VALIDATION PROCESS
FOR
FIREFIGHTER JOB DESCRIPTION

EXECUTIVE LEADERSHIP

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ABSTRACT

Well-written job descriptions support a variety of functions. They show job requirements, support wage and salary administration, and serve as support documentation for legal compliance. Fire departments that do not have a Human Resource work section, or a City Personnel Department attentive to their needs, may be operating from job descriptions that are more than five years old. Today, laws and labor/management agreements make it imperative for organizations to use logical systematic approaches to writing and revalidating job descriptions.

The purpose of this research was to revalidate the existing job description for the position of Firefighter on the Oklahoma City Fire Department. An evaluative research method was chosen due to an existing job description that needed to be evaluated against current standards. The research question was, “What steps should be taken to revalidate job descriptions.”

The procedure for the research started by calling several meetings with the Human Resource work section of the fire department and the Personnel Analyst of Oklahoma City. The Master Task List (MTL) used in 1983 was modified to include current job functions of a fire fighter. To validate the revised MTL a random survey was conducted of a selected group of fire department personnel. The research resulted in a methodology used to revalidate the department’s current job descriptions. It was recommended the research be expanded to identify methods of writing job descriptions for positions for which they do not currently exist. Also, a job description should be evaluated on a five-year basis.
INTRODUCTION

A well written job description supports a variety of administrative functions and gives the organization beneficial results. These benefits include:

* it shows job requirements and training needs;
* it supports wage and salary negotiations;
* be a guide for physicians to use in post job offers, pre-employment physicals, workers’ compensation and disability cases.

However, the most important result of the job description is it clarifies, to a potential applicant and incumbent employee, the essential requirements of a job. When individuals do not understand their jobs, what they must do, how they are to do it, and with whom they must work, confusion and misunderstandings occur. In many organizations once the job description is written, it is put on a shelf and not reviewed on a consistent basis. Therefore, the question for this research was, “What steps must be taken to revalidate job descriptions?” The purpose of this research was to identify a methodology to revalidate the job description of a firefighter for the Oklahoma City Fire Department. The job functions of a firefighter, in some ways, may be the same as it was ten years ago. However, the complexity, amount of risk, and the cost of providing service has changed noticeably over the past ten years. Based on that fact, and because the last review of the firefighter job description was done in 1983, an evaluative research method was chosen. The evaluative research would allow for a comparison of the existing job description against today’s requirement.
BACKGROUND AND SIGNIFICANCE

Historically, the fire service has met challenges with all the courage and technical skill that can be mustered. Fire fighting is demanding manual labor. Because of that, emphasis was put on staffing fire trucks with physically strong people. Those people were taught the “job,” through the war stories and experiences of those firefighters who had been on the job the longest. The Oklahoma City Fire Department, like many departments around the country, has its own culture and traditions.

In 1976 the first job descriptions for the department were analyzed and field tested. The test was conducted by the City of Oklahoma City with the cooperation of International Association of Fire Fighters (IAFF) Local 1524. The job descriptions developed during that time gave an opportunity to benchmark wages based on the critical skills, knowledge and abilities required to do the job functions of a firefighter. This documentation strongly influenced wage negotiations and subsequent cost of living raises for Oklahoma City firefighters. In 1988 the City of Oklahoma City used Job/Task Analysis methodologies in maintaining and modifying the Classification System. The Classification Section of the Procedures Manual outlined detailed procedures for maintaining the system. This study is justified for the Oklahoma City Fire Department because job descriptions have not been revalidated in almost ten years!

When a job description is written or revalidated it should be linked to the organization’s mission statement and assessed in the context of the strategic plan.

The strategic plan is composed of identified goals related to the organization’s mission and strategic objectives necessary to accomplish the goals. Assignment of responsibility for the accomplishment of strategic objectives is the basis for the essential functions of the job descriptions. Therefore, writing or
revalidating job descriptions, should be a compilation of processes to systematically collect, analyze, and document the important task of a job to accomplish the organization’s mission. This research relates to the Management Process section of the Executive Leadership course of the Executive Fire Officer program. The course material identified the key subsystems that comprise the Environmental System of an organization. The subsystem that relates specifically to this research is called “Structural.” That subsystem contains the following elements: Tasks, Units, Work Flow, Authority, Communications and Information Flow, and Rules and Procedures.

**LITERATURE REVIEW**

The purpose of the review of literature was to find material to answer the research question, “What steps should be taken to revalidate job descriptions.” To support this research it was also important to look at why job descriptions are written and a process to revalidate them.

A report titled, *Economic Proposal FY 78/79* was conducted for the Oklahoma City Fire Department, the report made the following points:

By January 1977, the senior level firefighter found that he was $5,245 or 30% short of the Bureau of Labor Statistics intermediate budget level. In percentage terms he earned 70% of the salary necessary to maintain a moderate standard of living. In fact, Oklahoma City Firefighters have lost in excess of $1,800 more in the five-year period since 1972 in real buying power. Firefighters’ earnings, even at maximum scale, were not in the past and are not now adequate for them to maintain a moderate standard of living as defined by the Bureau of Labor Statistics.
Further, over the past five years the firefighter’s ability to reach for this moderate standard of living has diminished. Oklahoma City Firefighters clearly have been the victims of the current recession and inflation and are being paid extremely meager wages in Oklahoma City (Section I).

Section III of that same report, went further to establish the need for job descriptions. The report drew the following conclusions:

The task studies introduced in this proposal include only those job descriptions within the bargaining unit . . . The task analysis conducted by the City [in concurrence with the bargaining unit] in our opinion is valid. It might be said here that the opportunity to jointly produce these job descriptions has effectively earned the support of the entire membership . . . Certainly the success of the task analysis was the labor/management approach to this project. The fact that we have a valid task analysis gives us now an opportunity to benchmark wages based on the critical skills, knowledge and abilities required to perform the job functions of the various classifications in the bargaining unit.

The review of this literature can be summarized in three points. One, to support positions within the fire service knowing the job functions of the various positions is imperative. The criticality of a position must be identified fairly to assess the value of the position to the organization and to the citizens of the community. Secondly, establishing a labor/management liaison will give a forum for dialogue designed to reduce mistrust and the “us -vs- them” attitude. This leads to the third point, a clearly defined job description may help the governing body and the bargaining agent to negotiate for a fair and equitable wage.
According to Nancy Grant and David Hoover, authors of the book Fire Service Administration, “Before someone is hired, the organization/fire department must identify exactly what the individual is to do. Job analysis is the process of identifying what activities are to be done, what skills are required, what knowledge is necessary, etc.” (Grant & Hover, 1994, p.120). The authors further write:

Although this seems simplistic, identifying exactly what is required in a given position is the first stem in job analysis. Several techniques can be used to conduct this analysis:

**Observation** - involves visiting the place of work and watching an individual do his or her tasks. This is difficult in the fire service given the variety of tasks performed, the uncertainty of each day’s schedule, and the risk involved in emergency response.

**Interviews** - with current fire fighters and supervisors can be useful because they can be scheduled away from the actual work location and do not interfere with daily operations. If designing a new position, it is necessary to interview the supervisors of the new position and advisable to interview others who will be interacting with a new position.

**Expert panel task analysis** - is another way to identify the tasks performed in a given position. A group of experts in the field are gathered and asked to identify what a person in the position in question does.

**Questionnaires** - can also be used to gather information. They are generally in two parts. The first section asks the worker to describe the kinds of experiences, qualifications, attitudes, information, and skills necessary to do the job. The second section contains a list of various activities. The worker is asked to identify those activities performed on the job and what percentage of time is spent on each. (Grant & Hover, 1994).
According to the authors of the book, Organizations -Behavior-Structure-Process, "The purpose of job analysis is to provide an objective description of the job itself" (Gibson, et.al, 1991, p.473). The authors further state:

When job analysis are performed information should be gathered from three aspects of all jobs: (1) job content, (2) job requirements, and (3) job context. The authors defined the universal job aspects in the following manner:

*Job content* - refers to the activities required in the job. Depending on the specific job analysis method used, the description can be either broad or narrow in scope. It can vary from general statements of job activities to highly detailed statements of each hand and body motion required to do the job. One widely used method, **Functional Job Analysis (FJA)**, described jobs in terms of:

1. What the worker does in relation to date, people, and jobs.
2. Methods and techniques the worker uses.
3. Machines, tools, and equipment the worker uses.
4. Materials, products, subject matter, or services the worker produces.

Besides defining what activities, methods, and machines make up the job FJA also defines what the individual doing the job should produce. FJA can, therefore, be the basis for defining standards of performance.

*Job requirements* - refer to factors such as education
experience, degrees, licenses, and other personal characteristics thought to be required of an individual in order to perform the job content. In recent years, the idea has emerged that job requirements should also identify skills, abilities, knowledge, and other personal characteristics required to perform the job content in the particular setting. One widely used method, the **Position Analysis Questionnaire (PAQ)**, takes these human factors into account through the analysis of the following job dimensions:

1. Information sources critical to job performance.
2. Information processing and decision making critical to job performance.
4. Interpersonal relationships required of the job.
5. Reactions of individuals to working conditions.

The PAQ method can be adapted to jobs of all types, including managerial jobs.

Job context - refers to factors such as the physical demands and working conditions of the job, the degree of accountability and responsibility, the extent of supervision required or exercised, and the consequences
of error. Job context describes the environment within which the job is to be performed (Gibson, et.al, 1991, p 473-475).

According to, The 1998 Executive File: Hot Employment Issues, there is not a particular format for a job description; however, consideration should be given to breaking down the job description into different categories such as:

* essential functions

• other functions

• physical and mental requirements

• equipment operated, if any

• licenses or certifications required, if any

• working conditions

• supervisory control

• number or type of employees supervised, if any

• required output, if appropriate

• Fair Labor Standards Act status

• bargaining unit coverage, if applicable

• date of preparation of job description and revision dates

An interview was conducted with Troy Coleman, Ph.D., of
Coleman and Associates a Dallas, Texas based company; during the interview, Dr. Coleman stated there were various methods to validate job descriptions. He further explained the job description is the basis to use to develop selection and promotional instruments. He provided the following process for validation of job descriptions:

1. Review Job Description
2. Tailor Job Analysis Validation Survey (JAVS) to make it congruent with Job Description
3. Administer JAVS to incumbents
4. Conduct Field Audits to verify job content and job process
5. Compile and Analyze JAVS Data
6. Compare JAVS Data with Field Audit Data
7. Use JAVS Report to determine the number of test items to come from each examination source document and each area of expertise or competency
8. Use JAVS Report and Field Audit Data to design assessment center exercises.

Dr. Coleman explained the JAVS is derived from the essential functions of the job. Once JAVS is written, it is given to a sample population of individuals currently in the position and to the supervisors of the position. This assures
two methods of verifying job content (Dr. T. Coleman, personal interview, August 6, 1997 and December 15, 1997).

The last review of literature was the Personnel Employment Classification and Compensation Manual of the City of Oklahoma City. The focus was the methodology used to validate job description. The starting point was the Master Task List, when viewed as a whole, it gives the reader an accurate description of the work involved. The MTL is a compilation of task statements. Tasks statements are defined as simple, declarative statements which are the base point in job analysis. This information allows the personnel analyst to be able to make judgements and inferences about what is required on the part of the workers. After development of the MTL, validation of the data gathered must be done. The various methods discussed previously in this literature review can be used. However, once the validation of the of the MTL is complete the final product is the job specification. There is considerable variety in the format and style of specification for different organizations. The City of Oklahoma City’s job specifications follow the outline below:

1. Job Summary
2. Duties and Responsibilities
3. Job Requirements
4. Evaluation Criteria

Prior to writing the specification, the job should be broken down into general job functions, that is, it should be broken down into three or four areas of work. The master task list should then be divided into groups of tasks which illustrate the job functions (OKC Personnel Dept., 1988).

In summary, it has been explained why a job description should be written and the benefits it offers to an organization. It has been expressed there are three aspects considered “universal” related to job analysis. Furthermore, there are several methods to use to gather information for the task analysis that leads to a description of the job.

PROCEDURES

This description of procedures is unique to the Oklahoma City Fire Department; but could be modified to fit any organization’s needs. As pointed out in the literature review, there are several methods to use to gather information for the task analysis. The Oklahoma City Fire Department had a job description that needed to be updated and validated based on current job functions. The procedures were followed to answer the research question, “What steps should be taken to revalidate job descriptions.”

The first step was to discuss the research question with the Fire Chief to gain his approval and get his insight.
Issues discussed were justification for revalidating the job description, soliciting the Bargaining Agent and Personnel Department involvement, division of labor, time lines, and staffing. Notification was made by the Fire Chief to the President of the bargaining unit to inform him of the project and identify a contact person. A committee was established between the Personnel Department and the Human Resources work section of the department. The committee consisted of a deputy chief, major, lieutenant and two city Personnel Analysts. Topics discussed at the first meeting included: general overview of the project, obtaining background information, deciding on course of action, and determining at what point in the project the Personnel Department would be involved.

The first objective was to modify the old Master Task List (MTL) to bring it in line with current functions of the department. This process required two meetings with the Personnel Department to clarify how changes should be made and to ensure they were made correctly. Personal meetings and telephone interviews were conducted with the Operations Chief, Emergency Medical Services (EMS) Chief, Special Teams Chief, and the representative of the Bargaining Agent to gain their input on job functions of a firefighter. A “How goes it” meeting, was convened with the Personnel Analysts and Human Resources work section to review the MTL prior to the
validation process (see Appendix A).

After modification of the MTL, the number of budgeted positions for firefighter and a list of their names was obtained. This list was used as the basis for determining how many firefighters the MTL would be sent to in order to obtain a 95% confidence level. An update briefing was given to the Fire Chief and the Bargaining Agent representative to inform them of the progress of the project and gain their support of a cover letter for the MTL. The letter briefly explained the purpose and criticality of the project and described the project’s benefits. The letter also asked for the firefighter’s support of this endeavor. An instruction sheet for completion of the MTL, requested the firefighter make additions, deletions, or changes on the forms and return the completed forms to Fire Administration.

Before the MTLs were mailed to the firefighter’s homes, an e-mail message was sent to all the Operations District Chiefs, giving them general information about the project. This was done in an effort to provide them with information to answer questions they might receive from their firefighters. The MTL, cover letter, and instruction sheet, along with a stamped self addressed envelope was mailed to the firefighter’s address of record. Thirty days was the turn around time for the MTL to be sent back to Fire
Administration.

When the MTLs were returned to Fire Administration, a meeting was set with the Personnel Department. At this point the Personnel Analysts became more involved with the refinement of the MTLs to get to the last step of the process, the job specification. To write the job specifications the task of the MTL had to be grouped into job functions. Those functions were broken down into six major areas of work:

- firefighting and hazard mitigation
- emergency medical services
- diving
- hazardous materials
- public education
- station, tool, and equipment maintenance

The next step was to derive the skills, knowledge, and abilities (SKAs) which were used to write the job requirements. Inferences were made on the SKAs and the willingness of the worker traits necessary to perform the tasks. This was done during the meeting of the Personnel Analysts and the Human Resources work section. The next step was the scoring of the inferences by the Personnel Analysts. According to the information that was provided, scoring symbols were used and each had an assigned point value: $+ = 2$
points, / = 1 point, 0 = 0 points.

There were four aspects scored on each inference:

**Barely Acceptable Workers** (B) This shows that extent to which a barely acceptable worker possesses a particular skill, knowledge, or ability. If all the workers possess it, score a +. If only some have it, score a /. If none of them have it, score a 0.

**Superior Workers** (S) Will possession of this particular skill, knowledge, or ability make the person a superior worker? If the possession of it is very important, score a +. If it is valuable, but not required, score a /. If possession of it makes no difference, score a 0.

**Trouble Likely** (T) How much trouble will it cause if the worker does not possess a particular skill, knowledge, or ability when hired? If the worker does not possess it and cannot acquire it within six months, score it a +. If it can be acquired within six months and is important, to the job, score a /. Score a 0 if it is safe to ignore.

**Practicality** (P) Demanding this element in the current job market, how many openings can we fill? Score a + if all openings can be filled, a / if only some can be
filled, and a 0 if almost no openings can be filled.

At this point of the procedure the project became complicated. After all inferences were scored, the total point value of each was calculated by the following formula: $(S+T+SP) -B-P$. The resulting score was either positive or a negative number. The higher the score, the more important the inference. The highest possible score was +6. The analyst scored the inferences independently then negotiated to a final score that was within two points of each other. Final scores of +6 or higher became the job requirements (see Appendix B).

The Job Summary and the Duties and Responsibilities sections of the previous job description were evaluated for modification. The Job Summary of the job description was evaluated against the following criteria:

1. Location of job
2. Level of job
3. Broad statement describing what the employee does
4. Statement about additional tasks
5. Statement describing how employee communicates, with whom and for what purpose
6. How employee delegates or supervises
7. How, when, and by whom employee’s work is supervised
8. General job functions.
The Duties and Responsibilities section was written by using the general job functions that were identified from the MTL, as headings, then listing the tasks that support the job function.

The last area was Evaluation Criteria this section consisted of the following criteria: difficulty, interpersonal relations, working conditions, physical requirement, supervision given and received. These areas were evaluated from the previous job description by the Personnel Analysts and the Human Resource work section. It was agreed the content of the above areas was sound however, minor modifications would be made that did not significantly affect the outcome.

A final draft was typed and reviewed by the Personnel Analysts and the Human Resources work section. A meeting with the Fire Chief and the Bargaining Agent representative was set to brief them on the final draft for their approval. The draft was approved and copies were sent to the City Personnel Department, the Fire Training Division, the Bargaining Agent, and put in the Administration section of the department’s Standard Operating Procedures Manual.

RESULTS

The research revealed attitudes of management and labor
can affect the outcome of the project. It is important to gain the cooperation of both sides and be aware of their driving and restraining forces. Periodic updates on the progress of the project are important. Spending time in this area will benefit the project by alleviating anxieties.

There is no one process that will fit every department due to labor/management agreements, staffing, budgeting, and department philosophy. However, this can be viewed as a major strength of the research, because it allows each department flexibility in establishing job functions necessary for their department.

This section also contains a summary of the process used to answer the research question, “What steps must be taken to revalidate job descriptions?” They are as follows:

1. Speak with the Fire Chief and City Personnel Analysts to determine the need for revalidating job descriptions.

2. Contact Bargaining Agent (if applicable) to explain project and solicit a representative to serve as a liaison.

3. Form a committee from members of the Fire and Personnel departments.

4. The committee should meet to determine process to
use, make assignments, and establish time lines.

5. A Master Task List (MTL) should be developed and refined.

6. Identify a means to send MTL to personnel currently holding the job and supervisors.

7. Collect MTL to make inferences and establish job requirements.

8. Review components of previous job description for modification and updating.

9. Write final draft, meet with committee members, Fire Chief, and Bargaining Agent to gain concurrence.


Periodic updates of the projects status will be contingent on the management style of the supervisory personnel. The final copy of the job description developed is in (see Appendix C).
DISCUSSION

This section presents a personal conclusion about the research results. It also contains an evaluation of the findings and organizational implications that stem from the findings. The process was specific to the Oklahoma City Fire Department. The process used compares directly to the findings discussed in the literature review and followed components that were identified as being important to writing and validating a job description. It was my opinion the process used to validate the current job description of the Oklahoma City Fire Department was feasible.

The implication of the results is proportional to the importance of well written job descriptions to the Oklahoma City Fire Department. Making a positive effort to identify job functions will minimize problems that directly affect the working conditions of the firefighter and indirectly affect the service to the citizens, will have a major impact.

RECOMMENDATION

Based on the research material available and process established, I recommend the Human Resources work section of the Oklahoma City Fire Department proceed and support a plan to revalidate existing job descriptions and write those job descriptions for positions where they do not exist. The plan
described in this research is a starting point toward that development.
References

Economic Proposal (1978). By Oklahoma City Fire Fighter Association, Local 1524 IAFF


