion Board Member	32.8	8.6	6.7	1.3	4.0	0.0	10.2
21	Investigation Officer	8.6	12.5	12.4	5.7	4.0	0.0	10.0
23	Member of Courts Martial	13.3	8.3	11.5	6.3	4.0	0.0	9.2
16	Historical Officer	2.3	8.6	12.0	10.1	8.0	0.0	8.6
36	Records Management Officer	1.6	10.4	12.0	7.5	4.0	0.0	8.5
17	Incentive Awards Committee Member	18.0	9.0	3.3	3.1	0.0	0.0	7.4
45	Top Secret Control Officer	6.2	8.0	8.6	5.0	4.0	0.0	7.0
11	Disaster Control Officer	4.7	6.9	8.6	6.3	12.0	0.0	6.9
19	Instructor Pilot (Flight Examiner)	4.7	5.5	8.1	10.7	0.0	0.0	6.8
33	Property Custodian	0.8	4.8	7.6	8.2	16.0	14.3	6.0
38	Savings Bond Project Officer	0.8	4.8	7.6	5.0	4.0	7.1	5.0
26	Officers Club Bd of Gov Member	12.5	4.7	3.8	1.9	0.0	0.0	4.8
7	Classification Board Member	3.9	5.5	5.3	0.6	4.0	0.0	4.1
27	OJT Officer	1.6	4.8	6.2	3.1	0.0	0.0	4.1
44	Test Control Officer	2.3	4.2	4.3	5.7	0.0	0.0	4.0
20	Inventory Officer	0.8	1.0	6.2	6.3	16.0	0.0	3.8
42	Standardization Board Member	3.9	3.8	2.4	4.4	0.0	0.0	3.4
37	Report of Survey Officer	1.6	1.4	5.3	4.4	4.0	0.0	3.0
34	Publications and Distribution Officer	0.8	1.7	3.8	3.1	4.0	0.0	2.4
13	Flying Training Officer	2.3	0.0	5.3	3.1	0.0	0.0	2.3
35	Public Information Officer	3.1	2.1	1.9	1.3	12.0	0.0	2.3
15	Ground Safety Officer	0.8	1.0	3.3	3.8	0.0	0.0	2.1
46	Unit Fire Warden (Marshall)	0.0	0.7	3.8	3.1	4.0	0.0	1.9
2	Athletic or Recreation Officer	0.8	1.7	1.4	2.5	4.0	7.1	1.8
10	Conservation Officer	1.6	2.4	1.9	0.0	0.0	7.1	1.7
43	Supply Officer	0.0	0.7	2.9	2.5	8.0	0.0	1.7
48	Unit Retention Officer	0.8	1.7	2.4	1.3	0.0	0.0	1.6
12	Discharge Board Member	0.8	0.7	2.9	1.9	0.0	0.0	1.5
30	Physical Training Officer	1.6	1.4	1.0	1.9	0.0	7.1	1.5
49	Voting Officer	0.0	1.7	1.9	1.3	4.0	0.0	1.5
29	Personal Affairs Officer	0.8	0.3	1.9	0.6	0.0	0.0	0.8
41	Sm Arms Mksman Tng Officer	0.8	1.0	1.0	0.0	4.0	0.0	0.8
4	CBR Team Commander	0.8	0.7	0.5	1.3	0.0	0.0	0.7
25	Mortuary (Casualty) Officer	0.0	0.7	1.4	0.0	0.0	0.0	0.6
47	Unit Fund Custodian	0.0	0.3	1.0	0.0	8.0	0.0	0.6
3	Billeting Officer	0.0	0.7	0.5	0.0	4.0	7.1	0.5
24	Mobility Officer	0.8	1.0	0.0	0.0	0.0	0.0	0.5
18	Inspector, Emerg Med Treat Unit	0.0	0.0	0.5	1.3	0.0	0.0	0.4
22	Library Officer	0.0	0.3	0.0	0.6	0.0	0.0	0.2
28	Pay Officer (Class "A" Agent)	0.0	0.0	0.0	1.3	0.0	0.0	0.2
14	Food Services Officer	0.0	0.0	0.5	0.0	0.0	0.0	0.1
31	Postal Officer	0.0	0.0	0.5	0.0	0.0	0.0	0.1
39	Sec Treas Officers Open Mess	0.0	0.0	0.5	0.0	0.0	0.0	0.1

REFERENCES

Christal, R. E. USAF Occupational research projects of tri-service interest. In *Proceedings: Tri-service conference on new approaches to personnel systems research.* Washington: Office of Naval Research, ONR Symposium Report ACR-76, 1962. Pp. 62-75.

Hemphill, J. K. *Dimensions of executive positions: A study of the basic character stics of the positions of 93 business executives.* Columbus, Ohio: Bureau of Business Research, College of Commerce and Administration, The Ohio State University, 1960.

Ward, J. H. Jr. *Hierarchical grouping to maximize payoff.* WADD-TN-61-29, AD-261 750. Lackland AFB, Tex.: Personnel Laboratory, Wright Air Development Division, March 1961.

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13. ABSTRACT

Using data collection procedures developed for airman career fields, the 6 specialties in the R & D Management Utilization Field were surveyed. A job inventory composed of 373 task statements and a Background Information Sheet was developed and mailed to all Air Force R & D Management officers. Analysis of 825 completed inventories by an iterative grouping technique allocated 675 of the officers' jobs to 27 job types, each including at least 5 jobs. The dominant job type (R & D Manager) included nearly half of the R & D Management officers. Most of the job types cut across grade levels and organization levels. Reported minimum academic requirements were a bachelor's degree with major in science or engineering. Some officers considered graduate training in management or administration desirable and some suggested additional experience in operational commands. The incumbent officers averaged more experience and education than they judged to be minimal. An appendix gives the computer printouts of job descriptions for two of the identified job types: R & D Project Staff Officer, Foreign Technology Staff Officer.

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14. KEY WORDS	LINK A		LINK B		LINK C	
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R & D Management officers						
officer specialties						
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