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Job Task-Competency Linkages for FAA First-Level Supervisors

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Final Report

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16. Abstract

A study was conducted to determine the linkages between the job tasks and competencies of first level supervisors in the FAA. A sample was drawn from each of nine job groups: Flight Service, Terminal, En Route, Regional Office/Headquarters Air Traffic, Aircraft Certification, Security, Airway Facilities, Flight Standards, and Other) for a total sample of 2,412 first-level supervisors. Mail surveys were distributed in April, 1990. Respondents were asked to (1) rate the relative importance of each of 50 tasks, (2) rate the relative time spent on each task, (3) identify up to three competencies needed to successfully perform each task, and (4) provide organizational location and demographic information. A total of 1020 surveys were returned for a response rate of 42%. After eliminating unuseable and unreliable respondents, the total sample for analysis was 853. Comparison of population and respondent demographics indicated that the results were representative and thus generalizable to the agency population of first-level supervisors. Statistically significant differences were found between job groups on the Time Spent, Importance, and Competencies variables using multivariate and univariate analysis of variance. Considering statistical and practical significance of the results, it was concluded that the task make-up of the job varies among the job groups but that the competencies required for the different jobs are quite similar. Applications of the results to selection, performance assessment, and training/development were discussed and recommendations for program changes were provided.

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JOB TASK-COMPETENCY LINKAGES FOR FAA FIRST-LEVEL SUPERVISORS

INTRODUCTION

Identifying competencies associated with the performance of job tasks is critical to the development of integrated systems for selection, development/training, and performance evaluation (Bemis, Belenky, & Soder, 1983). In addition, the establishment of a linkage between competencies (or knowledge, skills, and abilities) and job tasks is necessary to meet minimum court standards for job task analyses used as the basis for selection systems (Thompson & Thompson, 1982).

In an effort to partially satisfy these requirements, we conducted a research study to establish the linkage between previously identified job functions and competencies for first level supervisors within the FAA. Three primary objectives were specified for the study to: 1) identify critical tasks comprising the first-level supervisor position; 2) determine the extent to which first-level supervisors in the different FAA organizations performed similar job tasks; and 3) determine the relative importance, or linkage, of each competency to successful task performance as a supervisor. Results were used to make recommendations for first-level supervisor selection, development/training, and performance evaluation systems in the FAA.

METHOD

Sample

A combination of variables contained in the Consolidated Personnel Management Information System was used to identify populations of first-level supervisors in each of nine job groups: Flight Service, Terminal, and En Route options in Air Traffic; Air Traffic in Regional Offices and Headquarters, Aircraft Certification, Security, Airway Facilities, Flight Standards, and Other. The "other" category contained a mix of first-level supervisors in such job positions as systems analyst, administrative officer, and contract specialist. The sample size for each job group was determined by limiting the bound on the error of estimation to 5% (Schaeffer, Mendenhall, & Ott, 1979). Each job group sample size was doubled (or, in some job groups, included the entire population of first-level supervisors) to compensate for nonrespondents. The total sample consisted of 2,412 first-level supervisors.

Instruments

Task Statements. Task statements used in this study were obtained from a supervisory functional analysis conducted in 1985. According to the report (Steinberg & Apple, 1986), a preliminary list of functions was derived from position descriptions, generic job elements and principal duties and responsibilities for agency first-level supervisors. In addition, the Office of Personnel Management's "Management Excellence Framework" was reviewed for relevant material. This list was reviewed by two groups of subject-matter experts. Comments were used to finalize 49 functions. Prior to the current study, one function was split apart because of the combination of activities in the functional statement, resulting in a total of 50 tasks.

Competencies. A study to identify competencies required for successful job performance as a first-level supervisor was conducted in 1986 by a contractor (Human Technology, Inc., 1987). Critical incident interviews were conducted with 118 supervisors representing eight different job groups. Analysis of the interviewee responses resulted in the development of competencies, assignment of action phrases to the competencies, and creation of behavioral clusters of the action phrases for each competency. Subsequent to the analysis of interviewer results, the competencies and their definitions were refined and expanded by subject matter experts. Fourteen competencies were used in the current study.

Linkage Study Questionnaire. A questionnaire was constructed consisting of two general sections: 1) biographical/organizational questions and 2) job task/competency questions. The former section contained questions on organizational location and personal items such as age and gender. The latter section asked respondents to describe their jobs by rating: 1) the relative amount of time spent for each of the 50 tasks, 2) the relative importance of each task, and 3) the three most important competencies (knowledge, skills, or abilities) in the successful performance of each task. Respondents were to consider each task, compared to all other tasks, that are a part of their job in providing their task ratings of time spent and importance. The answer categories used to rate relative time spent were: much less time spent, less, about the same, more, and much more time spent. The answer categories for rating

TABLE 1: Linkage Project Sample

Job Group	Total Respondents	Overall Response Rate	Ineligible Respondents	Unreliable Raters	Total N for Analyses	Usable Response Rate
FSS	64	52%	6	2	56	46%
Terminal	144	42%	12	7	125	37%
En Route	112	48%	13	15	94	40%
Aircraft Certification	47	53%	1	0	46	53%
Security	20	38%	1	1	18	34%
Airway Facilities	215	36%	23	13	179	30%
Flight Standards	132	45%	13	7	112	38%
Other ATC	40	34%	10	2	28	24%
Other	179	32%	28	7	144	26%
Subtotal	**953**	**40%**	**107**	**44**	**802**	**33%**
Missing	67	-	11	5	51	-
TOTAL	**1020**	**42%**	**118**	**49**	**853**	**35%**

relative importance were: much less important, less important, about the same, more important, and much more important.

Procedure

Each supervisor selected to participate in the study received a packet containing: 1) a cover letter from the Associate Administrator of Human Resource Management explaining the importance of the study, 2) questionnaire instructions, 3) a task list, 4) a list of the competencies and their definitions, and 5) an answer sheet (see Appendix A). The materials were sent to each individual at their work location in April 1990. Returns were accepted through the end of July.

RESULTS

Sample Composition

Of the 2,412 supervisors who were mailed questionnaires, 1,020 returned their questionnaires, for an overall response rate of 42%. Initial analyses indicated that 118 of the respondents failed to complete Importance and/or Time Spent ratings for the 50 tasks, either because they were not first-level supervisors (as determined by responses to the biographical questions) or they were disinterested. These 118 "ineligible" respondents (11.6% of the original sample) were dropped from inclusion in further analyses, resulting in 902 cases. The breakdown of the sample, before and after dropping cases due to missing data, is presented in Table 1. It should be noted that of the 902 respondents who completed task ratings, 67 of them failed to provide sufficient background information to allow classification into one of the nine job groups.

Rater Reliability

Analyses were performed to assess the reliability with which individuals completed their ratings. Reliability was defined as the consistency with which each individual provided ratings that were similar to the ratings obtained from other respondents. Initially, centroids based on the 902 respondents were computed for both Time Spent and Importance ratings. The average correlation between respondents' Time Spent ratings and the total sample centroid was .49 (sd = .169), with the correlations ranging from a low of -.21 to a high of .80. For the Importance ratings, the average correlation was .43 (sd=.169), ranging from a low of -.19 to a high of .80. As can be seen, the extent to which the group centroid represented each respondent varied greatly. The correlation between the Time Spent and Importance centroids was also computed ($r = .83$). As would be expected when means are correlated, the correlation between centroids was much higher than the correlations between ratings and the centroid.

While it would have been possible to use the initial reliability estimate to eliminate "unreliable" raters, an alternative strategy was employed to allow for the possibility of group differences accounting for the lack of reliability among raters. Correlations between individuals' ratings and group centroids were computed in each job group. It was determined that while some of the "unreliability" was due to group differences, data from unreliable raters (or raters who were improperly grouped) were still present in the reduced data set.

TABLE 2: Population, Sample, and Respondent Composition by Job Group

Job Group	Population %	Population N	Sample %	Sample N	Usable Respondents %	Usable Respondents N
FSS	6	315	5	122	7	56
Terminal	20	1116	14	342	16	125
En Route	13	729	10	234	12	94
Aircraft Certification	1	72	4	86	6	46
Security	1	63	2	53	2	18
Airway Facilities	24	1299	25	601	22	179
Flight Standards	6	332	12	296	14	112
Other ATC	13	694	5	119	3	28
Other	17	914	23	559	18	144
Total	**100**	**5534**	**100**	**2412**	**100**	**802**

At this point a decision was made to exclude data from the least reliable raters in the analysis of the results. Several issues entered into the determination of the method for eliminating unreliable raters and are listed below:

1. A single definition of reliability must be applied to all raters regardless of group membership.

2. Because Time Spent ratings are most easily aligned with a description of job content, respondents should be able to provide these ratings with less difficulty than ratings of Importance. Thus, the reliability definition should be based on Time Spent ratings.

3. Given the possibility of true job group differences, to use the total sample ratings-centroid correlation as the criterion could eliminate many "reliable" raters whose groups' job differed from the majority of respondents. Thus, the most meaningful measure of reliability would be the within-group ratings-centroid correlation.

4. Regardless of the differences that might exist across groups, if a respondent reliably rated his or her job, and if the respondent's job was accurately classified in the appropriate job group, the respondent's within-group rating-centroid correlation should be no more than one and one-half standard deviations below the average total sample rating-centroid correlation.

Given these factors, it was decided that reliable raters would be defined as raters whose within-group Time Spent rating-centroid correlation was less than one and one-half standard deviations below the mean Total Group Time Spent rating-centroid correlation. Operationally, a reliable rater was defined as a respondent whose within-group Time Spent rating-centroid correlation was greater than .234 (e.g., .487 - [1.5 X .169]). Applying this rule, the sample size was reduced from 902 to 853 respondents (see Table 1).

Response Rate and Sample Characteristics

As mentioned previously, the overall response rate was 42%. However, once missing and/or unreliable data were eliminated, the "usable response rate" dropped to 35%. A comparison of both response rates, by group, is provided in Table 1.

Given the reduction in usable responses for analyses, sample representativeness was a more important issue. The final sample of 853 respondents represents only 15% of the population of supervisors in the nine groups of interest. A comparison of job group representation between the population, the original sample, and the "usable" sample is provided in Table 2. The proportion of respondents in each job group is very similar to that of the population.

In Table 3, the respondent sample and population of first level supervisors are compared on selected demographics. While members of the sample are somewhat older than the population as a whole, the sample generally is similar to the population in demographic makeup. Based on this comparison, and allowing for differences that may be attributable to missing group information from 51 respondents, we concluded that the usable sample was representative of the population. Thus, the study results could be generalized to the population of supervisors in the nine job groups.

Other demographic characteristics of the sample are contained in Table 4. Responses to the organizational level and grade variables were consistent with the organizational structure of the different job groups. The majority of the respondents supervised between 3 and 10 employees and had been an FAA supervisor for 5 or fewer years.

Time Spent Ratings

Table 5 contains the 10 tasks that received the highest relative Time Spent ratings overall. Mean scores for each top task are also presented for each job group. As demonstrated in the task statements, supervisors spend much of their time engaged in activities that ensure their employees "get the job done." The top 10 tasks overall included most of the highest rated tasks for each job group. The top 10 tasks and their ratings for each job group are contained in Appendix B.

A multivariate analysis of variance (MANOVA) was used to examine group differences on Time Spent ratings among the job groups. The MANOVA identified statistically significant differences between the groups (Pillai's Trace Criteria, $F[400,6008]=3.93$, $p<.0001$). Univariate analyses of variance (ANOVA) identified statistically significant differences for 34 of the 50 tasks. Given the large number of degrees of freedom for each of the statistical analyses performed, it was expected that statistically significant differences would be found. However, these differences do not necessarily reflect real differences that would impact practical application of the job analysis data. Differences between job groups were examined for practical significance, operationally defined as mean differences of 1.0 or greater across job groups.

Table 6 presents the 12 tasks for which practically significant differences were found. In general, air traffic supervisors spend less time on administrative-type tasks (e.g., reports, budget) than do the other job groups. On the other hand, air traffic supervisors spend more time than do the other job groups on pre-duty and relief briefings and dealing with labor contracts. This finding is not surprising, given the specificity of the former tasks to the air traffic job and the existence and bargaining unit employees in each facility. It is interesting to note that practical differences were not found among the job groups for eight of the highest rated tasks. However, the number of differences suggest that the task make-up of the supervisory position is different for the job groups. The differences were especially apparent for air traffic in comparison to the other job groups.

Importance Ratings

Table 7 contains the 10 tasks which received the highest ratings on the Importance variable across the 9 job groups. There is considerable overlap with the tasks which received the highest ratings on the Time Spent variable. The primary difference lies in the inclusion of tasks related to counseling, correcting, and rewarding employee performance. The top 10 tasks overall included most of the highest rated tasks for each job group. Appendix C contains the 10 highest rated tasks and their rankings for each job group.

Job group differences were examined using multivariate and univariate analyses of variance. The MANOVA demonstrated that statistically significant differences exist among the groups (Pillai's Trace Criteria, $F[400,6008]=3.59$, $p<.0001$). ANOVAs were calculated for each task and identified significant differences for 27 of the 50 tasks. As with the Time Spent ratings, these differences were examined for practical significance, resulting in the identification of ten tasks (see Table 8). None of these tasks were included among the 10 tasks that received the highest Importance ratings. Thus, although differences among the job groups exist, they are not among the critical elements of the supervisory job. Similar to the differences found for the Time Spent ratings, the differences in the Importance ratings primarily distinguished air traffic from the other job groups. Air traffic supervisors gave higher Importance ratings to tasks involving pre-duty and relief briefings, labor contracts, and the reporting of incidents and accidents than did the other job groups.

TABLE 3: Population And Respondent Comparisons On Selected Demographics

NOTE: All Numbers Are Percentages (%) - Underlined Entries Differ 5% Or More From The Population Composition

DEMOGRAPHIC VARIABLE	FSS N=56	TERM N=125	ENR N=94	AIRC N=46	SEC N=18	AIRW N=179	FLTS N=112	OATC N=28	OTHER N=144	TOTAL N=853
AGE										
2. Population: 25-35 years	5	20	11	4	13	4	2	4	6	8
2. Respondent: 25-35 years	4	20	12	0	6	7	2	0	6	8
3. Population: 36-45 years	44	44	40	24	35	26	29	35	35	35
3. Respondent: 36-45 years	41	42	38	20	39	22	21	39	30	30
4. Population: 46-55 years	39	32	43	46	27	54	38	55	45	45
4. Respondent: 46-55 years	45	34	45	37	22	53	29	54	46	42
5. Population: 56 years or older	12	4	7	26	25	16	32	6	15	12
5. Respondent: 56 years or older	11	4	5	44	33	19	48	7	18	19
RACE										
1. Population: Amer.Ind./AK Nat.	0	0	0	0	2	2	2	0	2	1
1. Respondent: Amer.Ind./AK Nat.	0	1	0	2	0	1	2	0	2	1
2. Population: Asian/Pacif. Is.	1	1	1	3	3	2	1	1	1	1
2. Respondent: Asian/Pacif. Is.	0	2	2	0	0	5	0	4	2	2
3. Population: Black, not Hispanic	10	4	4	3	18	6	5	5	11	6
3. Population: Black, not Hispanic	7	4	3	5	6	6	4	7	12	6
4. Population: Hispanic	4	2	4	0	3	4	2	3	3	3
4. Respondent: Hispanic	7	8	3	0	6	3	1	0	3	3
5. Population: White	85	93	92	93	75	86	91	90	83	88
5. Respondent: White	85	92	91	93	89	85	94	89	81	88
SEX										
1. Population: Male	89	95	96	96	72	98	96	96	76	91
1. Respondent: Male	89	94	95	99	84	99	96	94	75	92
2. Population: Female	11	5	4	4	28	2	5	4	24	9
2. Respondent: Female	11	6	6	1	16	2	4	6	25	8

TABLE 4: Demographic Breakdown Of Sample By Job Group

The entries indicate the percentage of respondents classified *within* a *Job Group* who were associated with a specific demographic category. The numbers do not always sum to 100% (summing down for a single demographic variable) because some category options were listed very infrequently and were excluded from the table. In some cases the sum is greater than 100% due to rounding.

DEMOGRAPHIC VARIABLE	FSS N=56	TERM N=125	ENR N=94	AIRC N=46	SEC N=18	AIRW N=179	FLTS N=112	OATC N=28	OTHER N=144	TOTAL N=853
ORGANIZATIONAL LEVEL										
Division	0	0	0	0	0	1	0	0	9	2
Branch	0	0	0	36	33	6	8	39	24	11
Section	0	0	0	31	17	9	7	43	34	13
Unit	0	0	3	13	33	38	64	14	15	22
Facility	23	16	3	13	0	15	5	4	3	10
Area	29	29	26	2	0	1	1	0	0	9
Team	30	47	51	0	0	4	7	0	0	17
Crew	7	6	7	0	0	11	1	0	2	5
Staff	11	3	10	0	11	9	0	0	10	7
REGION										
Aeronautical Center	0	0	0	0	0	3	9	21	13	6
Central	6	12	2	35	0	8	6	14	8	9
Eastern	13	12	9	0	6	10	12	4	10	9
Great Lakes	11	19	13	0	6	12	11	4	7	11
National Headquarters	0	0	0	5	6	5	4	25	18	7
New England	2	4	5	19	6	8	4	4	4	5
Northwest Mountain	15	9	15	30	17	15	7	7	9	12
Southern	16	15	26	0	28	17	13	11	10	15
Southwest	27	14	20	7	6	12	14	4	5	12
Technical Center	0	0	0	0	0	1	0	4	4	2
Western Pacific	6	16	11	0	17	7	17	4	9	10
GRADE										
0 - 9	-	-	-	-	-	-	-	-	10	2
10	-	-	-	-	-	-	-	-	2	1
11	23	7	-	-	-	1	-	-	5	4
12	23	24	-	-	-	14	-	-	9	10
13	54	29	-	-	56	63	3	7	20	27
14	-	19	6	69	28	16	65	7	40	29
15	-	21	94	29	17	6	33	86	15	28

TABLE 4 (cont.)
The entries indicate the percentage of respondents classified within a Job Group who were associated with a specific demographic category. The numbers do not always sum to 100% (summing down for a single demographic variable) because some category options were listed very infrequently and were excluded from the table. In some cases the sum is greater than 100% due to rounding.

DEMOGRAPHIC VARIABLE	FSS N=56	TERM N=125	ENR N=94	AIRC N=46	SEC. N=18	AIRW N=179	FLTS N=112	OATC N=28	OTHER N=144	TOTAL N=853
NUMBER FAA EMPLOYEES SUPERVISED										
Less than 3	4	0	2	4	0	6	3	0	4	3
3 to 5	19	18	5	54	67	35	26	29	29	27
6 to 10	60	70	61	39	28	44	56	50	50	53
11 to 15	13	10	20	2	6	12	11	18	13	12
More than 15	4	3	12	0	0	3	5	4	5	5
YEARS AS SUPERVISOR										
Less than 2 years	20	29	21	28	39	24	34	7	7	26
2 - 5 years	54	32	35	26	56	30	39	18	18	35
6 - 10 years	9	11	22	26	0	14	17	32	32	16
11 - 15 years	13	18	13	7	0	15	5	25	25	13
16 - 20 years	5	7	9	7	6	11	4	14	14	8
More than 20 years	0	2	0	7	0	7	1	4	4	3

TABLE 5: Critical Tasks Based On Time Spent Ratings

Bolded numbers represent the tasks having the highest Time Spent ratings for each group, underlined numbers represent relatively high means, and numbers with broken lines represent relatively low means when comparing Job Groups. Means could range from 0-5.

	TASK	FSS N=56	TERM N=125	ENR N=94	AIRC N=46	SEC N=18	AIRW N=179	FLTS N=112	OATC N=28	OTHER N=144	TOTAL N=853	Rank
1.	Fostering harmony, high morale, and a cooperative atmosphere that is conducive to efficient operations.	**3.52**	**3.73**	**3.74**	**3.28**	**3.22**	**3.35**	**3.48**	**3.61**	**3.57**	**3.52**	**1**
18.	Assigning work considering requirements, staff qualifications, workload demands and available resources.	**3.64**	**3.50**	**3.66**	**3.37**	**3.50**	**3.21**	**3.54**	**3.64**	**3.47**	**3.44**	**2**
47.	Influencing and motivating personnel in performing tasks and meeting performance standards, goals, and work objectives.	**3.46**	**3.42**	**3.36**	**3.17**	**3.44**	2.44	**3.42**	**3.57**	**3.43**	**3.40**	**3**
20.	Monitoring work flow and making timely adjustments to improve the utilization of human and material resources.	**3.57**	**3.58**	**3.79**	**3.24**	**3.50**	**3.12**	**3.41**	**3.39**	**3.26**	**3.37**	**4**
46.	Maintaining professional currency and keeping well-informed about new developments in technology and management.	**3.46**	**3.24**	**3.20**	**3.11**	2.94	**2.92**	**3.05**	**3.04**	**3.01**	**3.07**	**5**
11.	Working with employees in identifying needs and making recommendations for improvement in operations, the organization and the work environment.	**2.91**	**3.02**	**3.01**	2.52	2.83	**2.97**	**3.15**	**3.43**	**3.04**	**2.99**	**6**

Table 5 (cont.)
Bolded numbers represent the tasks having the highest Time Spent ratings for each group, underlined numbers represent relatively high means, and numbers with broken lines represent relatively low means when comparing Job Groups. Means could range from 0-5.

	TASK	FSS N=56	TERM N=125	ENR N=94	AIRC N=46	SEC N=18	AIRW N=179	FLTS N=112	OATC N=28	OTHER N=144	TOTAL N=853	Rank
2.	Ensuring that work unit staff demonstrates a working knowledge of policies, procedures, rules, and regulations.	2.82	**3.14**	**3.03**	**3.11**	**3.61**	2.62	3.20	2.96	**2.99**	**2.95**	7
16.	Holding employees accountable for performance and professional standards as set forth in the Performance Appraisal document and relevant FAA Guidelines.	**3.11**	**3.24**	**3.23**	2.72	2.78	**2.78**	2.86	**3.00**	2.88	**2.93**	8
3*.	Initiating, reviewing, commenting on, and forwarding reports to management.	2.14	2.11	2.45	**3.00**	3.61	3.34	**3.07**	3.86	**3.01**	**2.86**	9
48*.	Conducting and attending meetings with employees and other interfacing work units, task forces, and work groups.	2.29	2.20	2.49	**2.98**	**3.06**	3.20	2.84	3.32	**3.10**	**2.84**	10

*The mean rating differences between job groups for these tasks were interpreted to be practically significant.

TABLE 6: Practically Significant Differences Between Job Groups on Time Spent Rating

Bolded numbers represent the tasks having the highest Time Spent ratings for each group, underlined numbers represent relatively high means, and numbers with broken lines represent relatively low means when comparing Job Groups. Means could range from 0-5.

	TASK	FSS N=56	TERM N=125	ENR N=94	AIRC N=46	SEC N=18	AIRW N=179	FLTS N=112	OATC N=28	OTHER N=144	TOTAL N=853
3.	Initiating, reviewing, commenting on, and forwarding reports to management.	2.14	2.11	**2.45**	**3.00**	**3.61**	**3.34**	**3.07**	**3.86**	**3.01**	**2.86**
48.	Conducting and attending meetings with employees and other interfacing work units, task forces, and work groups.	2.29	2.20	2.49	**2.98**	**3.06**	**3.20**	2.84	**3.32**	**3.10**	**2.84**
34.	Coordinating and integrating work unit activities with other interfacing work units.	2.38	2.11	2.63	**3.04**	2.78	**3.07**	**2.98**	**3.25**	**3.09**	2.81
22.	Conducting and receiving operational and staff briefings.	1.96	1.98	2.24	2.37	**3.00**	2.51	2.48	2.96	2.39	2.35
24.	Incorporating and applying FAA initiatives in accordance with local and national guidelines.	2.38	2.15	2.18	2.37	**3.00**	1.97	2.81	2.82	2.13	2.23
35.	Representing and promoting staff activities to management and outside persons and groups.	1.66	1.63	1.24	2.17	2.67	2.04	2.26	2.54	2.40	2.01
36.	Preparing, justifying, and/or administering the work unit budget and staffing needs, and submitting them to management.	0.95	0.83	1.13	2.33	2.11	2.27	**2.51**	**2.43**	**2.43**	1.90
41.	Selecting personnel to fill vacancies using official guidelines.	0.95	1.01	1.17	1.87	1.67	1.72	2.14	1.93	2.23	1.65

Table 6 (cont.)
Bolded numbers represent the tasks having the highest Time Spent ratings for each group, underlined numbers represent relatively high means, and numbers with broken lines represent relatively low means when comparing Job Groups. Means could range from 0-5.

	TASK	FSS N=56	TERM N=125	ENR N=94	AIRC N=46	SEC N=18	AIRW N=179	FLTS N=112	OATC N=28	OTHER N=144	TOTAL N=853
23.	Performing pre-duty familiarization routines to meet operational requirements.	2.25	2.15	2.10	0.98	0.94	1.31	1.53	0.96	1.13	1.52
9.	Supporting FAA interpretation and application of labor contract(s).	1.86	2.30	2.30	0.54	0.33	1.57	0.58	1.18	1.16	1.45
37.	Preparing and monitoring employee travel schedules and expenditures.	0.50	0.51	0.43	2.13	2.56	1.61	2.13	2.07	1.62	1.35
25.	Ensuring that specialists conduct position relief briefings.	2.54	2.43	2.69	0.46	0.39	0.75	0.52	0.57	0.66	1.24

TABLE 7: Critical Tasks Based On Importance Ratings

Bolded numbers represent the tasks having the highest Importance ratings for each group. Means could range from 0.5.

	TASK	FSS N=56	TERM N=125	ENR N=94	AIRC N=46	SEC N=18	AIRW N=179	FLTS N=112	OATC N=28	OTHER N=144	TOTAL 853	Rank
1.	Fostering harmony, high morale, and a cooperative atmosphere that is conducive to efficient operations.	**4.14**	**4.18**	**4.16**	**4.04**	**4.06**	**4.02**	**4.08**	**4.00**	**4.15**	**4.09**	**1**
47.	Influencing and motivating personnel in performing tasks and meeting performance standards, goals, and work objectives.	**3.86**	**3.80**	**3.78**	**3.70**	**3.78**	**3.91**	**3.96**	**3.89**	**4.06**	**3.87**	**2**
28.	Recognizing employee accomplishments, encouraging employee suggestions, and recommending awards.	**3.73**	**3.62**	**3.51**	**3.74**	**3.78**	**3.76**	**3.67**	**3.68**	**3.85**	**3.70**	**3**
16.	Holding employees accountable for performance and professional standards as set forth in the Performance Appraisal document and relevant FAA Guidelines.	**3.89**	**3.88**	**3.65**	**3.67**	**3.56**	**3.55**	**3.54**	**3.82**	**3.65**	**3.64**	**4**
26.	Counseling employees in a fair and objective manner.	**3.73**	**3.66**	**3.63**	**3.70**	**3.67**	**3.58**	**3.48**	**3.50**	**3.73**	**3.61**	**5**
18.	Assigning work considering requirements, staff qualifications, workload demands and available resources.	**3.66**	**3.60**	**3.48**	**3.78**	3.33	**3.54**	**3.65**	**3.61**	**3.75**	**3.60**	**6**
20.	Monitoring work flow and making timely adjustments to improve the utilization of human and material resources.	**3.61**	**3.66**	**3.68**	**3.67**	3.44	**3.42**	**3.58**	3.36	**3.52**	**3.53**	**7**

Table 7 (cont.)
Bolded numbers represent the tasks having the highest Importance ratings for each group.

	TASK	FSS N=56	TERM N=125	ENR N=94	AIRC N=46	SEC N=18	AIRW N=179	FLTS N=112	OATC N=28	OTHER N=144	TOTAL 853	Rank
46.	Maintaining professional currency and keeping well-informed about new developments in technology and management.	**3.77**	**3.74**	3.39	**3.98**	3.28	3.34	**3.77**	3.46	3.40	3.53	8
11.	Working with employees in identifying needs and making recommendations for improvement in operations, the organization and the work environment.	3.38	3.51	3.41	3.30	3.39	**3.46**	**3.47**	**3.71**	**3.57**	3.46	9
13.	Identifying employee deficiencies and taking or recommending appropriate corrective action.	**3.77**	**3.64**	**3.51**	3.39	**4.00**	3.40	3.34	3.39	3.38	3.45	10

TABLE 8: Practically Significant Differences Between Job Groups on Importance Rating

Bolded numbers represent the tasks having the highest Time Spent ratings for each group, underlined numbers represent relatively high means, and numbers with broken lines represent relatively low means when comparing Job Groups. Means could range from 0-5.

	TASK	FSS N=56	TERM N=125	ENR N=94	AIRC N=46	SEC N=18	AIRW N=179	FLTS N=112	OATC N=28	OTHER N=144	TOTAL N=853
34.	Coordinating and integrating work unit activities with other interfacing work units.	2.66	2.43	3.01	3.46	2.94	3.37	3.22	3.54	3.38	3.12
3.	Initiating, reviewing, commenting on, and forwarding reports to management.	2.64	2.26	2.32	2.83	3.28	2.85	3.01	2.89	3.03	2.75
41.	Selecting personnel to fill vacancies using official guidelines.	1.84	1.73	1.82	3.43	2.89	2.99	3.16	3.32	3.58	2.74
7.	Reporting incidents and accidents within established procedures and following up as appropriate.	3.05	3.17	3.00	2.54	2.83	2.65	3.11	1.82	2.13	2.71
35.	Representing and promoting staff activities to management and outside persons and groups.	1.91	1.92	1.55	2.61	2.89	2.31	2.63	2.79	2.81	2.33
36.	Preparing, justifying, and/or administering the work unit budget and staffing needs, and submitting them to management.	1.27	1.10	1.46	2.93	2.78	2.68	2.90	2.86	2.96	2.31
9.	Supporting FAA interpretation and application of labor contract(s).	3.07	3.05	2.82	0.71	0.78	2.39	0.84	1.54	1.60	2.03
23.	Performing pre-duty familiarization routines to meet operational requirements.	2.95	2.91	2.73	1.22	0.94	1.60	1.63	1.04	1.38	1.89

Table 8 (cont.)
Bolded numbers represent the tasks having the highest Time Spent ratings for each group, underlined numbers represent relatively high means, and numbers with broken lines represent relatively low means when comparing Job Groups. Means could range from 0-5.

	TASK	FSS N=56	TERM N=125	ENR N=94	AIRC N=46	SEC N=18	AIRW N=179	FLTS N=112	OATC N=28	OTHER N=144	TOTAL N=853
37.	Preparing and monitoring employee travel schedules and expenditures.	0.88	0.66	0.50	2.67	2.61	1.94	2.43	2.36	2.01	1.65
25.	Ensuring that specialists conduct position relief briefings.	3.38	3.49	3.34	0.65	0.44	1.07	0.57	0.75	0.74	1.64

Competency Ratings

The relative importance of each competency was determined by summing the number of times a competency was identified as one of the three most important competencies in task performance for each task and averaging across tasks. A MANOVA was computed to determine if the relative importance of a competency differed among the nine job groups. As with the task ratings, statistically significant differences were found (Pillai's Trace Criteria, $F[400,6296] = 2.10, p<.0001$). However, univariate analyses demonstrated that the mean differences across groups were much less for the Competency ratings than for either of the Time Spent and Importance ratings. In fact, significant univariate differences were found for only 3 of the 14 competencies: Direction and Motivation, Problem Solving and Analytical Ability, and Technical Competence. Of these, only the mean rating differences for Technical Competence were practically significant. In general, the competencies required to successfully complete supervisory tasks were found to be quite similar across the job groups.

Table 9 contains the mean Competency ratings by job group. As mentioned above, while statistically significant group differences in Competency ratings were identified, only one difference was felt to be practically significant in terms of job requirements across the nine groups. Also, the competencies that were most frequently reported were not those for which group differences were found.

While the results in Table 9 document the relative importance of the various competencies, it is illustrative to focus on the competencies that appear to be most important in handling the key tasks performed by supervisors. In Table 10 are listed the 3 competencies that were identified by the greatest number of respondents for each of the 10 tasks that received the highest Time Spent and Importance ratings. The results in Table 10 clearly highlight the importance of specific competencies, since their relative importance is based solely on critical tasks. While Communication Skill was the single most frequently reported competency across all tasks and job groups, it was not unique in the number of times it appeared among the top three competencies associated with the critical tasks. Only Problem-Solving and Analytical Ability and Organizational Competence were not mentioned by a sufficient number of respondents to be included among the top three competencies reported for each critical task. Although Team Skill and Technical Competence did not receive relatively high ratings overall, they were included among the most frequently mentioned competencies for the critical tasks.

Demographic Influences on Supervisory Job

Demographic influences on the Time Spent task ratings and Competency ratings were examined using separate MANOVAs for each type of rating. Because of the large correlation between Time Spent and Importance ratings, an analysis of the Importance ratings would have yielded results very similar to the Time Spent rating analysis and thus was not conducted. Table 11 contains a summary of the MANOVA and ANOVA results for these variables.

The magnitude of the differences found for the Time Spent and Competency ratings using demographic characteristics as independent variables never approached the magnitude of differences when job group was used as the independent variable. In fact, in most cases, the differences found with the demographic variables can be linked directly to the fact that the job groups were not identical in their demographic make-up. The demographic variable for which the largest number of task rating differences were noted, Organizational Level, was also the variable on which there were large differences between the job groups. Further, when the Time Spent differences were examined across Organizational Level, the pattern of the differences generally paralleled the pattern of job group differences discussed earlier. Similarly, where there were differences between job groups in Region, Grade, and Age variables there were also differences among these demographic variables in Time Spent and Competency ratings.

Statistically significant differences were also found when Race and Sex were examined. Hispanics and Blacks tended to respond with higher Time Spent ratings, Asian/Pacific Islanders tended to respond with lower Time Spent ratings, and Whites' ratings tended to be somewhat between the other groups. Females gave higher time spent ratings than did Males, and the differences tended to reflect a constant difference of approximately .30 on the six point scale. Because the direction and magnitude of the differences were consistent across tasks, it was concluded that the differences were a result of response tendencies rather than actual differences among the groups in performance of the first-level supervisor job.

TABLE 9: Critical Competencies Based On Frequency of Responses

Bolded numbers represent the most frequently selected Competencies for each Job Group, underlined numbers represent relatively high means and numbers with broken lines represent relatively low means when comparing Job Groups.

	COMPETENCY	FSS N=56	TERM N=125	ENR N=94	AIRC N=46	SEC N=18	AIRW N=179	FLTS N=112	OATC N=28	OTHER N=144	TOTAL 853	Rank
1)	Communications Skill	**17.7**	**18.0**	**17.8**	**17.2**	**20.4**	**18.2**	**18.4**	**17.0**	**18.0**	**17.9**	1
13)	Supervisory Role Performance	**12.9**	**14.5**	**13.4**	**16.4**	**13.7**	**14.1**	**14.3**	**14.0**	**15.5**	**14.3**	2
6)	Interpersonal Skill	**11.7**	**11.5**	**11.4**	**12.7**	**12.7**	**12.8**	**12.3**	**12.6**	**11.5**	**12.1**	3
3)	Direction and Motivation	**8.9**	**9.1**	**9.7**	**9.0**	**9.5**	8.0	**9.5**	**11.4**	8.7	**8.9**	4
7)	Judgment	8.1	8.5	9.0	8.2	6.6	**8.7**	**9.8**	**10.7**	**8.8**	**8.8**	5
10)	Planning and Organizing	**9.0**	8.1	7.9	**8.8**	**10.2**	**8.7**	9.3	8.8	**9.0**	**8.7**	6
4)	Employee Development	8.6	8.5	8.1	7.8	9.0	7.3	8.4	8.7	7.6	8.0	7
12)	Technical Competence*	8.8	**9.9**	**10.0**	7.3	6.3	6.9	7.6	8.2	6.7	7.9	8
11)	Prob. Solving/Analyt. Ability	7.4	7.1	7.4	5.8	5.4	6.1	7.2	7.4	6.1	6.6	9
2)	Decisiveness	7.2	6.9	6.5	6.0	6.1	6.8	6.3	7.9	5.8	6.5	10
9)	Organizational Knowledge	6.3	6.7	6.1	5.0	5.0	6.6	6.4	6.6	5.4	6.1	11
14)	Team Skill	5.7	5.8	5.1	6.4	6.8	6.4	6.1	7.1	6.6	6.1	12
8)	Organizational Competence	5.4	5.2	6.1	6.8	5.8	5.6	5.2	6.6	4.9	5.5	13
5)	Flexibility/Independence	3.5	3.3	3.3	3.4	3.6	3.8	3.7	3.3	3.3	3.5	14

* Differences between Job Groups Differences for Technical Competence (12) were interpreted as practically significant.

TABLE 10: Most Frequently Selected Competencies for the Critical Tasks

Bolded entries represent the most frequently selected Competencies (across all tasks) for the Total Group.

Critical Tasks Based on Time Spent and Importance Ratings	TASK	Most Frequently Selected Competency/Sum	2nd Selected Competency/Sum	3rd Selected Competency/Sum
1.	Fostering harmony, high morale, and a cooperative atmosphere that is conducive to efficient operations.	**1) Comm. Skill/609**	**6) Interp. Skill/601**	14) Team Skill/486
18.	Assigning work considering requirements, staff qualifications, workload demands & available resources.	**10) Planning & Organ./549**	**7) Judgment/325**	**3) Direction & Motiv/206**
47.	Influencing and motivating personnel in performing tasks and meeting performance standards, goals, and work objectives.	**3) Direction & Motiv./635**	**1) Comm. Skill/421**	**6) Interp. Skill/351**
20.	Monitoring work flow and making timely adjustments to improve the utilization of human and material resources.	**10) Planning & Organ./453**	**7) Judgment/327**	**5) Flexibility-Indep/260**
46.	Maintaining professional currency and keeping well-informed about new developments in technology and management.	12) Technical Comp/676	**13) Super. Role Perf./308**	9) Organ. Know./175
11.	Working with employees in identifying needs and making recommendations for improvement in operations, the organization and the work environment.	14) Team Skill/371	**1) Comm. Skill/370**	**6) Interp. Skill/312**
16.	Holding employees accountable for performance professional standards as set forth in the Performance Appraisal document and relevant FAA Guidelines.	**13) Super. Role Perf./388**	**3) Direction & Motiv./309**	4) Employee Dev./280

TABLE 10 (cont.)
Bolded entries represent the most frequently selected Competencies (across all tasks) for the Total Group.

Critical Tasks Based on Time Spent Ratings Only		Most Frequently Selected Competency/Sum	2nd Selected Competency/Sum	3rd Selected Competency/Sum
	TASK			
3.	Initiating, reviewing, commenting on, and forwarding reports to management.	**1) Comm. Skill/460**	12) Technical Comp./297	**7) Judgment/292**
48.	Conducting and attending meetings with employees and other interfacing work units, task forces, and work groups.	**1) Comm. Skill/628**	6) Interp. Skill/347	**14) Team Skill/323**
2.	Ensuring that work unit staff demonstrates a working knowledge of policies, procedures, rules, and regulations.	12) Technical Comp./380	4) Employee Dev./322	9) Organ. Know./306
Critical Tasks Based on Importance Ratings Only				
	TASK			
28.	Recognizing employee accomplishments, encouraging employee suggestions, and recommending awards.	**3) Direction & Motiv./413**	4) Employee Dev./413	**13) Super. Role Perf./352**
26.	Counseling employees in a fair and objective manner.	**1) Comm. Skill/637**	**6) Interp. Skill/629**	**13) Super. Role Perf./270**
13.	Identifying employee deficiencies and taking or recommending appropriate corrective action.	**4) Employee Dev./418**	**6) Interp. Skill/341**	**2) Decisiveness/321**

TABLE 11: Differences Across Job Groups As A Function Of Demographic Variables

Independent Variable	Time Spent MANOVA F	#Number of Task Differences	Competency MANOVA F	#Number of Competency Differences
Org. Level	2.42***	26	1.89***	4
Region	1.48***	22	1.02	-
Grade	1.55***	19	1.21*	2
Age	1.82***	17	1.44*	3
Race	1.20*	8	1.23	-
Sex	1.82***	10	.84	-
No. Supervised	1.44***	16	1.74*	3
Time as Supv	1.15	-	1.15	-
Job Group	**3.93*** **	**34**	**2.10*** **	**3**

Pillai's Trace Criteria Estimates Of F Are Reported For All MANOVAs

*p<.05 - **p<.01 - ***p<.001

#Differences were identified by ANOVAs, p<.05

In summary, while significant Time Spent and Competency rating differences were found across a number of demographic variables and some were practically significant, the differences were small when compared with the differences found across job groups. It was concluded that the differences found for the demographic variables were either artifacts of group composition, or reflected response tendencies. Therefore, differences associated with job group membership appear to have the greatest importance for FAA personnel programs.

PRACTICAL IMPLICATIONS OF RESULTS

Supervisory Selection

Of the data analyzed, those that most directly pertain to supervisory selection were the Competency ratings. Selection decisions tend to be based on critical job requirements or skills, regardless of the specific tasks that are performed in a given job.

Overall, it was determined that the competencies key to performing supervisory jobs were similar across job groups, even when the tasks themselves varied. This implies that a single set of selection criteria can be used in screening supervisory candidates for the job groups studied. An analysis of Competencies associated with the performance of critical tasks demonstrated that of the 14, only 2 (Organizational Competence and Problem Solving and Analytical Ability) were not listed among the top 3 competencies for these tasks. Based upon these results, we concluded that, with the exception of Organizational Competence and Problem Solving and Analytical Ability, supervisory candidates for positions similar to those studied in this project should be selected on the basis of the Competencies included in this study.

Having identified the set of important Competencies the second issue is that of weight, or emphasis. The relative weight given to the Competencies was consistent across groups, with one exception, Technical Competence. More supervisors in Air Traffic (FSS, En Route, and Terminal) indicated that Technical Competence was important to successful performance in their positions than did the majority of other supervisors. This finding tends to confirm the need to include Technical Competence in the Peer-Supervisory Assessment (PSA) portion of the Air Traffic Supervisory Identification and Development Program (SIDP). However, the specificity of some of the task statements to Air Traffic positions may have partially accounted for the identification of Technical Competence as an important competency. The other job groups should carefully review the importance of technical competence in the supervisory position and determine the need for its inclusion in their SIDP. As an alternative, Technical Competence could be included in the criteria for selection for a specific position rather than included in the SIDP.

A third issue is the assessment of competencies in the PSA and/or the Skill-Based Interview (SBI). The PSA assesses a candidate on Communication, Direction/Motivation (Leadership), Technical Skill, and Interpersonal Skill. Candidates who successfully complete the PSA are referred to the SBI which is designed to measure seven critical skills/abilities and two specific types of knowledge: Problem Solving/Analytical Ability, Judgment, Decisiveness, Organization and Planning Ability, Interpersonal

Skill, Communication Skill, Direction/Motivation (Leadership), Knowledge of Supervisor's Role, and Knowledge of Agency Programs. Given the findings of this project, it appears that the current approach to assessment is generally consistent with what supervisors view to be critical Competencies. However, some slight modification may be in order. Communication and Interpersonal Skills are assessed in both steps of the screening process, but one could argue that Supervisory Role Performance, rather than Direction/Motivation (Leadership), should also be assessed at both steps. Similarly, Employee Development was identified as one of the top three competencies for several of the critical tasks. Its inclusion in the SIDP should be considered. Suggestions for how these two competencies might be included are offered below.

Supervisory Role Performance could be included in the PSA by identifying behaviors associated with 1) carrying out the goals and intent of special emphasis or hiring programs, and 2) effective and appropriate actions in response to subordinate feedback. Areas that could be considered for inclusion are, for example, working well with others at different organizational levels or in different work settings, responding appropriately to constructive criticism, soliciting honest feedback from others about performance, and setting a good example for peers to follow. The SBI currently assesses knowledge of the supervisor role. However, a scenario could be developed that elicits behavioral indicators of Supervisory Role Performance. As a simple example, candidates could be presented with two equally qualified applicants for a position -one who is a female and the other a male - and questioned about who they would hire and why.

With some revision, Employee Development could also be assessed in the PSA and SBI. Behaviors to be assessed might include, for example, demonstration of self-development activities on the part of the candidate, history of providing constructive criticism to peers and management, and helping others on work-related problems. An example of a possible scenario which could be used in the SBI could involve the candidate responding to an employee who was unsuccessful in a bid on a staff position. The ratings for that scenario could be based upon the candidate's method of identifying deficiencies and the manner in which feedback is provided.

Performance Assessment

The finding of practical differences between the job groups in task make-up has implications for performance assessment as well. The key factor determining the extent to which different sets of performance criteria may be needed to evaluate supervisors in different job groups is how closely the performance assessment criteria are to be linked to actual job content. That is, if supervisors are to be evaluated on how well they complete all of the tasks associated with their job, and if such evaluations are designed to account for differences in the relative importance of the tasks to be completed, the finding of differences among job groups in task make-up would require that some of the performance assessment criteria be different for each of the job groups. For example, the ninth highest rated task on relative Time Spent, "Initiating, reviewing, commenting on, and forwarding reports to management" (Task 3), did not receive high Time Spent ratings among the Air Traffic options. Similar types of differences were noted for many of the less time consuming tasks. Both Task 23 "Performing pre-duty familiarization routines to meet operational requirements," and Task 25 "Ensuring that specialist conduct position relief briefings" received very low ratings in most of the groups, but would be considered moderately time consuming tasks in the Air Traffic options.

Similar conclusions are reached if performance criteria are to be used as screening tools to assess readiness to assume supervisory positions, especially when the critical Competencies are to be used in defining the criteria. As was noted earlier, Technical Competence was not one of the most important Competencies when all job groups were considered. However, for the Air Traffic options, it received relatively high ratings.

As can be seen, if performance criteria were to be based upon the amount of time spent completing an activity (i.e., were directly linked to job content), or were to be based on the relative importance of the Competencies required to successfully perform a task, at least two different sets of performance criteria would be needed - one for Air Traffic and one for all other job groups. Although a common set of criteria could be used for all positions since there were more similarities than differences across job groups, the use of a single set of criteria (especially one that had a single weighting formula) could result in directing behavior away from critical areas of performance.

The development of critical job elements used in performance standards could be accomplished in several different ways. One possibility is to conduct a task analysis for a job group, focusing on observable behaviors. Rating dimensions would be defined empirically, using statistical techniques for clustering the tasks into dimensions. An alternative method is to use subject matter experts to identify key performance dimensions and the critical tasks within each of those dimensions. The results of this study provide the starting point for this method of developing a performance assessment process.

Training and Development

There are several general applications of the results of this study to training and development. First, the competencies used to drive curriculum development must be consistent with those identified as most important in this study. Important competencies that are not assessed in the SIDP should be particular candidates for inclusion in training; e.g., Employee Development. As a part of this process, there needs to be a clear understanding of the tasks that are linked to a particular competency since the tasks, rather than the competencies, are being trained. Second, the identification of critical tasks associated with particular competencies provides the potential content for training scenarios that integrate the demonstration of competencies in tasks that are highly likely to be performed on the job. Third, tasks that were identified as very important, but performed infrequently, suggest where periodic refresher training might be required. For example, several tasks associated with employee counseling and appraisal were identified as important tasks but did not receive high Time Spent ratings. Supervisors would likely benefit from recurrent training in these areas. Finally, the important competencies identified in this study should be compared with the mid-level manager competencies (Human Technology, Inc., 1990) to identify what developmental activities and training might be provided to prepare an individual for further career advancement.

The consistency with which Air Traffic supervisors differed from other agency supervisors suggests the need for a two stage training process. The first stage could consist of a generic curriculum to cover the issues subsumed within the most important tasks across job groups, while the second stage could be tailored to cover the critical and unique training needs of a particular job group. The authors are aware that the supervisory training courses currently in place follow a similar strategy. However, it is important that the courses be reexamined to ensure that the content of the courses reflects the results found in this study. For example, Air Traffic supervisors appeared to have greater needs for training in such areas as incident reporting (Task 7), dealing with labor contracts (Task 9), and pre-duty and position relief briefings (Tasks 23 and 5), based on their relatively higher Time Spent ratings on these tasks. On the other hand, non-Air Traffic supervisors demonstrated higher Time Spent ratings on communicating with management (Task 3), coordinating work units (Task 34), making contacts with others/groups outside one's work group (Task 35), handling budgetary and travel issues (Tasks 36 and 37), and staffing (Task 41), suggesting that this group has greater training needs in these areas.

STUDY LIMITATIONS

Questionnaire Response Format

In addition to the identification of "unreliable" respondents, inconsistency in responding was also found in the form of "not applicable" responses accompanied by other Competency and Task ratings. "Not applicable" responses were interpreted as zeros on the Time Spent and Importance ratings. Some of the apparent confusion experienced by some of the respondents in this study could be eliminated by separating task and competency ratings in future similar studies. In addition, respondents should be given the opportunity to rate relative Time Spent and Importance as zero, rather than relying on a "not applicable" response to accurately represent their intentions.

Task Statement and Competency Wording

Our primary concern here is that task statements often did not appear to clearly describe what behaviors a person performs. For example, "Fostering harmony, high morale, and a cooperative atmosphere that is conducive to efficient operations" describes a desired state or outcome to be achieved, rather than the behaviors or activities that produce or are related to that outcome. Statements containing imprecise action verbs, non-behavioral action verbs, or multiple actions can result in inconsistent and less accurate self-descriptions of job behavior. In addition, social desirability was introduced in some of the task statements by the use of phrases such as

"fostering harmony" and "is open, honest, and straightforward." Few supervisors would say "fostering harmony" is unimportant; this could have resulted in artifactually elevated responses. Statement wording is crucial if precise and accurate descriptions of job behavior are to be studied. Given the problems described, it is recommended that future efforts to further elucidate the task structure of a particular job group include task statements that are designed to focus on observable behaviors.

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U.S. Department of Transportation
Federal Aviation Administration

Memorandum

APPENDIX A
QUESTIONNAIRE MATERIALS

Subject: ACTION: Linkage Study of Supervisory Knowledges, Skills, and Abilities (KSA's)

Date: APR 23 1990

From: Associate Administrator for Human Resource Management

Reply to Attn. of:

To: Participating First-Level Supervisor

A series of studies of first-level supervisors in the Federal Aviation Administration (FAA) resulted in the identification of the attached job tasks that they perform and the KSA's necessary to perform those tasks. The current study that you are being asked to participate in is an effort to link the KSA's with particular job tasks. In addition, we are asking you to provide us with information about the relative time spent on each task and the relative importance of each task. This information is critical to insuring that FAA implements selection and training procedures for first-level supervisors that are appropriate and accurate. Because you are one of the first-level supervisors who performs these job tasks, it is essential that we obtain your input.

Not all first-level supervisors are being asked to respond. You were randomly selected from the pool of first-level supervisors in your occupational group (e.g., Airway Facilities, Flight Standards). The information that you will provide cannot be associated with you as an individual in any way and is completely confidential. Background questions are asked to be sure that the people who respond are representative of the pool of first-level supervisors from which they were selected.

Please complete and return the attached answer sheet to Dr. Jennifer Myers, Civil Aeromedical Institute, AAM-500, in the attached envelope by May 14. Your cooperation is greatly appreciated.

Herbert R. McLure

Attachments

JOB TASK RATINGS

Step One

Please take a few minutes to review the materials that have been sent to you. In addition to these instructions, you should have 1) a list of the knowledges, skills, and abilities (KSA's) for first-level supervisors and the definitions of the KSA's, 2) a First-level Supervisor Questionnaire containing the list of job tasks, and 3) a scannable answer sheet. Please record all answers on the answer sheet using a NO. 2 PENCIL. Make sure all erasures are complete.

Step Two

You are asked to identify the THREE KSA's that are MOST IMPORTANT to successfully performing each of the job tasks. As you read through the tasks, darken the circles in the columns corresponding to the three KSA's that you think are most important to performing that task successfully. YOU CANNOT select more than three, but YOU CAN select less than three. If you do not perform a task that is listed, darken the circle under "Not Applicable" for that task. Please read through the KSA's and their definitions carefully before completing the questionnaire and refer to the KSA list as often as you need to as you answer the questions.

Step Three

After you have finished making this judgment for all tasks, return to the first job task listed (page 1) and complete the RELATIVE TIME SPENT and RELATIVE IMPORTANCE sections according to the following directions:

1. Complete the additional judgments on all tasks for which you chose corresponding KSA's. DO NOT complete the additional judgments for those tasks you marked "Not Applicable."

2. For each task in your job, consider the amount of time you spend on it relative to the time you spend on the other tasks that are a part of your job. Using the scale definitions below, darken the circle on the answer sheet in the column of the RELATIVE TIME SPENT section that best describes the relative time you spend on a task compared to all the other tasks that are a part of your job.

   * MUCH LESS time spent on this task compared to other tasks that are a part of your job.

   * LESS time spent on this task compared to other tasks that are a part of your job.

   * ABOUT THE SAME amount of time spent on this task compared to other tasks that are a part your job.

* MORE time spent on this task compared to other tasks that are a part of your job.

* MUCH MORE time spent on this task compared to other tasks that are a part of your job.

3. Next, consider how important each task is for doing your job properly. Think of importance in terms of the negative consequences of incorrect performance or non-performance of the task. In general, the more negative the consequences of incorrect performance or non-performance of the task, the more important a task is to your job. Using the scale definitions below, darken the circle on the answer sheet in the column of the RELATIVE IMPORTANCE section that best describes the relative importance of each task compared to all the other tasks that are a part of your job.

   * MUCH LESS important than other tasks that are a part of your job.

   * LESS important than other tasks that are a part of your job.

   * ABOUT THE SAME importance as other tasks that are part of your job.

   * MORE important than other tasks that are a part of your job.

   * MUCH MORE important than other tasks that are a part of your job.

Do both RELATIVE TIME SPENT and RELATIVE IMPORTANCE ratings for each item at the same time.

* MORE time spent on this task compared to other tasks that are a part of your job.

* MUCH MORE time spent on this task compared to other tasks that are a part of your job.

3. Next, consider how important each task is for doing your job properly. Think of importance in terms of the negative consequences of incorrect performance or non-performance of the task. In general, the more negative the consequences of incorrect performance or non-performance of the task, the more important a task is to your job. Using the scale definitions below, darken the circle on the answer sheet in the column of the RELATIVE IMPORTANCE section that best describes the relative importance of each task compared to all the other tasks that are a part of your job.

   * MUCH LESS important than other tasks that are a part of your job.

   * LESS important than other tasks that are a part of your job.

   * ABOUT THE SAME importance as other tasks that are part of your job.

   * MORE important than other tasks that are a part of your job.

   * MUCH MORE important than other tasks that are a part of your job.

Do both RELATIVE TIME SPENT and RELATIVE IMPORTANCE ratings for each item at the same time.

B. COMMUNICATION SKILL

Presents and expresses ideas and information effectively and concisely in an oral and/or written mode; listens and comprehends what others are saying; shares information with others and facilitates the open exchange of ideas and information; is open, honest, and straightforward with others; provides a complete and timely explanation of issues and decisions in a manner appropriate for the audience; and presents information and material in a manner which gains the agreement of others.

C. DECISIVENESS

Makes decisions, renders judgments, and takes action on difficult or unpleasant tasks in a timely fashion, to include the appropriate communication of both negative and positive information and decisions.

D. DIRECTION AND MOTIVATION

Motivates and provides direction in the activities of others to accomplish goals; gains the respect and confidence of others; appropriately assigns work and authority to others in the accomplishment of goals; provides advice and assistance as required; and establishes high quality work standards for self and others.

E. EMPLOYEE DEVELOPMENT

Accurately evaluates each employee's performance and identifies skills and abilities as targets of training and developmental activities related to current and future job requirements; finds and uses work-related opportunities in which to appropriately select and apply developmental techniques, such as coaching; and provides constructive feedback based on observed behavior.

F. FLEXIBILITY/INDEPENDENCE

Makes necessary modifications in own behavior and work methods in response to changing conditions or unexpected obstacles i.e., knows when to manage by following existing rules and procedures, and knows when to lead by initiating new approaches; adjusts to new information; and considers a wide range of alternatives. Views problems and issues from different perspectives; develops positions/decisions that are acceptable to others having differing views; and functions effectively in situations involving little guidance or information as to what is expected.

G. INTERPERSONAL SKILL

Is aware of, responds to, and considers the needs, feelings, and capabilities of others; deals effectively with others in both favorable and unfavorable situations regardless of their status or position; accepts interpersonal and cultural differences; manages conflicts/confrontations/disagreements in a positive manner which minimizes personal impact, to include controlling one's own feelings and reactions; and provides appropriate support to others.

H. JUDGMENT

Develops and evaluates alternative courses of action; makes decisions based on correct assumptions concerning resources and guidelines; supports decisions or recommendations with data or reasoning; defines and implements solutions to problems; and recognizes when no action is required.

I. ORGANIZATIONAL COMPETENCE

Interprets and utilizes information as to the organizational structure, functioning, and relationships among units; correctly identifies and draws upon source(s) of information or support; and assesses the impact and implications of decisions on other components of the organization.

J. ORGANIZATIONAL KNOWLEDGE

Demonstrates knowledges of the FAA organizational components, the mission(s) of each relevant organizational unit, and the principal programs in the FAA.

K. PLANNING AND ORGANIZING

Identifies requirements, allocates, and effectively uses information, personnel, time, and other resources necessary for mission accomplishment; establishes appropriate courses of action for self and/or others to accomplish specific goals; develops evaluation criteria and tracking systems for monitoring goal progress and accomplishment; and specifies objectives, schedules, and priorities.

L. PROBLEM SOLVING AND ANALYTICAL ABILITY

Identifies existing and potential problems; notes, understands and includes the critical elements of problem situations; obtains and evaluates relevant information; demonstrates awareness that new and/or additional information sources are required; notes interrelationships among elements; identifies possible causes of the problems; recognizes the need to shift to an alternative course of action including innovative or creative approaches; and appropriately terminates information collection and evaluation activities.

M. TECHNICAL COMPETENCE

Understands and appropriately applies procedures, requirements, regulations, and policies; maintains credibility with others on technical matters; and uses equipment, procedures, or systems in the operational and/or staff environment as the position requires.

N. SUPERVISORY ROLE PERFORMANCE

Displays knowledge of the roles, responsibilities, and duties of supervisors and managers; accurately assesses the impact upon others of role performance; and supports and promotes organizational decisions, policies, programs and initiatives such as EEO, Employee Assistance Program, Survey-Feedback-Action Program, and Affirmative Action.

O. TEAM SKILL

Creates an environment which fosters group morale, establishes effective working relationships among team members, and appropriately involves group members in problem solving and decision making.

FIRST-LEVEL SUPERVISOR JOB QUESTIONNAIRE

A Not Applicable
B Communication Skill
C Decisiveness
D Direction and Motivation
E Employee Development
F Flexibility/Independence
G Interpersonal Skill
H Judgment
I Organizational Competence
J Organizational Knowledge
K Planning and Organizing
L Problem Solving and Analytical Ability
M Technical Competence
N Supervisory Role Performance
O Team Skill

Note that definitions of the above KSAs are provided in the packet of materials. Please refer to them as you complete this questionnaire.

Which of the above KSA's do you feel are most IMPORTANT to successfully performing each of the following tasks (choose no more than three KSA's):

1. Fostering harmony, high morale, and a cooperative atmosphere that is conducive to efficient operations.

2. Ensuring that work unit staff demonstrates a working knowledge of policies, procedures, rules, and regulations.

3. Initiating, reviewing, commenting on, and forwarding reports to management.

4. Conducting proficiency reviews and performance improvement discussions in a timely manner and forwarding reports to management.

5. Approving and disapproving leave considering operational requirements and relevant guidelines.

6. Investigating and attempting to resolve grievances and misunderstandings within established procedures.

7. Reporting incidents and accidents within established procedures and following up as appropriate.

8. Recommending and administering personnel actions with proper documentation based on performance evaluation and observation.

9. Supporting FAA interpretation and application of labor contract(s).

10. Reporting to management problems and situations that affect staff and/or user safety and/or service.

A Not Applicable
B Communication Skill
C Decisiveness
D Direction and Motivation
E Employee Development
F Flexibility/Independence
G Interpersonal Skill
H Judgment
I Organizational Competence
J Organizational Knowledge
K Planning and Organizing
L Problem Solving and Analytical Ability
M Technical Competence
N Supervisory Role Performance
O Team Skill

11. Working with employees in identifying needs and making recommendations for improvement in operations, the organization, and the work environment.

12. Participating in planning, recommending, and scheduling employee training and development in accordance with need.

13. Identifying employee deficiencies and taking or recommending appropriate corrective action.

14. Making employee retention and termination recommendations which reflect work performance evaluations and personal observations.

15. Participating in identifying problems affecting staff, the facility, and user safety and services, and taking appropriate action.

16. Holding employees accountable for performance and professional standards as set forth in the Performance Appraisal document and relevant FAA Guidelines.

17. Initiating questions about and responding to the technical and human resources needs of employees.

18. Assigning work considering requirements, staff qualifications, workload demands and available resources.

19. Setting quality standards for employees in technical and human resources matters consistent with FAA policies and procedures.

20. Monitoring work flow and making timely adjustments to improve the utilization of human and material resources.

21. Communicating important operational information to relevant staff to improve productivity, safety, and services.

22. Conducting and receiving operational and staff briefings.

23. Performing pre-duty familiarization routines to meet operational requirements.

A Not Applicable
B Communication Skill
C Decisiveness
D Direction and Motivation
E Employee Development
F Flexibility/Independence
G Interpersonal Skill
H Judgment
I Organizational Competence
J Organizational Knowledge
K Planning and Organizing
L Problem Solving and Analytical Ability
M Technical Competence
N Supervisory Role Performance
O Team Skill

24. Incorporating and applying FAA initiatives in accordance with local and national guidelines.

25. Ensuring that specialists conduct position relief briefings.

26. Counseling employees in a fair and objective manner.

27. Demonstrating awareness of EEO program responsibilities and keeping informed of program changes.

28. Recognizing employee accomplishments, encouraging employee suggestions, and recommending awards.

29. Keeping employees aware of career progression opportunities and assisting them in planning and achieving their goals.

30. Identifying, resolving and/or reporting EEO problems and cooperating with EEO Officials.

31. Keeping current with requirements for and contributing to Affirmative Action Plans and other special emphasis programs.

32. Initiating personnel actions in a timely manner and following up on the status of actions until their resolution.

33. Ensuring the effective performance of duties by employees in unusual or emergency situations.

34. Coordinating and integrating work unit activities with other interfacing work units.

35. Representing and promoting staff activities to management and outside persons and groups.

36. Preparing, justifying, and/or administering the work unit budget and staffing needs, and submitting them to management.

A Not Applicable
B Communication Skill
C Decisiveness
D Direction and Motivation
E Employee Development
F Flexibility/Independence
G Interpersonal Skill
H Judgment
I Organizational Competence
J Organizational Knowledge
K Planning and Organizing
L Problem Solving and Analytical Ability
M Technical Competence
N Supervisory Role Performance
O Team Skill

37. Preparing and monitoring employee travel schedules and expenditures.

38. Determining when staff is ready to work with minimum supervision.

39. Taking action to address problems and situations that affect the occupational safety and health of employees.

40. Representing and promoting management policies to employees.

41. Selecting personnel to fill vacancies using official guidelines.

42. Encouraging employee participation in groups (e.g., EPGs, FABs).

43. Soliciting employee feedback on proposed and implemented procedural or organizational changes.

44. Planning for procedural or organizational changes and assisting employees in understanding the impact of those changes.

45. Participating in identifying causes and resolutions to conflict.

46. Maintaining professional currency and keeping well-informed about new developments in technology and management.

47. Influencing and motivating personnel in performing tasks and meeting performance standards, goals, and work objectives.

48. Conducting and attending meetings with employees and other interfacing work units, task forces, and work groups.

49. Working with employees in establishing and communicating unit goals and objectives.

50. Working with individual employees to establish and communicate performance standards and objectives.

FIRST LEVEL SUPERVISOR QUESTIONNAIRE

Background Information

Which of the following best describes the organizational level you supervise?

- O Division
- O Branch
- O Section
- O Unit
- O Sub-unit
- O Facility
- O Area
- O Team
- O Sector
- O Crew
- O Staff
- O Laboratory
- O Other _____

Series

0	0	0	0
1	1	1	1
2	2	2	2
3	3	3	3
4	4	4	4
5	5	5	5
6	6	6	6
7	7	7	7
8	8	8	8
9	9	9	9

Grade

0	0
1	1
	2
	3
	4
	5
	6
	7
	8
	9

Which Region or Center are you assigned to?

- O Aeronautical Center (AAC)
- O Alaska (AAL)
- O Central (ACE)
- O Eastern (AEA)
- O European (AEU)
- O Great Lakes (AGL)
- O National Headquarters (AWA)
- O New England (ANE)
- O Northwest Mountain (ANM)
- O Southern (ASO)
- O Southwest (ASW)
- O Technical Center (ACT)
- O Western Pacific (AWP)

In which type of facility or office do you work?

- O Regional/Headquarters Office
- O Aeronautical/Technical Center
- O Aircraft Certification Field Office (ACO, MIDO)
- O Aviation Standards National Field Office (AVN)
- O Flight Inspection Field Office (FIFO)
- O Flight Standards Field Office (e.g., ACDO, FSDO)
- O Airway Facilities Field Office (e.g., AFS, FMP)
- O Air Traffic: En Route Center/Cerap field facility
- O Air Traffic: Tower/Tracon/Rapcon field facility
- O Air Traffic: AFSS/FSS field facility
- O Airports District Office
- O Security Field Office (e.g., CASFO)
- O Other

For which of the following organizations do you work?

- O Accounting
- O Air Traffic
- O Aircraft Certification
- O Airports
- O Airway Facilities
- O Aviation Standards
- O Budget
- O Flight Standards
- O Human Resource Management
- O Logistics
- O Management Systems/Data Processing
- O Medical
- O Security
- O Other (e.g., Civil Rights, Chief/Regional Counsel)

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Are you currently a permanent first level supervisor?

- ○ Yes
- ○ No, I am a non-supervisor
- ○ No, I am a higher level supervisor

(If you answered no, you do not need to complete the questionnaire. However, please return the unaswered questionnaire in the envelope provided.)

How many FAA employees do you supervise?

- ○ Less than 3
- ○ 3 to 5
- ○ 6 to 10
- ○ 11 to 15
- ○ More than 15

How long have you been a supervisor in the FAA?

- ○ Less than two years
- ○ 2-5 years
- ○ 6-10 years
- ○ 11-15 years
- ○ 16-20 years
- ○ More than 20 years

The following information is needed to help us be sure that we have achieved a representative sample of first level supervisors. Your individual responses will not be reported; results will be presented for GROUPS ONLY.

What is your race/ethnic origin?

- ○ American Indian or Alaskan Native
- ○ Asian/Pacific Islander
- ○ Black, not Hispanic
- ○ Hispanic
- ○ White

What is your sex?

- ○ Male
- ○ Female

How old are you?

- ○ Under 25 years
- ○ 25-35 years
- ○ 36-45 years
- ○ 46-55 years
- ○ 56 years or older

TASK INFORMATION

THREE MOST IMPORTANT KSA'S	RELATIVE TIME SPENT					RELATIVE IMPORTANCE				
	Much Less	Less	About the Same	More	Much More	Much Less	Less	About the Same	More	Much More
Not Applicable										
Communication Skill										
Decisiveness										
Direction and Motivation										
Employee Development										
Flexibility/Independence										
Interpersonal Skill										
Judgment										
Organizational Competence										
Organizational Knowledge										
Planning and Organizing										
Problem Solving and Analytical Ability										
Technical Competence										
Supervisory Role Performance										
Team Skill										

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
THREE MOST IMPORTANT KSA'S																														
Not Applicable																														
Communication Skill																														
Decisiveness																														
Direction and Motivation																														
Employee Development																														
Flexibility/Independence																														
Interpersonal Skill																														
Judgment																														
Organizational Competence																														
Organizational Knowledge																														
Planning and Organizing																														
Problem Solving and Analytical Ability																														
Technical Competence																														
Supervisory Role Performance																														
Team Skill																														
RELATIVE TIME SPENT																														
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RELATIVE IMPORTANCE																														
Much Less																														
Less																														
About the Same																														
More																														
Much More																														

APPENDIX B

TASKS WITH HIGHEST TIME SPENT RATINGS BY JOB GROUP

TERMINAL

MEAN RATING	TASK NUMBER	TASK STATEMENT
3.73	1	Fostering harmony, high morale, and a cooperative atmosphere that is conducive to efficient operations.
3.58	20	Monitoring work flow and making timely adjustments to improve the utilization of human and material resources.
3.50	18	Assigning work considering requirements, staff qualifications, workload demands and available resources.
3.42	47	Influencing and motivating personnel in performing tasks and meeting performance standards, goals, and work objectives.
3.24	16	Holding employees accountable for performance and professional standards as set forth in the Performance Appraisal document and relevant FAA Guidelines.
3.24	46	Maintaining professional currency and keeping well-informed about new developments in technology and management.
3.14	2	Ensuring that work unit staff demonstrates a working knowledge of policies, procedures, rules, and regulations.
3.02	11	Working with employees in identifying needs and making recommendations for improvement in operations, the organization, and the work environment.
2.90	13	Identifying employee deficiencies and taking or recommending appropriate corrective action.
2.88	12	Participating in planning, recommending, and scheduling employee training and development in accordance with need.

FLIGHT SERVICE STATION

MEAN RATING	TASK NUMBER	TASK STATEMENT
3.64	18	Assigning work considering requirements, staff qualifications, workload demands and available resources.
3.57	20	Monitoring work flow and making timely adjustments to improve the utilization of human and material resources.
3.52	1	Fostering harmony, high morale, and a cooperative atmosphere that is conducive to efficient operations.
3.46	46	Maintaining professional currency and keeping well-informed about new developments in technology and management.
3.46	47	Influencing and motivating personnel in performing tasks and meeting performance standards, goals, and work objectives.
3.10	16	Holding employees accountable for performance and professional standards as set forth in the Performance Appraisal document and relevant FAA Guidelines.
2.91	11	Working with employees in identifying needs and making recommendations for improvement in operations, the organization, and the work environment.
2.89	4	Conducting proficiency reviews and performance improvement discussions in a timely manner and forwarding reports to management.
2.86	17	Initiating questions about and responding to the technical and human resources needs of employees.
2.86	40	Representing and promoting management policies to employees.

EN ROUTE

MEAN RATING	TASK NUMBER	TASK STATEMENT
3.79	20	Monitoring work flow and making timely adjustments to improve the utilization of human and material resources.
3.74	1	Fostering harmony, high morale, and a cooperative atmosphere that is conducive to efficient operations.
3.66	18	Assigning work considering requirements, staff qualifications, workload demands and available resources.
3.36	47	Influencing and motivating personnel in performing tasks and meeting performance standards, goals, and work objectives.
3.23	16	Holding employees accountable for performance and professional standards as set forth in the Performance Appraisal document and relevant FAA Guidelines.
3.20	46	Maintaining professional currency and keeping well-informed about new developments in technology and management.
3.03	2	Ensuring that work unit staff demonstrates a working knowledge of policies, procedures, rules and regulations.
3.01	11	Working with employees in identifying needs and making recommendations for improvement in operations, the organization, and the work environment.
2.91	43	Soliciting employee feedback on proposed and implemented procedural or organizational changes.
2.76	40	Representing and promoting management policies to employees.

AIRCRAFT CERTIFICATION

MEAN RATING	TASK NUMBER	TASK STATEMENT
3.37	18	Assigning work considering requirements, staff qualifications, workload demands and available resources.
3.28	1	Fostering harmony, high morale, and a cooperative atmosphere that is conducive to efficient operations.
3.24	20	Monitoring work flow and making timely adjustments to improve the utilization of human and material resources.
3.17	47	Influencing and motivating personnel in performing tasks and meeting performance standards, goals, and work objectives.
3.11	2	Ensuring that work unit staff demonstrates a working knowledge of policies, procedures, rules, and regulations.
3.11	46	Maintaining professional currency and keeping well-informed about new developments in technology and management.
3.04	34	Coordinating and integrating work unit activities with other interfacing work units.
3.00	3	Initiating, reviewing, commenting on, and forwarding reports to management.
2.93	40	Representing and promoting management policies to employees.
2.83	21	Communicating important operational information to relevant staff to improve productivity, safety, and services.

SECURITY

MEAN RATING	TASK NUMBER	TASK STATEMENT
3.61	2	Ensuring that work unit staff demonstrates a working knowledge of policies, procedures, rules, and regulations.
3.61	3	Initiating, reviewing, commenting on, and forwarding reports to management.
3.50	18	Assigning work considering requirements, staff qualifications, workload demands and available resources.
3.50	20	Monitoring work flow and making timely adjustments to improve the utilization of human and material resources.
3.44	47	Influencing and motivating personnel in performing tasks nd meeting performance standards, goals, and work objectives.
3.33	21	Communicating important operational information to relevant staff to improve productivity, safety, and services.
3.22	1	Fostering harmony, high morale, and a cooperative atmosphere that is conducive to efficient operations.
3.11	49	Working with employees in establishing and communicating unit goals and objectives.
3.06	48	Conducting and attending meetings with employees and other interfacing work units, task forces, and work groups.
3.00	22	Conducting and receiving operational and staff briefings.

AIRWAY FACILITIES

MEAN RATING	TASK NUMBER	TASK STATEMENT
3.44	47	Influencing and motivating personnel in performing tasks and meeting performance standards, goals, and work objectives
3.35	1	Fostering harmony, high morale, and a cooperative atmosphere that is conducive to efficient operations.
3.34	3	Initiating, reviewing, commenting on, and forwarding reports to management.
3.22	18	Assigning work considering requirements, staff qualifications, workload demands and available resources.
3.20	48	Conducting and attending meetings with employees and other interfacing work units, task forces, and work groups.
3.13	20	Monitoring work flow and making timely adjustments to improve the utilization of human and material resources.
3.07	34	Coordinating and integrating work unit activities with other interfacing work units.
2.97	11	Working with employees in identifying needs and making recommendations for improvement in operations, the organization, and the work environment.
2.92	46	Maintaining professional currency and keeping well-informed about new developments in technology and management.
2.78	17	Initiating questions about and responding to the technical and human resources needs of employees.

FLIGHT STANDARDS

MEAN RATING	TASK NUMBER	TASK STATEMENT
3.54	18	*Assigning work considering requirements, staff qualifications, workload demands and* available resources.
3.48	1	Fostering harmony, high morale, and a cooperative atmosphere that is conducive to efficient operations.
3.42	47	Influencing and motivating personnel in performing tasks and meeting performance standards, goals, and work objectives.
3.41	20	Monitoring work flow and making timely adjustments to improve the utilization of human *and material resources.*
3.20	2	Ensuring that work unit staff demonstrates a working knowledge of policies, procedures, rules, and regulations.
3.16	21	Communicating important operational information to relevant staff to improve productivity, safety, and services.
3.15	11	Working with employees in identifying needs and making recommendations for improvement in operations, the organization, and the work environment.
3.07	3	Initiating, reviewing, commenting on, and forwarding reports to management.
3.05	46	Maintaining professional currency and keeping well-informed about new developments in technology and management.
2.98	34	Coordinating and integrating work unit activities with other interfacing work units.

OTHER ATC

MEAN RATING	*TASK* NUMBER	TASK STATEMENT
3.86	3	Initiating, reviewing, commenting on, and forwarding reports to management.
3.64	18	Assigning work considering requirements, staff qualifications, workload demands and available resources.
3.61	1	Fostering harmony, high morale, and a cooperative atmosphere that is conducive to efficient operations.
3.57	47	*Influencing* and motivating personnel in performing tasks and meeting performance standards, goals, and work objectives.
3.43	11	Working with employees in identifying needs and making recommendations for improvement in operations, the organization, and the work environment.
3.39	20	Monitoring work flow and making timely adjustments to improve the utilization of human and material resources.
3.32	48	Conducting and attending meetings with employees and other interfacing work units, task forces, and work groups.
3.25	34	Coordinating and integrating work unit activities with other interfacing work units.
3.18	21	Communicating important operational information to relevant staff to improve productivity, safety, and services.
3.11	10	Reporting to management problems and situations that affect staff and/or user safety and/or service.

OTHER

MEAN RATING	TASK NUMBER	TASK STATEMENT
3.57	1	Fostering harmony, high morale, and a cooperative atmosphere that is conducive to efficient operations.
3.47	18	Assigning work considering requirements, staff qualifications, workload demands and available resources.
3.43	47	Influencing and motivating personnel in performing tasks and meeting performance standards, goals, and work objectives.
3.26	20	Monitoring work flow and making timely adjustments to improve the utilization of human and material resources.
3.10	48	Conducting and attending meetings with employees and other interfacing work units, task forces, and work groups.
3.09	34	Coordinating and integrating work unit activities with other interfacing work units.
3.04	11	Working with employees in identifying needs and making recommendations for improvement in operations, the organization, and the work environment.
3.03	49	Working with employees in establishing and communicating unit goals and objectives.
3.01	3	Initiating, reviewing, commenting on, and forwarding reports to management.

APPENDIX C

TASKS WITH HIGHEST IMPORTANCE RATINGS BY JOB GROUP

TERMINAL

MEAN RATING	TASK NUMBER	TASK STATEMENT
4.17	1	Fostering harmony, high morale, and a cooperative atmosphere that is conducive to efficient operations.
3.88	16	Holding employees accountable for performance and professional standards as set forth in the Performance Appraisal document and relevant FAA Guidelines.
3.80	47	Influencing and motivating personnel in performing tasks and meeting performance standards, goals, and work objectives.
3.74	46	Maintaining professional currency and keeping well-informed about new developments in technology and management.
3.70	33	Ensuring the effective performance of duties by employees in unusual or emergency situations.
3.66	26	Counseling employees in a fair and objective manner.
3.66	20	Monitoring work flow and making timely adjustments to improve the utilization of human and material resources.
3.64	13	Identifying employee deficiencies and taking or recommending appropriate corrective action.
3.62	28	Recognizing employee accomplishments, encouraging employee suggestions, and recommending awards.

FLIGHT SERVICE STATION

MEAN RATING	TASK NUMBER	TASK STATEMENT
4.14	1	Fostering harmony, high morale, and a cooperative atmosphere that is conducive to efficient operations.
4.02	33	Ensuring the effective performance of duties by employees in unusual or emergency situations.
3.89	16	Holding employees accountable for performance and professional standards as set forth in the Performance Appraisal document and relevant FAA Guidelines.
3.86	47	Influencing and motivating personnel in performing tasks and meeting performance standards, goals, and work objectives.
3.79	45	Participating in identifying causes and resolutions to conflict.
3.77	46	Maintaining professional currency and keeping well-informed about new developments in technology and management.
3.73	26	Counseling employees in a fair and objective manner.
3.73	28	Recognizing employee accomplishments, encouraging employee suggestions, and recommending awards.
3.73	50	Working with individual employees in establishing and communicating unit goals and objectives.
3.66	18	Assigning work considering requirements, staff qualifications, workload demands and available resources.

EN ROUTE

MEAN RATING	TASK NUMBER	TASK STATEMENT
4.16	1	Fostering harmony, high morale, and an cooperative atmosphere that is conducive to efficient operation.
3.78	47	Influencing and motivating personnel in performing tasks and meeting performance standards, goals, and work objectives.
3.69	33	Ensuring the effective performance of duties by employees in unusual or emergency situations.
3.68	20	Monitoring work flow and making timely adjustments to improve the utilization of human and material resources.
3.65	16	Holding employee accountable for performance and professional standards as set forth in the Performance Appraisal document and relevant FAA Guidelines.
3.63	26	Counseling employees in a fair and objective manner.
3.51	13	Identifying employee deficiencies and taking or recommending appropriate corrective action.
3.51	28	Recognizing employee accomplishments, encouraging employee suggestions, and recommending awards.
3.48	18	Assigning work considering requirements, staff qualifications, workload demands and available resources.

AIRCRAFT CERTIFICATION

MEAN RATING	TASK NUMBER	TASK STATEMENT
4.04	1	Fostering harmony, high morale, and a cooperative atmosphere that is conducive to efficient operations.
3.98	46	Maintaining professional currency and keeping well-informed about new developments in technology and management.
3.78	18	Assigning work considering requirements, staff qualifications, workload demands and available resources.
3.74	28	Recognizing employee accomplishments encouraging employee suggestions, and recommending awards.
3.70	26	Counseling employees in a fair and objective manner.
3.70	47	Influencing and motivating personnel in performing tasks and meeting performance standards, goals, and work objectives.
3.67	16	Holding employees accountable for performance and professional standards as set forth in the Performance Appraisal document and relevant FAA Guidelines.
3.67	20	Monitoring work flow and making timely adjustments to improve the utilization of human and material resources.
3.48	12	Participating in planning, recommending, and scheduling employee training and development in accordance with need.
3.48	50	Working with individual employees to establish and communicate performance standards and objectives.

SECURITY

MEAN RATING	TASK NUMBER	TASK STATEMENT
4.06	1	Fostering harmony, high morale, and a cooperative atmosphere that is conducive efficient operations.
4.00	13	Identifying employee deficiencies and taking or recommending appropriate corrective action.
3.94	2	Ensuring that work unit staff demonstrates a working knowledge of policies, procedures, rules, and regulations.
3.78	28	Recognizing employee accomplishments, encouraging employee suggestions, and recommending awards.
3.67	21	Communicating important operational information to relevant staff to improve productivity, safety, and services.
3.67	33	Ensuring the effective performance of duties by employee in unusual or emergency situations.
3.56	4	Conducting proficiency reviews and performance improvement discussions in a timely manner and forwarding reports to management.
3.56	12	Participating in planning, recommending, and scheduling employee training and development in accordance with need.
3.56	46	Maintaining professional currency and keeping well-informed about new developments in technology.

AIRWAY FACILITIES

MEAN RATING	TASK NUMBER	TASK STATEMENT
4.01	1	Fostering harmony, high morale, and a cooperative atmosphere that is conducive to efficient operation.
3.90	47	Influencing and motivation personnel in performing tasks and meeting performance standards, goals, and work objective.
3.58	26	Counseling employees in a fair and objective manner.
3.55	16	Holding employees accountable for performance and professional standards as set forth in the Performance Appraisal document and FAA Guidelines.
3.54	18	Assigning work considering requirements, staff qualifications, workload demands and available resources.
3.46	11	Working with employees in identifying needs a nd making recommendations for improvement in operations, the organization, and the work environment.
3.46	45	Participating in identifying causes and resolutions to conflict.
3.44	50	Working with individual employees to establish and communicate performance standards and objectives.
3.42	12	Participating in planning, recommending, and scheduling employee training and development in accordance with need.
3.42	20	Monitoring work flow and making timely adjustments to improve the utilization of human material resources.

FLIGHT STANDARDS

MEAN RATING	TASK NUMBER	TASK STATEMENT
4.08	1	Fostering harmony, high morale, and a cooperative atmosphere that is conducive to efficient operation.
3.96	47	Influencing and motivating personnel in performing tasks and meeting performance standards, goals, and work objectives.
3.78	46	Maintaining professional currency and keeping well-informed about new developments in technology and management.
3.67	28	Recognizing employee accomplishments, encouraging employee suggestions, and recommending awards.
3.66	18	Assigning work considering requirements staff qualifications, workload demands and available resources.
3.62	2	Ensuring that work unit staff demonstrates a working knowledge of policies, procedures, rules and regulations.
3.58	20	Monitoring work flow and making timely adjustments to improve the utilization of human and material resources.
3.54	16	Holding employees accountable for performance and professional standards as set forth in the Performance Appraisal document and relevant FAA Guidelines.
3.47	11	Working with employees in identifying needs and making recommendations for improvement in operations, the organization, and the work environment.
3.48	26	Counseling employees in a fair and objective manner.

OTHER ATC

MEAN RATING	TASK NUMBER	TASK STATEMENT
4.00	1	Fostering harmony, high morale, and a cooperative atmosphere that is conducive to efficient operation.
3.89	47	Influencing and motivating personnel in performing tasks and meeting performance standards, goals, and work objectives.
3.82	16	Holding employees accountable for performance and professional standards as set forth in the Performance Appraisal document and relevant FAA Guidelines.
3.71	11	Working with employees in identifying needs and making recommendations for improvement in operations, the organization, and the work environment.
3.68	28	Recognizing employee accomplishments, encouraging employee suggestions, and recommending awards.
3.64	29	Keeping employees aware of career progression opportunities and assisting them in planning and achieving their goals.
3.61	18	Assigning work considering requirements, staff qualifications, workload demands and available resources.
3.53	34	Coordinating and integrating work unit activities with other interfacing work units.
3.50	17	Initiating questions about and responding to the technical and human resources needs of employees.
3.05	26	Counseling employees in a fair and objective manner.

OTHER

MEAN RATING	TASK NUMBER	TASK STATEMENT
4.15	1	Fostering harmony, high morale, and a cooperative atmosphere that is conducive to efficient operations.
4.05	47	Influencing and motivating personnel in performing tasks and meeting performance standards, goals, and work objectives.
3.85	3	Initiating, reviewing, commenting on, and forwarding reports to management.
3.75	18	Assigning work considering requirements staff qualifications, workload demands and available resources.
3.73	26	Counseling employees in a fair and objective manner.
3.65	16	Holding employees accountable for performance and professional standards as set forth in the Performance Appraisal document and relevant FAA Guidelines.
3.58	41	Selecting personnel to fill vacancies using official guidelines.
3.58	50	Working with individual employees to establish and communicate performance standards and objectives.
3.57	11	Working with employees in identifying needs and making recommendations for improvement in operations, the organization, and the work environment.
3.54	49	Working with employees in establishing and communicating unit goals and objectives.

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