

THE FUNCTIONS AND ACTIVITIES OF THE
MUNICIPAL FIRE CHIEF

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CHAPTER I

INTRODUCTION

Municipal fire protection has become increasingly complex. Not only has the fire chief of a municipal fire department been faced with new fire problems created by our highly technical and material society, but, changes within the fire department itself, including the organization of labor, has further complicated his job.

The fire chief of today, more than ever before, needs to function at a high level of management. As a professional manager, the fire chief must be very much aware of the actual functions and activities required of that position.

Information concerning the fire chief's functions and activities and written specifically for the fire service is scarce. A determination of fire chief management responsibilities is important for identifying books, research studies and other literature which explains and investigates them. A great wealth of recognized and "proven" information concerning managerial functions and activities in business and industry has been developed over the years. Much also has been written about management in the public sector. If it can be determined that the management functions and activities of municipal fire chiefs are similar to those of managers in business, industry, and the public sector, it can be reasonably assumed that fire chiefs, upon developing general management

skills, would be able to transfer and use them in the management of municipal fire departments.

The Problem

At the present time, very little organized and documented information is available on the management functions and activities of municipal fire chiefs. In addition, little evidence is available to indicate that the functions and activities of municipal fire chiefs are similar to those of high level managers in business, industry, and the public sector. Books, research studies, and other literature developed for business, industry, and the public sector generally are not being used by the municipal fire chief.

Need for the Study

Municipal fire departments operating within a complex society need fire chiefs who possess high-level management skills. In order to perform his job efficiently and effectively, the fire chief must have a thorough knowledge and understanding of the functions and activities normally required in this position. The fire chief also needs to know which books and other types of literature are available to explain in detail his functions and activities. Since this type of information is not readily available in "fire service" publications, the fire chief needs to be able to transfer and use the knowledge and findings from recognized management books and research studies developed for managers in business, industry, and even the public sector.

Purpose

The purpose of this study was to determine the management responsibilities of the municipal fire chief and to determine if these responsibilities are similar to the functions and activities of high-level managers in business, industry, and the public sector, and also to determine if general management skills might be applied to the position of municipal fire chief. The purpose of this study also was to determine how the present municipal fire chiefs acquire the skills and knowledge necessary to perform these functions and activities.

Research Questions

To fulfill the purposes of this study the following specific questions were considered:

1. What are the functions and activities of the municipal fire chief?
2. Are these functions and activities similar to those of high-level managers in business, industry, and the public sector?
3. How do present municipal fire chiefs acquire the necessary skills and knowledge to perform these functions and activities?
4. Can information and knowledge gained from authoritative management books, research studies, and other literature developed for business, industry, and the public sector be applied to the position of municipal fire chief?

Definition of Terms

Activity: A set of organizational tasks required for performing a specific function. The process in which a fire chief is involved by

virtue of being in that position.

Business: A commercial enterprise in the private sector.

Delphi Technique: A means of securing expert convergent opinion without bringing the experts together in face-to-face confrontation. This opinion of experts is gained through the use of successive questionnaires and feedback with each round of questions being designed to produce more carefully considered group opinion.

Fire Chief: The chief administrator and manager of an organized fire department. A department head in a municipal government.

Fire Service: The organized fire prevention and fire fighting service, including its members individually and collectively. A municipal fire department is part of the fire service.

High-Level Manager: The chief or top manager of a large unit. A manager that is responsible for the actions of many people, the proper allocation of large budgets, and the accomplishment of the units goals. Examples include: a plant manager, owner-manager of a department store or the chief of a fire department.

Industry: A manufacturing activity which employs large personnel and capital for the purpose of creating value.

Management: The act or acts of managing. A dynamic process which effectively utilizes all resources, human and material, in achievement of policy and goals established for an organization.

Manager: One who directs, handles, controls, or carries on business or affairs. One who organizes work to be done and then oversees those who do it.

Managerial Functions: A group of actions relating to one's official position. The actions designated for a manger.

Municipal: Relating to a municipality. A primarily urban political unit having corporate status and powers of self government such as a city or town.

Public Sector: Those businesses and/or organizations which are created and operated by and for the people of a society. Examples would include public, federal, state, and local government entities such as U.S. Office of Education, state police, or a municipal hospital. The "Public Sector" is opposite of the "Private Sector".

Role: An organized set of expected behaviors belonging to an identifiable office or position.

CHAPTER II

REVIEW OF LITERATURE

Introduction

The problem with which this study was concerned was a lack of organized information on the functions and activities of the municipal fire chief. Also there was a lack of evidence showing the similarities of the fire chief's functions and activities to the functions of high-level managers in business, industry and the public sector.

The review of literature concentrated in five areas. First, research studies and articles concerned directly with the management functions and activities of the municipal fire chief were reviewed. This section was relatively brief since little has been done in this area.

Second, books written specifically about fire department management were reviewed. Only 12 books in total were discovered which had been written for the fire service on management of the municipal fire department. A few of these publications dealt specifically with the functions and activities of the fire chief.

Third, books written about management within the public sector were reviewed. The municipal fire chief, of course, is a manager in the public sector. These books have direct applicability to a better understanding of the functions and activities of the fire chief. The public sector manager's functions and activities were identified and reported

in this section as a basis for comparing the fire chief with other public sector managers. Books about the public sector are relatively new since this field is currently being examined.

Fourth, highly established and contemporary books about the management functions and activities within business and industry were reviewed. Many of these publications dealt specifically with the functions and activities of the high-level manager. These functions were identified and reported in this section as a basis for comparing the similarities between the fire chief and the manager in business and industry. So many books have been written on the subject of management that this review of literature examined only a few of the books available. Older management books still on the market, as well as contemporary works, were included in this section.

Finally, the fifth section of this review of literature dealt with those publications which were used to facilitate this study. For example, the names and addresses of the municipal fire chiefs to whom the questionnaire was sent came from a publication listed in this section.

To summarize, the review of literature was separated into five sections:

1. Fire Chief Studies and Articles,
2. Fire Department Management Books,
3. Public Sector Management Books,
4. Business and Industry Management Books, and
5. Publications that Helped Facilitate this Study.

Fire Chief Studies and Articles

A research study conducted by Cragan (1975), reported in Fire Chief Magazine, entitled "What Management Courses Do Fire Chiefs Need?", provides a relatively good insight into the functions and activities of the municipal fire chief. After a two-day brainstorming session with 12 Illinois fire chiefs, a questionnaire was developed to determine the management training program needed by fire chiefs and fire officers in the state. Twelve hundred questionnaires were mailed of which 638 were filled out and returned by Illinois fire chiefs and officers. Subject areas were ranked by the participants with the following results:

1. Emergency Planning (prefire planning, disaster planning and master emergency planning)
2. Personnel (labor management relations, delegation of authority, organization of staff)
3. Planning (goal-setting, need forecasting and station planning)
4. Fire Research (up-dating on current experimentation in fire prevention and suppression)
5. Leadership (types of leadership, decision-making models and appointed vs. natural leaders)
6. Local Fire Codes and Ordinances (fire offices input and responsibilities for enforcement)
7. Training (supervision of, in-station, at academies, and evaluation of job performance)
8. Oral (public speaking, small group, and persuasive communication)
9. Written (report and creative writing)
10. School System (general education of students in fire prevention, emergency procedures and career development in Fire Science)
11. Organizational (superior-subordinate, upward and downward and lateral)

12. News Media (management of news and improvement of public image) (p. 41).

The report also listed 24 additional subject areas (in rank order in which fire chiefs and officers need training. Other areas included: human behavior and motivation (rank No. 19), interpersonal relations (rank No. 20), and budgeting (rank No. 24). From this list of subject areas inferences can be drawn about the actual function and activities of the "fire officers".

"What is the fire chief's role?" According to Chief Jaffe (1973) of Passaic, New Jersey, the chief's role is to provide "leadership". Included under this broad concept Jaffe points out that the chief is involved with: commanding, planning, organizing, coordinating, directing, and controlling. Management tools needed by the executive fire chief include: "The ability to gather, interpret and present data in a meaningful form. . . . Principles of organization . . . work scheduling, human relations, personnel management, etc." (Jaffe, 1973, p. 31).

"Five Fundamentals for the Fire Chief" as outlined by Chief Fetters (1970) in *Fire Chief* are: (1) knowledge of the work (through understanding of the technical aspects of fire protection), (2) knowledge of responsibilities (an understanding of the limits of his authority in the department and his role in the chain of command), (3) skill in leading (practice of good human relations), (4) skill in instruction (the ability to prepare and present information), and finally (5) skill in improving methods (the ability to "change").

Chief Gratz (1973) indicated in an article in Fire Chief Magazine that the "personnel function" of the fire chief is one of his most important since his most valuable resource is "his men". The activities within the personnel function include: classification, recruitment,

administration of wages, labor relations, and in-service activities (such as training, discipline, evaluation, promotion, and work schedules).

A research study conducted by the California State Department of Education entitled *A Study of the Fireman's Occupation* (Allen, 1968) attempted to determine the duties, responsibilities, and training requirements of all ranks within a fire department. A survey questionnaire was used with 11,660 individuals representing 90 fire departments participating. The study was designed to make an occupational task inventory of all the ranks within the fire service including the fire chief. Results and conclusions of this work were vague. Apparently, the researcher selected the tasks and had the participants respond to them. The findings were reported in over 200 tables which utilized a complex coding system.

Fire Department Management Books

Only a few books were discovered which had been written specifically about fire department management with just a few of these dealing directly with the functions and activities of the fire chief. Two of these publications openly report that the functions of a manager in the fire service are the same as the functions of managers in other public and private organizations.

In *Fire Fighting Strategy and Leadership*, Walsh and Marks (1977, p. 298) state that "The functions of a manager include planning, organization, direction, staffing, and control. All managerial activity can be classified under these five categories." They go on to state that:

Managers perform the same functions regardless of the type of organization structure or their place in it. . . . Because of

the universality of managerial functions, anything significant said about one manager applies to all managers (p. 298).

Much of the information contained in Walsh and Mark's book, as in other fire service books, dealt with the technical subject area of fire protection and suppression.

The National Fire Protection Association's (NFPA, 1977a, p. 2) publication on fire management also states that "Management concepts and principles are essentially universal." This NFPA book entitled Management in the Fire Service also points out an interesting concept as follows:

Managers, particularly at high levels, have always been aware of the great similarities in managing different organizations because they know that the required technical knowledge exists among the people in the organizations, and that they can draw on that expertise. At lower levels of management, on the other hand managers usually must possess some of that technical expertise themselves. Direct supervision of work requires that the manager understand the intricacies of the work at least sufficiently to recognize what is right and what is wrong (p. 2).

The management "functions" in this book were classified as:

1. Fire Prevention Activities--codes, operational tasks, and inspections;
2. Loss Prevention Activities--prefire planning and related functions;
3. Fire Ground Command Management Functions;
4. Management of Physical Resources;
5. Fire Service Personnel Management; and
6. Training as a Management Function.

These "functions" are more "administrative responsibilities" than they are personal functions of the chief. The book also spent considerable

time on the concept of management by objectives. In this section some discussion revolves around the decision-making process.

The "Management Cycle," as defined by Favreau (1969, p. 16), consists of "planning, organizing, directing, controlling, and coordinating." This acronym PODCC revolves around the objectives of the organization as a continuous cycle. PODCC is a derivative of Gulick's POSDCORD which represents the initials of management functions: planning, organizing, staffing, directing, coordinating, reporting, and budgeting. Following Favreau's line of reasoning Gratz (1972, p. 9) outlined the four functions of management, from Gulick's model, as "planning, organizing, leading, and evaluating."

From Gratz's Table of Contents we can see the further breakdown of these four major functions:

1. The Function of Planning
 - The Scope of Planning
 - Fire Department Planning
 - Budgeting
 - Planning Fire Stations
2. The Function of Organizing
 - The Scope of Fire Department Organization
 - Guidelines for Organizing the Organization
 - Organizing the Fire Department
 - Staffing the Fire Department
3. The Function of Leading
 - The Scope of Leadership
 - Leadership in Action
 - Communications
 - Leadership in Public Relations
4. The Function of Evaluating
 - The Scope of Evaluation
 - Fire Service Information and Reporting (pp. vi-viii).

Gratz (1972) relates the universal functions of managers to the fire chief. Interestingly, one entire chapter deals with interpersonal communications. This is probably the most extensive work found in a

fire management book on this subject. Barnard (1938) and Lohmann (1954) describe the "activity" of management as that of "communication".

The International Fire Service Training Association in The Fire Department Officer classified the "functions of the fire chief as non-fire fighting functions and fire fighting functions (Hudiburg, 1967).

A further breakdown reveals the following:

1. Fire Chief Non-Fire Fighting Functions

- Communications

- Making Decisions

- Long-Range Planning

- Activating (giving orders and implementing plans)

- Problem Solving

- Delegating Authority

2. Fire Chief Fire Fighting Functions

Coleman (1978) in his Management of Fire Service Operations examines the fire chief's role as a technical expert and a fireground commander. His book places heavy emphasis on the theories of fire behavior and fire protection and the chief's responsibilities in pre-emergency "planning", "command and control", emergency "decision making", and overall emergency operations and procedures.

Several other fire service management publications emphasize the technical fire protection and suppression areas of a fire department. Publications by Hamm (1967), International City Managers Association (ICMA, 1967), National Fire Protection Agency (1976a), and the National Fire Protection Association (1977b) relate to the management of a municipal fire department but do not emphasize the actual functions and activities of the municipal fire chief.

Public Sector Management Books

The municipal fire chief is, of course, a manager in the public sector. The books reviewed here have a direct application to a better understanding of the functions and activities of the fire chief. Books about the public sector are relatively new since this field is just presently being examined.

The functions and activities of the public manager are basically the same as the private manager. Gortner (1977) points out that:

The general administrative side of the public administrator does not vary greatly from the role played by the manager of an enterprise in the private sector of the economy. Most of the managerial theories that are currently accepted as valid may be used by public or private officials because the ideas are based on relatively universal concepts about human beings (p. 5).

The Gortner book is organized into district functional areas of management. These areas include: decision making, planning, control, communication, conflict, public personnel administration, and public financial administration.

Managing the Public Sector by Starling (1977) outlines the subjects needed in a college or university public administration program. The knowledge, skill, values, and behavior competencies required by the public manager are in the areas of:

1. The political, social, and economic environment
2. Policy Analysis
3. Managerial Processes
4. Analytical Tools
5. Individual, group, and organizational behavior (pp. 6-7).

Starling's publication is separated into sections dealing with planning,

decision-making, organizational structure, financial management, and the management of people.

Looking at a specific public sector manager, that of the "health care organization," Rakich, Longest, and O'Donovan (1977) defined the functions or specific processes of these managers as the:

1. Decision-Making Process
 - Defining Problems
 - Evaluating Alternatives
2. Planning Process
 - Forecasting
 - Objectives
 - Strategies
 - Policies
 - Procedures
3. Organizing Process
 - Formal Structure
 - Informal Organization
 - Manpower Utilization
 - Labor Relations
4. Executing Process
 - Motivating
 - Leading
 - Communicating
5. Controlling Process
 - Monitoring Output
 - Facilitating Change (p. 19).

The common elements of managerial functions are also clearly outlined in Buchele's (1977) The Management of Business and Public Organizations. Buchele states that "Management is the process of defining and achieving an organization's goals through the efforts of others by performing the processes of planning, controlling, organizing, staffing, and leading" (p. 269). Buchele goes on to say that "This theory focuses on the processes performed by all managers regardless of their level, field of specialty, or type of organization (public or private)" (p. 269).

Public sector books by Berkley (1975), Fried (1976), and Henry (1975) deal directly with public administration but were not included in this review because they did not address the question of the functions and activities of the public sector manager.

Business and Industry Management Books

Many highly esteemed books have been written about the functions and activities of the high-level managers in business and industry. A few universally recognized books were reviewed in this section. The actual functions and activities of managers have been summarized and reported here as a basis for the completion of this study.

Barnard (1938, p. 217) wrote in The Functions of the Executive that the essential executive functions are "first, to provide the system of communication; second, to promote the securing of essential efforts; and, third, to formulate and define purpose."

Lohmann (1954) former Dean of the College of Engineering at Oklahoma State University put it a little differently in his unpublished dissertation, "A Concept of Organization and Management," when he stated:

In a formal unit organization, managers perform the activity of communication to aid contributor to know and agree upon a resultant, recognize incentives, and perceive the acts needed to achieve purposeful coordination of their activities (p. 154).

Both Barnard and Lohmann, at least in part, explain the management function or activity as that of "communication".

According to Lohmann (1954) the manager performs three functions:

1. He perceives and selects agreeable prospective resultants.
2. He influences the other contributors to perform the needed acts.

3. He determines the acts and the relationship of the acts that must be performed to achieve the prospective resultant (p. 120).

In Management: A System and Contingency Analysis of Managerial Functions by Koontz and O'Donnell (1976), management functions are classified by knowledge areas and include:

1. Planning (which is decision-making),
2. Organizing,
3. Staffing,
4. Directing and Leading,
5. Controlling,
6. Coordinating.

The entire book by Koontz and O'Donnell (1976) is divided into six parts: Part 1, "The Basis of Management"; Part 2, "Planning"; Part 3, "Organizing"; Part 4, "Staffing"; Part 5, "Directing and Leading"; and Part 6, "Controlling".

Management skills as outlined by Drucker (1974) include:

1. Making effective decisions.
2. Communications within and without the organization.
3. The proper use of controls and measurements.
4. The proper use of analytical tools, that is of the management sciences (p. 464).

It was the contention of Drucker that every manager needs basic "literacy" with respect to these managerial skills.

The management functions, as outlined by Dale (1965) in his book Management: Theory and Practice, come from the ideas of Gulick (1937) who coined the phrase "POSDCORB" which represents the initials of management functions: planning, organizing, staffing, directing,

coordinating, reporting, and budgeting. Dale's (1965) analysis of management functions is similar and includes:

1. Planning (including budgeting),
2. Organizing (including coordinating),
3. Staffing,
4. Directing (including communications),
5. Controlling,
6. Innovation,
7. Representation.

The functions comprising the management process include: "planning, organizing, controlling and administering" according to Wren and Voich (1976, p. 6). Their book Principles of Management: Process and Behavior, as are other management books designed for business and industry, is divided into the basic functions of the manager. From the Table of Contents the divisions are clear:

- I. Foundations of Management Theory and Practice
- II. The Planning Function [includes Decision Making and Budgeting]
- III. The Organizing Function [includes Staffing]
- IV. The Administering Function [includes Motivation, Communication and Leadership]
- V. Managing Today and Tomorrow (pp. vii-x).

A completely different approach to explaining what a manager does was taken by Mintzberg (1973) in his book The Nature of Managerial Work. Mintzberg categorized the activities of the manager by the use of managerial "roles". A set of 10 roles was developed by Mintzberg in his research study of fire chief executives. The 10 roles are as follows:

The Interpersonal Roles

1. The Manager as Figurehead
2. The Manager as Leader
3. The Manager as Liason

The Information Roles

4. The Manager as Monitor
5. The Manager as Disseminator
6. The Manager as Spokesman

The Decisional Roles

7. The Manager as Entrepreneur
8. The Manager as Disturbance Handler
9. The Manager as Resource Allocator
10. The Manager as Negotiator (pp. 55-90).

The functions and activities of managers in business and industry have been carefully categorized and recorded in universally recognized books, some of which have been on the market for 30 to 40 years. These functions and activities are clearly visible and have been reported in this review of literature.

Publications to Facilitate Study

Three publications were used to facilitate this study. In order to find the names and location of articles dealing with fire chiefs the IFSTA Fire Service Reference Guide (Williams, 1977) was used. Also, the files being developed for the next edition of this publication were reviewed in the Fire Protection Publication Department of Oklahoma State University in Stillwater, Oklahoma.

To find the names and addresses of fire chiefs to be used for the Delphi Technique two sources were used: The Municipal Year Book, 1978 (ICMA, 1978) and the Fire Service Directory (NFPA, 1970-71).

CHAPTER III

METHODOLOGY

The purpose of this study was to identify the functions and activities of the municipal fire chief and determine if they are similar to the functions and activities of the high-level managers in business, industry, and the public sector. This study also sought to determine how the present day fire chief acquires the skills and knowledge necessary to perform these functions and activities. Finally, this study was designed to determine if knowledge from highly established management books, research studies, and other literature developed for business, industry, and the public sector is applicable to the position of municipal fire chief for his (her) professional development. To accomplish the purposes of this study the methodology was organized according to the following outline:

1. The Clustered Random Sample,
2. The Initial Questionnaire,
3. The Delphi Technique Procedure,
4. The Final Questionnaire,
5. The Review of Literature,
6. The Verification of Managers,
7. The Review of Periodicals.

The Clustered Random Sample

One hundred municipal fire chiefs from cities over 30,000 population were randomly selected from The Municipal Yearbook 1978 (ICMA, 1978) (see Appendix A). Two chiefs were randomly selected from each state with the following exceptions: Delaware, Hawaii, Vermont, and Washington, D.C. each had one chief selected. California and Pennsylvania each had three chiefs randomly selected. A table of random numbers was used to make the unbiased selection.

The Initial Questionnaire

A cover letter and a return addressed post card (see Appendix B) were sent to each of the selected fire chiefs asking them to list their choices of five "most capable and respected" fire chiefs in the United States. The results of this survey were compiled and a list developed of some of the most respected and capable fire chiefs in the United States (see Appendix C). This same group of respected and capable fire chiefs was used throughout the Delphi Technique portion of the study.

The Delphi Technique Procedure

The Delphi Technique procedure was designed utilizing two questionnaires or instruments. The first instrument (see Appendix D) simply asked the Delphi group to list in outline form the functions and activities that they performed as a municipal fire chief. This instrument was deliberately left open-ended to allow original input from the Delphi participants.

The responses were compiled by the researcher and a second questionnaire was sent to the entire Delphi group (see Appendix E). This second

questionnaire was simply the compiled outline of the functions and activities of the municipal fire chief with directions asking for verification of the completeness of the outline and/or further suggestions and comments.

After receiving and compiling the second questionnaire, a final draft of the functions and activities of the municipal fire chief was prepared (see Appendix F) and sent to the Delphi group with a cover letter asking for input if any "glaring" problems with the outline were found. This third Delphi letter was accompanied by a final questionnaire (see Appendix G).

The Final Questionnaire

A final questionnaire sent to the Delphi group was developed to gather information concerning how the present day fire chiefs acquire the skills and knowledge to perform their job. Biographical data, such as age, number of years in the fire service, management positions held, and formal education were asked; as well as, additional information on references used, "key" positions held, and membership in professional organizations (see Appendix G). This information was compiled to provide a "general profile" on how the present day fire chief acquires his skills and knowledge.

The Review of Literature

To determine if the functions and activities of the municipal fire chief are similar to those of managers in private business and industry and in the public sector and if management books designed for the latter can be applied to an understanding of the fire chief's functions and

activities, the review of literature was employed. The Delphi-developed list of functions and activities of the municipal fire chief was compared with the topics and outlines revealed in the Review of Literature--Chapter II of this study.

The Verification of Managers

To further show that the functions and activities of the municipal fire chief are similar (if not the same) to those of managers in both the private business and industry and the public sector, eight local Stillwater, Oklahoma, high-level managers were selected through the Stillwater Chamber of Commerce (see Appendix H). A "camouflaged" outline of the Delphi-developed outline (see Appendix I) was personally given to each of these managers for review and verification that these functions and activities were consistent with the functions and activities they, as the local managers, perform. A verification statement form (see Appendix J) was used to record their responses and to collect data on each manager.

The Review of Periodicals

To determine if research studies and other literature developed for managers in private business and industry and the public sector can be applied to and utilized by the municipal fire chief the following review of periodicals was undertaken.

Twelve highly recognized management periodicals were reviewed with regard to article titles and article abstracts. Each article in the table of contents was placed in one of nine categories. Eight of these categories coincided with the eight categories in the Delphi-developed

outline of the fire chief's functions and activities. A ninth category was introduced for technical and miscellaneous articles that did not apply to the position of fire chief. Each periodical was recorded over a one-year time period. Different years were used to help eliminate fad or overemphasized topics by year.

A table was developed showing the 12 periodicals and the classification of their articles by category (see Appendix K). Also, a breakdown was shown of data by individual periodical and by category.

CHAPTER IV

RESULTS

The purpose of this study was to identify the functions and activities of the municipal fire chief and determine if they are similar to the functions and activities of high-level managers in business, industry, and the public sector. This study was also designed to determine how the present day fire chief acquires the skills and knowledge necessary to perform these functions and activities. Finally, this study was designed to determine if knowledge from highly established management books, research studies, and other literature developed for business, industry, and the public sector is applicable to the position of municipal fire chief for his/her professional development.

To accomplish the purposes of this study the steps outlined below were employed:

1. The Clustered Random Sample,
2. The Initial Questionnaire,
3. The Delphi Technique Procedure,
4. The Final Questionnaire,
5. The Review of Literature,
6. The Verification by Managers,
7. The Review of Periodicals.

The results of these steps are reported in this chapter.

The Clustered Random Sample

Of the 100 municipal fire chiefs throughout the United States who were randomly selected (see Appendix A) 30 responded. This, of course, represents a 30 percent response rate. Since the postcard questionnaire did not have a place for the participant's name the participants who responded were not identified.

The Initial Questionnaire

The questionnaire post cards simply asking for a listing (from first to fifth place) of the five most respected and capable fire chiefs in the nation (see Appendix B). These were used to identify the Delphi group which would be used throughout the remainder of the study. The fire chiefs identified for the Delphi group either appeared on two or more of the returned post cards or were listed in first and second place on the post card questionnaire indicating the highest and second highest rank in the participant's eyes.

Thirty-nine of some of the nation's most respected and capable municipal fire chiefs were identified (see Appendix C). The sizes of their respective cities and their mailing addresses were found in The Municipal Yearbook 1978 (ICMA, 1978) and The Fire Service Directory (NFPA, 1970-71).

Analysis of the 39 Delphi group members reveals that:

1. Twenty-four states were represented.
2. California had the highest number with nine.
3. James Shern of Pasadena was identified by the highest number of survey respondents.

4. Cities ranged in size from 11,000 population (Durham, N.H.) to over seven million (New York, N.Y.).
5. The average city size was 829,600.
6. The median city size was 306,500.

The Delphi Technique Procedure

The Delphi group of 39 were each sent the three successive questionnaires regardless of whether they answered or did not answer the first or second instruments. The first questionnaire (see Appendix D) simply asked the Delphi group to list the functions and activities which they perform as a municipal fire chief. Eighteen of the 39 fire chiefs responded to the first questionnaire. Utilizing this information, a single outline was developed which incorporated the ideas from all the participants.

The second questionnaire (see Appendix E) was developed which consisted simply of the compiled list of functions and activities along with directions asking for verification of the completeness of the outline and/or further suggestions and comments. Twenty of the original 39 Delphi group members responded (see Appendix C) with the following results:

1. Six respondents indicated the functions and activities outline was "complete as is".
2. Five respondents indicated the functions and activities outline was "complete as is" but made modifying comments and suggestions.
3. Nine respondents indicated the outline "needed corrections" and

gave modifying comments and suggestions (three of these respondents suggested major changes).

From these comments and suggestions a final draft of the functions and activities of the municipal fire chief was compiled (see Appendix F). Copies were sent, with the final questionnaire and a cover letter (see Appendix G), which asked if this final outline contained any "glaring" problems. Not a single fire chief in the Delphi group indicated any problems existed with the final outline.

The Final Questionnaire

A final questionnaire (see Appendix G) sent to the Delphi group was developed to gather information concerning how the present day fire chiefs acquired the skills and knowledge to perform their job. Twenty-three of the original 39 Delphi group members responded (see Appendix C). From this information a "general profile" was developed of today's respected and capable municipal fire chiefs:

I. Biographical Data

- A. Age: Range 32 to 67, Mean (arithmetic average) 52.
- B. Number of years as a fire chief: Range 2 1/2 to 20, Mean 11.
- C. Total number of years in the fire service: Range 14 to 42, Mean 28.

Note: By subtracting the participants' number of years as a fire chief (B) from the total number of years in the fire service (C) we can determine the range and mean of the number of years in the fire service before becoming a fire chief.
Range: 6 to 30, Mean: 17.

- D. Number of years in the fire department of which the participants were presently chief: Range 2 1/2 to 42, Mean 21.
- E. Fourteen of the 23 participants or 61 percent had no outside supervisory experience. Thirty-nine percent reported

having outside supervisory experience ranging from 1 to 15 years with an average (mean) of 5 years and a median of 3 years. Outside supervisory positions reported include:

1. Electrician Supervisor and Non-Comm. Army Officer
 2. Fire Safety Technician with Atomic Energy Commission
 3. Electronics Business Owner
 4. U.S. Navy
 5. Foreman and Petty Officer
 6. Small T.V. Service Business Manager
 7. USMC Sargent
 8. Engineering Manager
 9. Auto Parts Store Manager
- F. Number of years as a company officer (lieutenant or captain): Range 0 to 19, Mean 5.
- G. Number of years as a chief officer such as a Battalion, Assistant, or Deputy Chief: Range 0 to 16, Mean 5.
- H. It was found that 13 of the 23 participants or 57 percent were neither a Fire Marshal or Fire Prevention Officer. For those who were, the range was 1/3 to 14 with an average (mean) of 5.4 years and a median of 3 years.
- I. The number of years completed in school: Range 11 to 16+, Mean 13.6* (1 1/2 years of college).
*Note: The 16+ years reported were computed as 16.
- J. Number of contact hours of fire training schooling completed (approximate). Sixteen of the 23 participants or 70 percent answered this question. Of those that did answer the range was 32 to 2000+ with an average (mean) of 704 hours and a mode of 1000 hours.
- K. Number of fire training courses completed (approximately): Range 1 to 150, Mean 42.
- L. Number of fire training courses taught: Range 0 to 350, Mean 54, Median 30.
- M. Management textbooks read (approximate number either fire or general management): Range 3 to 350, Mean 38, Median 19.
- N. Number of management seminars attended: Range 1 to 100, Mean 25, Median 11. For approximately the following number of hours: Range 40 to 2000, Mean 418, Median 240.

II. Additional Information

- A. The most important experiences, courses or activities that prepared the participant to be a fire chief varied considerably. The major areas reported include:

Preparation	Participants indicating this experience as important
1. Experience as a Chief Officer Areas: research planning administration operations fire prevention training	57 percent
2. Management seminars	35 percent
3. College courses or a college education	26 percent
4. Motivation by encourage- ment from others such as: Other Chief Officer Fire Chief City Manager	22 percent
5. Being a part-time instructor	17 percent
6. Being able to study	17 percent
7. Managing an outside business	13 percent
8. Chief's aide	13 percent
9. Line officer experience	13 percent
10. Miscellaneous: Starting in new fire departments Diverse experience (de- partment sizes and geography) National fire service organizations Wrote fire management textbook Participation in home and church activities	

B. & C. Because of the overlapping answers given, the names of the "fire service " books and "other" books were grouped together to give a complete picture of references used.

Book or publication	Participants indicating this publication
1. Municipal Fire Administration and Managing Fire Services (ICMA)	70 percent
2. Fire Protection Handbook (NFPA)	35 percent
3. Magazines	22 percent
Fire Chief	
Fire Command	
Fire Engineering	
Fire Journal	
International Fire Chief	
Fire and Police Personnel Reporter	
Nation's Cities Weekly	
Monthly Municipal Review	
4. Fire Department Management Scope and Methods (Gratz)	17 percent
5. Fire Chief's Handbook	17 percent
6. Public Fire Safety Organization A Systems Approach (Hickey)	13 percent
7. Management in the Fire Service (NFPA)	9 percent
8. Supervisory Methods in Municipal Administration (ICMA)	9 percent
9. Many reference books	30 percent
Other responses (each listed only once):	
Functions of the Executive (Barnard)	
Managing the Modern City	
Life Safety Code	
Management of a Fire Depart- ment	
The Municipal Yearbook	
Fire Attack 1	
Fire Attack 2	
Fire Fighting Principles and Practices	
Fire Tactics (Fried)	
Fire Service Management (Favreau)	

Management (Drucker)
 Public Speaking
 Front-Line Leadership
 Master Planning (USFA)
 Uniform Fire and Building
 Code
 Fire Prevention Practices
 Forcible Entry and Ropes
 Officer's Guide to Dangerous
 Chemicals
 Building Construction for
 the Fire Service
 Fire Management
 Dictionary
 NFPA "Standards"
 Oklahoma "Red Books"
 Denver Fire Code
 Denver City Charter
 "Time Management" Books
 The Living Bible

- D. The key position (in or out of the fire service) that was used as a "stepping stone" to the fire chief's position varied. Listed below are the key positions reported by the participants.

Key positions	Participants indicating this key position
1. Training Officer	39 percent
2. Fire Suppression Officer	26 percent
3. Chief Officer: Administrative Research and Plans Operations Deputy Chief	17 percent
4. Fire Marshal (Fire Prevention Officer)	17 percent

Other Responses:

Graduate of Oklahoma State
 University
 Civil Defense Director
 Business Manager
 A "combination" of several

- E. Memberships in 90 different organizations were reported by the 23 participants. This averaged almost four organizations per person. The following breakdown was noted:

Organization	Participants involved	
	As Members	As President (past or present)
1. International Association of Fire Chiefs	78 percent	17 percent
2. State fire chiefs association	70 percent	26 percent
3. National Fire Protection Association	65 percent	*
4. International Association of Fire Chiefs Divisionals	61 percent	35 percent
5. Regional fire chiefs associations	48 percent	17 percent
6. Fire instructors associations	39 percent	9 percent
7. Fire and arson investigation associations	26 percent	9 percent
8. Non fire service organizations	48 percent	22 percent

*26 percent on committees within NFPA

Other areas reported:
Professional firefighters associations
Firemens associations
Fire marshal's associations
League of Cities
Joint Council
Miscellaneous.

The Review of Literature

To determine if the functions and activities of the municipal fire chief are similar to those of managers in private business and industry and in the public sector and to show that management books designed for the private and public sectors can be applied to an understanding of the

fire chief's functions and activities, the Review of Literature of Chapter II was employed.

The Delphi-developed list of functions and activities of the municipal fire chief contained eight general categories:

1. Planning and Budgeting,
2. Communications,
3. Decision-Making,
4. Directing and Coordinating,
5. Controlling-Monitoring-Overseeing,
6. Organizing (Arranging the Resources),
7. Social and Personal Interface (Liaison Activity),
8. Professional Development.

The categories emphasized in the management books developed for private business and industry were as follows:

1. Communications,
2. Planning,
3. Decision Making,
4. Organizing,
5. Staffing,
6. Directing and Leading,
7. Controlling,
8. Coordinating,
9. Administering (Motivation, Communication, and Leadership).

The categories emphasized in the management book developed for the public sector were as follows:

1. Decision Making,
2. Planning,

3. Organizing,
4. Motivating,
5. Leading,
6. Communicating,
7. Controlling,
8. Staffing,
9. Personnel Management,
10. Financial Management.

The Verification by Managers

To further test the thesis that the functions and activities of the municipal fire chief are similar (if not the same) to those of managers in both the private and public sector, eight, local to Stillwater, Oklahoma, high-level managers were selected through the Stillwater Chamber of Commerce (see Appendix H). A "camouflage" outline of the Delphi-developed outline (see Appendix I) was personally given to each of these eight managers for review and verification. The managers did not know that this list had originally been developed for municipal fire chiefs. After they verified the list, the true nature of the study was revealed to them.

All eight of the managers (see Appendix H), four from the private sector and four from the public sector, verified by signing a form (see Appendix J) that the list of the functions and activities of the manager was consistent with what they do as a manager.

Comments concerning "The Functions and Activities of the Manager" outline found at the bottom of the verification statement form from the public sector were as follows:

Plant General Manager: "Other areas must make a profit, to do this you must have low waste on material produced, labor efficiency and correct selling price."

Director of Industrial Relations: "The outline is presented correctly, reflects the activities involved in by the Plant Operations Manager and the other Division staff functions. It also reflects the activities of high level managerial positions throughout the Brunswick Corporation."

Retail Store Manager: "80% yes, 20% no."

Southwestern Bell Manager: "Comprehensive, Accurate, Realistic."

Comments from the public sector which were found at the bottom of the verification statement form were as follows:

City Manager: "This list of the functions and activities of the manager is consistent with those functions and activities performed by me in the course of my work as a manager 'or delegated by me'."

Hospital Administrator: (No comment.)

Postmaster: "I concur with the outline with the exceptions of items II E and VIII H. (II E--"Politicizing", Contacting and talking with the appropriate leaders and politicians to achieve desired results; VIII H-- Review current local, state, and federal legislation decisions.)

College Dean: "Cursory examination suggests these functions are all carried out somewhere in the hierarchy of the university. Some decisions are definitely made at a higher level (e.g., location of buildings). Some of the activities are carried out at the departmental/school level (e.g., departments/schools have both responsibilities and authority to contact industry for scholarships, etc. when interest is restricted to narrow activities). Our role in this is simply to encourage."

The Review of Periodicals

To further determine if research studies and other literature developed for managers in private business and industry and the public sector can be applied to and utilized by the municipal fire chief, a review of periodicals was undertaken.

By reviewing a list of business administration periodicals ranked by members of the Management Department at Oklahoma State University, 12 highly recognized management periodicals were identified with regard to article titles and article abstracts. Each periodical was reviewed over a one-year period. Articles from these journals were tabulated or classified into one of nine categories. Eight of these categories coincided with the eight categories in the Delphi-developed outline of the fire chief's functions and activities. A ninth category was introduced for technical and miscellaneous articles that did not apply to the position of fire chief. The nine categories included:

1. Planning and Budgeting,
2. Communications,
3. Decision Making,
4. Directing and Coordinating,
5. Controlling-Monitoring-Overseeing,
6. Organizing,
7. Social and Personal Interface,
8. Professional Development,
9. Technical and Miscellaneous.

A table was developed (see Appendix K) showing the 12 periodicals and the classification of their articles by category. The following results were noted:

1. Sixty-seven issues of 12 periodicals were reviewed with 544 articles being categorized.
2. The percentage of articles in each periodical relating to the functions and activities of the municipal fire chief ranged from 57 percent to 88 percent.
3. The "average" periodical (mean percentage) showed 75 percent of its articles applying to the municipal fire chief.
4. The highest category (excluding the technical and miscellaneous category) was planning with 21 percent.
5. The lowest category was social and personal interface with three percent.

An examination of the table (Appendix K) will show the classification of data by periodical and by category.

CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Summary of Study

Municipal fire protection has become increasingly complex. The fire chief of today, more than ever before, needs to function on a high management level. As a professional manager the fire chief must be very aware of the actual functions and activities that he performs. Organized information on the functions and activities of the municipal fire chief is scarce. Also, little evidence is available showing the similarities of the fire chief's functions and activities to those of high-level managers in business, industry, and the public sector. Books, research studies, and other literature developed for business, industry, and the public sector are generally not being used by the municipal fire chief.

The purpose of this study was to identify the functions and activities of the municipal fire chief to see if they are similar to the functions and activities of high-level managers in business, industry, and the public sector. This study was to determine if books and other literature developed for managers in business, industry, and the public sector could be applied to the position of municipal fire chief. This study also was to determine how the present day municipal fire chief acquires the skills and knowledge necessary to perform these functions and activities.

The review of literature concentrated on five areas:

1. A review of research studies and articles concerned directly with the management functions and activities of the municipal fire chief,
2. A review of books written specifically about fire department management,
3. A review of books written about management within the public sector,
4. A review of universally recognized and contemporary books about the management functions and activities within business and industry,
5. A review of those publications that were used to facilitate this study.

The Delphi Technique was the basic method used to accomplish this study. Five separate questionnaires were used to gather information.

To identify the Delphi group consisting of some of the most capable and respected fire chiefs in the United States 100 randomly selected municipal fire chiefs from cities over 30,000 population were chosen. Generally, two chiefs were randomly selected from each of the 50 states utilizing The Municipal Yearbook 1978 (ICMA, 1978). The initial questionnaire simply asked these chiefs to identify five of the nation's most capable and respected chiefs. The returns were tabulated to form the Delphi group of 39 individuals who were or had been a municipal fire chief. This Delphi group was used for the remainder of the study.

Two Delphi questionnaires plus a final questionnaire and one follow-up were sent to the Delphi group. The first questionnaire simply asked the group to list, in outline form, the functions and activities that

they perform as a fire chief. From the 18 responses a complete list was developed and in a second questionnaire sent back to the original Delphi group for modifications and comments. Twenty of the 39 responded. From this response the final list of functions and activities of the municipal fire chief was compiled (see Appendix F) and returned to the Delphi group with a letter and a third questionnaire.

A third questionnaire sent to the Delphi group was designed to gather information as to the group's biographical background and methods of preparing for and securing the fire chief's position. A weak response prompted a follow-up letter. Twenty-three of the original Delphi group responded. From this information a general profile was developed of today's respected and capable municipal fire chiefs.

To determine if the functions and activities of the municipal fire chief are similar to those of managers in private business and industry and in the public sector and to show that management books designed for the private and public sectors can be applied to an understanding of the fire chief's functions and activities the Review of Literature of Chapter II was employed. The Delphi developed list of functions and activities was compared to the functions and activities stressed in management books written for the public and private sectors.

To further verify that the functions and activities of the municipal fire chief are similar to other managers the Delphi-developed list was "camouflaged" (see Appendix I) and personally presented to four public sector and four private sector managers. All eight of the Stillwater, Oklahoma, managers verified that the list was consistent with what they did as a manager.

To further determine if research studies and other literature developed for managers in private business and industry and the public sector can be applied to and utilized by the municipal fire chief a review of periodicals was undertaken. A table was developed showing the review of periodicals over a one-year period and classifying the articles into one of nine categories. Eight of these categories were the Delphi-developed major categories of functions and activities of the fire chief with the ninth being a miscellaneous or technical section for those articles which did not fit into the other eight categories. Twelve business administration periodicals were reviewed and tabulated in the table (see Appendix K).

Summary of Findings

Four research questions were considered to fulfill the purposes of this study. The findings of the study as related to these research questions will be reviewed.

Research Question No. 1

What are the functions and activities of the municipal fire chief?

As determined by the Delphi group of 39 of some of the most capable and respected fire chiefs in the United States, eight major generalized categories were identified:

- I. Planning and Budgeting,
- II. Communications,
- III. Decision-Making,
- IV. Directing and Coordinating,
- V. Controlling-Monitoring-Overseeing,

- VI. Organizing (Arranging the Resources),
- VII. Social and Personal Interface (Liaison Activity),
- VIII. Professional Development.

The complete detailed list developed, modified, and verified by the Delphi group is contained in Appendix F.

Research Question No. 2

Are these functions and activities similar to those of high-level managers in business, industry, and the public sector?

The answer is "yes" based upon the results of two parts of the study. First, a "camouflaged" list of the functions and activities of the municipal fire chief was personally presented to each of eight public and private non-fire managers with the question as to whether that list of functions and activities was consistent with what was being performed by that non-fire manager. All eight managers, four public sector and four private sector, signed a statement that those were the functions and activities that they performed. After the statement was signed by each, they were told how the list was developed and the true nature of the study.

Second, the Delphi-developed final list of functions and activities was compared to the topics stressed in the tables of contents of management books developed for business and industry and the public sector. The topics were found to be the same. The functions and activities of managers are the same in terms of: communications, decision-making, planning, budgeting, directing, controlling, organizing, etc.

Research Question No. 3

How do present municipal fire chiefs acquire the necessary skills and knowledge to perform these functions and activities?

A general profile was developed of some of the nation's most capable and respected municipal fire chiefs followed by information concerning his most important experiences, reading material, key position held, and organizational memberships.

A general profile of some of the most respected and capable municipal fire chiefs contains the following characteristics:

1. 32 to 67 years of age, Mean 52.
2. Has been a chief for 2 1/2 to 20 years, Mean 11.
3. Has been in the fire service 14 to 42 years, Mean 28.
4. Has been a company officer 0 to 19 years, Mean 5.
5. Has been a chief officer 0 to 16 years, Mean 5.
6. Has 11 to 16+ years of formal school, Average 1 1/2 years of college.
7. Has from 700 to 1000 hours of training.
8. Has completed 1 to 150 fire training courses, Mean 42.
9. Has taught 0 to 350 fire training courses, Median 30, Mean 54.
10. Has read 3 to 350 management books, Median 19, Mean 38.
11. Has attended 1 to 100 management seminars, Median 11, Mean 25; for a total of 40 to 2000 hours, Median 240, Mean 418.

Additional information concerning most important experiences, reading material, key positions held, and organizational memberships are as follows:

1. Most important experience in preparation for the position of

fire chief include: experience as a chief officer indicated by 57 percent of the respondents, management seminars 35 percent, college course 26 percent, and motivation or encouragement by others 22 percent.

2. The books used most by the fire chief include: ICMA Municipal Fire Administration (now Managing Fire Services) indicated by 70 percent of the respondents and the NFPA Fire Protection Handbook 35 percent of the respondents.

3. The following magazines were read by the fire chiefs:

Fire Chief,

Fire Command,

Fire Engineering,

Fire Journal,

International Fire Chief,

Fire and Police Personnel Reporter,

Nation's Cities Weekly,

Monthly Municipal Review.

4. The "key" position used as a stepping stone to the fire chief's position included the positions of:

Training Officer by 39 percent of respondents,

Fire Suppression Officer by 26 percent,

"Other" Chief Officer by 17 percent,

Fire Marshal by 17 percent.

5. Memberships were reported in 90 different organizations.

Organizations with the highest memberships included:

International Association of Fire Chiefs (IAFC)--78 percent,

State fire chiefs' associations--70 percent,
National Fire Protection Association--65 percent,
IAFC Divisionals--61 percent,
Regional fire chief's association--48 percent,
Non-fire service related--48 percent.

Research Question No. 4

Can information and knowledge gained from authoritative management books, research studies, and other literature developed for business, industry, and the public sector be applied to the position of municipal fire chief?

The answer is "yes" based upon a review of management books and contemporary management books written for managers in private business and industry and management books written for public sector managers. All contain chapters and topics that deal directly with the functions and activities outlined in the Delphi-developed list for fire chiefs. Such topics as communications, decision-making, planning, budgeting, directing, controlling, organizing, etc., are universal to both private and public managers including fire chiefs.

In reviewing 12 different business administration (non-fire service) periodicals, most of which are considered to be the best by management professors at Oklahoma State University, it was found that the following periodicals were related the most to the municipal fire chief's functions and activities. The percentage indicates the amount of articles related to the fire chief's functions and activities:

1. The Academy of Management Review--88 percent,
2. Administrative Science Quarterly--88 percent,

3. Supervision--88 percent,
4. Managerial Planning--81 percent,
5. Academy of Management Journal--78 percent,
6. Sloan Management Review--78 percent,
7. Management Review--76 percent,
8. Journal of Systems Management--74 percent.

Of the 12 periodicals examined over a one-year period each, 67 actual issues were reviewed. The highest concentration of articles were of the following categories:

1. Planning and Budgeting--21 percent,
2. Organizing--12 percent,
3. Directing and Coordinating--11 percent,
4. Professional Development--10 percent,

Of course many articles (23 percent) of the total reviewed had no relationship at all to municipal fire chiefs. The table found in Appendix K shows the complete analysis.

Conclusions

Using a clustered random sample of 100 municipal fire chiefs throughout the United States a Delphi group of 39 of some of the most capable and respected fire chiefs was formed. This Delphi group, through a series of two questionnaires, identified the functions and activities of the municipal fire chief.

The functions and activities of the municipal fire chief, as developed in general terms by the Delphi group, are similar or nearly the same as those functions and activities performed by managers in private business and industry and the public sector. This was shown by surveying

actual private and public managers in the Stillwater, Oklahoma, area with a "camouflaged" list of the Delphi-developed functions and activities of the fire chief. Also, the Delphi-developed list was compared to the table of contents and topical areas covered in established and contemporary books written for managers in private business and industry and the public sector. Functions and activities such as communications, decision-making, planning, budgeting, directing, controlling, organizing, etc., seem universal in their application toward fire chief "managers" as well as private and public managers.

The municipal fire chief generally prepares himself for this management position by "experience" as a chief officer, management seminars, college courses, and motivation or encouragement by others. The average chief has been in the fire service 28 years and has spent five years as a company officer and five years as a chief officer. He has some college, one and one-half years, and many hours (700 to 1000) of fire service training. "Key" positions used as a stepping stone to the fire chief's position are that of Training Officer, Fire Suppression Officer, Fire Marshal, or other chief officer positions. All are internal fire department positions. The majority of fire chiefs have no supervisory experience outside of the fire department.

The books used most by the fire chief include ICMA's (1967) old Municipal Fire Administration now Managing Fire Services (ICMA, 1979) and the NFPA (1976b) Fire Protection Handbook. Finally, the municipal fire chief belongs to a variety of fire service and non-fire service professional organizations. The most popular organizations include: International Association of Fire Chiefs (IAFC), state fire chief associations, National Fire Protection Association, and IAFC Divisionals.

Knowledge from highly established management books, research studies, and other literature developed for business, industry, and the public sector can be directly applied to the position of municipal fire chief. As previously mentioned established and contemporary management books contain information about the fire chief's functions and activities. Also, many business administration periodicals contain articles directly related to the functions and activities of the fire chief. A high percentage of the articles in The Academy of Management Review, Administrative Science Quarterly, and Supervision are applicable to the municipal fire chief. However, the final Delphi questionnaire showed that the fire chiefs surveyed did not use these periodicals. They reported using, almost exclusively, fire service magazines.

Recommendations

Recommendations about future studies will be made along with recommendations drawn from the conclusions of the study. The recommendations are as follows:

1. Additional studies are needed on this same topic of the functions and activities of the municipal fire chief. When reviewing the literature it was found that very few studies have concerned themselves with the specific functions and activities of the municipal fire chief.
2. Research studies of all types need to be conducted for a better understanding of not only the fire chief's position but also a better understanding of the operation of the fire department. For example is the downward communication distorted at the district chief's level? What impact does the Union have on

productivity? Does the educational level of the fire chief relate to a more efficient and effective fire department?

3. Specific "established" and contemporary management books developed for private business and industry and the public sector that have the most application to the fire chief should be identified.
4. Specific business administration periodicals that would have the most application to the fire chief should be identified.
5. A determination should be made as to the percentage of time spent by the fire chief in each of the eight functions identified by the Delphi group. This may indicate which type of function needs to be stressed in the education of the fire chief.
6. Municipal fire chiefs and those aspiring to be a fire chief should know and understand the functions and activities of the municipal fire chief as outlined by the Delphi group in this study.
7. The fire service should recognize that the functions and activities of the municipal fire chief are similar if not the same as managers in private business and industry and in the public sector.
8. Alternate ways should be developed for the preparation of individuals to become municipal fire chiefs. This study revealed that almost all fire chiefs prepare themselves with on-the-job experience requiring time-in-grade. This may not be the most efficient or effective way to prepare the fire chiefs of the future.

9. Municipal fire chiefs and those aspiring to be a fire chief should become familiar with and use those "established" and contemporary management books originally developed for private business and industry and the public sector.
10. Municipal fire chiefs and those aspiring to be a fire chief should become familiar with and subscribe to business administration periodicals that contain useful information pertinent to the functions and activities of the municipal fire chief.

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APPENDIXES

APPENDIX A

LIST OF 100 RANDOMLY SELECTED MUNICIPAL
FIRE CHIEFS

Randomly Selected Municipal Fire Chiefs from the
50 States Plus Washington, D.C.

The fire chiefs were selected from cities of 30,000 population and over. Two fire chiefs were selected from each state except California and Pennsylvania which had three selected and Delaware, Hawaii, and Vermont which had only one selected (each of these three states had only one city over 30,000 population).

	<u>Population</u>
1. Fire Chief J. A. Odom Montgomery Fire Dept. Montgomery, Alabama 36102	153,000
2. Fire Chief Massey Tolen Huntsville Fire Dept. Huntsville, Alabama 35801	136,000
3. Fire Chief Eugene Bennett Anchorage Fire Dept. Anchorage, Alaska 99502	195,000
4. Chief Steve Childress Fairbanks Fire Dept. Fairbanks, Alaska 99701	30,000
5. Chief Gray Crabtree Glendale Fire Dept. Glendale, Arizona 85301	66,000
6. Chief L. A. Witzeman Scottsdale Fire Dept. Scottsdale, Arizona 85251	78,000
7. Chief Luther Bevel Fort Smith Fire Dept. Fort Smith, Arkansas 72901	65,000
8. Chief Ray Jacks Pine Bluff Fire Dept. Pine Bluff, Arkansas 71601	55,000
9. Chief H. K. Schrock Daly City Fire Dept. Daly City, California 94015	73,000
10. Chief Charles Masten El Monte Fire Dept. El Monte, California 91734	68,000

	<u>Population</u>
11. Chief Jack Baird Livermore Fire Dept. Livermore, California 94550	50,000
12. Chief Ralph Nice Colorado Springs Fire Dept. Colorado Springs, Colorado 80901	180,000
13. Chief John Speed Aurora Fire Dept. Aurora, Colorado 80012	118,000
14. Chief Ed Buvarsky Enfield Fire Dept. Enfield, Connecticut 06082	47,000
15. Chief Guido Bartolucci New London Fire Dept. New London, Connecticut 06320	30,000
16. Chief James Blackburn Wilmington Fire Dept. Wilmington, Delaware 19801	76,000
17. Chief Burton W. Johnson Washington D.C. Fire Dept. Washington, D.C. 20013	712,000
18. Chief Louis Cafone Miramar Fire Dept. Miramar, Florida 33023	30,000
19. Chief William McWhorter Fort Myers Fire Dept. Fort Myers, Florida 33901	36,000
20. Chief George Lamb Columbus Fire Dept. Columbus, Georgia 31908	159,000
21. Chief Verlin Wilson Marietta Fire Dept. Marietta, Georgia 30060	31,000
22. Chief Boniface Aiv Honolulu Fire Dept. Honolulu, Hawaii 96820	705,000
23. Chief David Perry Boise City Fire Dept. Boise City, Idaho 83702	100,000

	<u>Population</u>
24. Chief H. G. Call Pocatello Fire Dept. Pocatello, Idaho 83201	41,000
25. Chief Martin Kreil Burbank Fire Dept. Burbank, Illinois 60459	30,000
26. Chief Bert Moran Highland Park Fire Dept. Highland Park, Illinois 60035	32,000
27. Chief William Patterson Indianapolis Fire Dept. Indianapolis, Indiana 46206	715,000
28. Chief Joseph Petsovich Mishawaka Fire Dept. Mishawaka, Indiana 46544	36,000
29. Chief Robert Dunphy Dubuque Fire Dept. Dubuque, Iowa 52001	62,000
30. Chief Harold Smith Waterloo Fire Dept. Waterloo, Iowa 50705	78,000
31. Chief Swain Lawrence Fire Dept. Lawrence, Kansas 66044	51,000
32. Chief Ben Neill, Jr. Topeka Fire Dept. Topeka, Kansas 66603	119,000
33. Chief Earl McDaniel Lexington-Fayette Fire Dept. Lexington-Fayette, Kentucky 40507	186,000
34. Chief Walter Freeman Owensboro Fire Dept. Owensboro, Kentucky 42301	51,000
35. Chief Charles Carruth Alexandria Fire Dept. Alexandria, Louisiana 71301	49,000
36. Chief F. M. Smith Bossier City Fire Dept. Bossier City, Louisiana 71111	47,000

	<u>Population</u>
37. Chief Reginald Doucette Lewiston Fire Dept. Lewiston, Maine 04240	41,000
38. Chief Joseph McDonough Portland Fire Dept. Portland, Maine 04101	60,000
39. Fire Chief Bowie Fire Dept. Bowie, Maryland 20715	37,000
40. Fire Chief Rockville Fire Dept. Rockville, Maryland 20850	44,000
41. Chief George Paul Boston Fire Dept. Boston, Massachusetts 02201	637,000
42. Chief Harvey Preble Newton Fire Dept. Newton, Massachusetts 02158	89,000
43. Chief Gino Polidori Dearborn Fire Dept. Dearborn, Michigan 48126	99,000
44. Chief John Van DeVoort Farmington Hills Fire Dept. Farmington Hills, Michigan 48024	54,000
45. Chief William Thompson Coon Rapids Fire Dept. Coon Rapids, Minnesota 55433	30,000
46. Chief Robert Hughes Fridley Fire Dept. Fridley, Minnesota 55432	35,000
47. Chief Edgar Bray Jackson Fire Dept. Jackson, Mississippi 39205	167,000
48. Chief J. W. Reynolds Meridian Fire Dept. Meridian, Mississippi 39301	46,000
49. Chief Girard Wren Columbia Fire Dept. Columbia, Missouri 65201	63,000

	<u>Population</u>
50. Chief Vincent Willmeno Jefferson City Fire Dept. Jefferson City, Missouri 65101	35,000
51. Chief John McCarthy Butte-Silver Bow Fire Dept. Butte-Silver Bow, Montana 59701	43,000
52. Chief Robert Kelly Missoula Fire Dept. Missoula, Montana 59801	30,000
53. Chief George Arnett Grand Island Fire Dept. Grand Island, Nebraska 68801	33,000
54. Chief Vernon Van Scoy Omaha Fire Dept. Omaha, Nebraska 68108	371,000
55. Chief Sam Cooper Las Vegas Fire Dept. Las Vegas, Nevada 89114	146,000
56. Chief Don Young Sparks Fire Dept. Sparks, Nevada 89431	32,000
57. Chief John Lydon Manchester Fire Dept. Manchester, New Hampshire 03103	83,000
58. Chief Richard Navaroli Nashua Fire Dept. Nashua, New Hampshire 03060	61,000
59. Chief Joseph Crisci Kearny Fire Dept. Kearny, New Jersey 07032	39,000
60. Fire Chief Montclair Fire Dept. Montclair, New Jersey 07042	43,000
61. Chief Joe Maddox Clovis Fire Dept. Clovis, New Mexico 88101	32,000
62. Chief George Daniels Roswell Fire Dept. Roswell, New Mexico 88201	38,000

	<u>Population</u>
63. Chief Karl Kubiak Buffalo Fire Dept. Buffalo, New York 14202	407,000
64. Chief Gerald Darby Utica Fire Dept. Utica, New York 13503	82,000
65. Chief T. C. Bishop Fayetteville Fire Dept. Fayetteville, North Carolina 28301	66,000
66. Chief Robert Shipp Wilmington Fire Dept. Wilmington, North Carolina 28401	54,000
67. Chief Alvin Ode Bismark Fire Dept. Bismark, North Dakota 58501	38,000
68. Chief Arthur Klimpel Minot Fire Dept. Minot, North Dakota	33,000
69. Chief George Langa Euclid Fire Dept. Euclid, Ohio 44117	63,000
70. Chief Ed Beecher Lima Fire Dept. Lima, Ohio 45801	51,000
71. Chief Richard Tannery Lawton Fire Dept. Lawton, Oklahoma 73501	76,000
72. Chief David Newby Midwest City Fire Dept. Midwest City, Oklahoma 73110	50,000
73. Chief Reno Virgili Bethel Park Fire Dept. Bethel Park, Pennsylvania 15102	38,000
74. Chief Willis Snyder Norristown Fire Dept. Norristown, Pennsylvania 19401	36,000
75. Chief John Unsworth East Providence Fire Dept. East Providence, Rhode Island 02914	50,000

	<u>Population</u>
76. Chief Michael Moise Providence Fire Dept. Providence, Rhode Island 02903	168,000
77. Chief Robert Carson Greenville Fire Dept. Greenville, South Carolina 29602	59,000
78. Chief Crawford Howell Rock Hill Fire Dept. Rock Hill, South Carolina 29730	35,000
79. Chief Ken Johnson Rapid City Fire Dept. Rapid City, South Dakota 57701	48,000
80. Chief W. J. Tellinghuisen Sioux Falls Fire Dept. Sioux Falls, South Dakota 57102	74,000
81. Chief C. M. Kenner Kingsport Fire Dept. Kingsport, Tennessee 37662	33,000
82. Chief Paul Warwick Knoxville Fire Dept. Knoxville, Tennessee 37901	183,000
83. Chief Ken Jones Texas City Fire Dept. Texas City, Texas 77590	41,000
84. Chief Hurshel Johnson Wichita Falls Fire Dept. Wichita Falls, Texas 76307	95,000
85. Chief Charles Hanson Ogden Fire Dept. Ogden, Utah 84401	69,000
86. Chief Arnold Long Orem Fire Dept. Orem, Utah 84057	36,000
87. Chief Patrick Brown Burlington Fire Dept. Burlington, Vermont 05401	37,000
88. Chief J. F. Finnegan, Jr. Richmond Fire Dept. Richmond, Virginia 23219	233,000

	<u>Population</u>
89. Chief Harry Diezel Virginia Beach Fire Dept. Virginia Beach, Virginia 23458	214,000
90. Chief Reino Watson Everett Fire Dept. Everett, Washington 98669	48,000
91. Chief Otto Jensen Vancouver Fire Dept. Vancouver, Washington 98660	48,000
92. Chief John Britton Charleston Fire Dept. Charleston, West Virginia 25301	67,000
93. Chief Cliff Sligar Wheeling Fire Dept. Wheeling, West Virginia 26003	44,000
94. Chief Gerald Selissen Green Bay Fire Dept. Green Bay, Wisconsin 54301	91,000
95. Chief Charles Conway New Berlin Fire Dept. New Berlin, Wisconsin 53151	30,000
96. Chief Bill McCarrel Casper Fire Dept. Casper, Wyoming 82601	41,000
97. Chief Ken Wynn Cheyenne Fire Dept. Cheyenne, Wyoming 82001	47,000
98. Chief Walter Pflughaupt Corvallis Fire Dept. Corvallis, Oregon 97330	39,000
99. Chief Waitman Boddy Medford Fire Dept. Medford, Oregon 97501	33,000
100. Chief Thomas Kennelly Pittsburgh Fire Dept. Pittsburgh, Pennsylvania 15219	459,000

APPENDIX B

COVER LETTER AND POST CARD QUESTIONNAIRE

Cover letter sent to 100 randomly
selected fire chiefs.

May 9, 1979

Dear Fire Chief:

Your help is needed! You are one of the one hundred municipal fire chiefs who have been randomly selected to participate in the initial phase of a research study entitled "The Functions of the Municipal Fire Chief."

The first phase of the study will be the formation of a group of names of the most capable and respected fire chiefs in the United States. The names will then be used in completing a Delphi Technique Study. Using your best judgments, please list in rank order, from highest to lowest, the names of five (5) municipal fire chiefs whom you believe to be the most capable and respected administrators in the United States. A postage paid postal card is enclosed for your convenience in responding to this request.

A major purpose of the study is to identify the functions and activities of municipal fire chiefs. It is anticipated that the results of the study may be helpful in the future development of training materials for fire chiefs. Thank you for your time and interest.

Sincerely,

Thomas W. Dawson
Graduate Student

TWD/bh
Enclosure: Post Card

Post card questionnaire

Please list (from highest to lowest) the five (5) most capable and respected municipal fire chiefs in the United States.

1.	_____	3.	_____
	<i>Fire Chief</i>		<i>Fire Chief</i>
	_____		_____
	<i>City or Town</i>		<i>City or Town</i>
	_____		_____
	<i>State</i>		<i>State</i>
2.	_____	4.	_____
	<i>Fire Chief</i>		<i>Fire Chief</i>
	_____		_____
	<i>City or Town</i>		<i>City or Town</i>
	_____		_____
	<i>State</i>		<i>State</i>
	_____	5.	_____
			<i>Fire Chief</i>

			<i>City or Town</i>

			<i>State</i>

APPENDIX C

THE DELPHI GROUP, "SOME OF THE MOST RESPECTED
AND CAPABLE FIRE CHIEFS IN THE
UNITED STATES

The Delphi Group

		<u>Population</u>	<u>Questionnaires</u>		
			1st	2nd	3rd
1.	Raymond C. Picard, Chief Huntington Beach Fire Dept. P. O. Box 190 Huntington Beach, California 92648	150,000	x	x	x
2.	Byron Chaney, Fire Chief Palm Springs Fire Dept. 277 N. Indian Ave. Palm Springs, California 92262	27,000	x	x	x
3.	James Shern, Fire Chief Pasadena Fire Dept. 175 North Marengo Ave. Pasadena, California 91101	108,000			x
4.	Robert Ely, Fire Chief Kirkland Fire Dept. Kirkland, Washington 98033	16,000	x	x	x
5.	John E. Lee, Fire Chief Charlotte Fire Dept. 125 South Davidson St. Charlotte, North Carolina 28202	281,000	x	x	x
6.	Alan Brunacini, Fire Chief Phoenix Fire Dept. 10 North 3rd Ave. Phoenix, Arizona 85003	665,000			
7.	Charles H. Rule, Fire Chief Alexandria Fire Dept. Powhatan and Second Sts. Alexandria, Virginia 22314	105,000			x
8.	Frank R. Hanson, Fire Chief Seattle Fire Dept. 301 2nd Ave. S. Seattle, Washington 98104	487,000			
9.	Myrle K. Wise Denver Fire Dept. 914 - 12th St. Denver, Colorado 80204	485,000	x	x	x
10.	John C. Gerard L.A. Fire Dept. 217 South Hill St. Los Angeles, California 90012	2,727,000	x	x	

	<u>Population</u>	<u>Questionnaires</u>		
		1st	2nd	3rd
11. Clyde Bragdon L.A. County Fire Dept. P. O. Box 3009 Terminal Annex Los Angeles, California 90054	6,987,000			
12. Augustus A. Beekman Fire Commissioner New York City Fire Dept. 11th Floor, Municipal Bldg. New York, New York 10007	7,482,000	x		
13. William Stamm, Fire Chief Milwaukee Fire Dept. 711 W. Wells St. Milwaukee, Wisconsin 53233	666,000	x	x	x
14. Warren Isman, Director Montgomery County Fire and Rescue 6110 Executive Blvd. Rockville, Maryland 20852	672,000	x	x	x
15. Byron Hollander, Fire Chief Oklahoma City Fire Dept. 820 N.W. 5th St. Oklahoma City, Oklahoma 73105	366,000		x	x
16. John P. Reardon, Fire Chief New Haven Fire Dept. 952 Grand Ave. New Haven, Connecticut 06510	127,000			
17. John L. Swindle, Fire Chief Birmingham Fire Dept. 1917 7th Ave. N. Birmingham, Alabama 35203	276,000			x
18. George Paul, Fire Chief Boston Fire Dept. 115 Southampton St. Boston, Massachusetts 02118	637,000			
19. Andrew C. Casper San Francisco Fire Dept. 260 Golden Gate Ave. San Francisco, California 94102	665,000			
20. David Gratz, Vice President Fire Chiefs Foundation 1329 18th St., N.W. Washington, D.C. 20036 (Ex-Fire Chief, Silver Springs, MD)	90,000	x		x

		<u>Population</u>	<u>Questionnaires</u>		
			1st	2nd	3rd
21.	Dodd Miller, Fire Chief Dallas Fire Dept. 2111 Main St. Dallas, Texas 75201	813,000		x	x
22.	Ronny J. Coleman San Clemente Fire Dept. 100 Avenue Presidio San Clemente, California 92672	21,000	x	x	x
23.	E. Stanley Hawkins Tulsa Fire Dept. 411 S. Frankford Tulsa, Oklahoma 74120	332,000			x
24.	Wilmont E. Guthke, Fire Chief Charleston Fire Dept. 114 Meeting St. Charleston, South Carolina 29407	57,000	x	x	x
25.	B. J. Thompson, Fire Chief Santa Ana Fire Dept. 20 Civic Center Dr. Santa Ana, California 92701	177,000			x
26.	Commissioner Richard Albrecht Chicago Fire Dept. Room 105 City Hall Chicago, Illinois 60602	3,099,000			
27.	Richard W. Niemi Waukegan Fire Dept. Waukegan, Illinois 60085	65,000			
28.	Lawrence A. Pairitz Mount Prospect Fire Dept. Mount Prospect, Illinois 60056	52,000	x	x	x
29.	H. V. Christiansen Beloit Fire Dept. 524 Pleasant St. Beloit, Wisconsin 53511	36,000	x	x	
30.	H. Ray Vliet Edison Fire Dept. Municipal Building Edison, New Jersey 08817	66,000			x

	<u>Population</u>	<u>Questionnaires</u>		
		1st	2nd	3rd
31. Wm. T. Stewart Fargo Fire Dept. 637 N. P. Avenue Fargo, North Dakota 58102	56,000	x	x	x
32. Jon Greenawalt, Fire Chief Durham-UNH Fire Dept. Durham, New Hampshire 03824	11,000			x
33. Gordon Vickery Administrator U.S. Fire Administration P.O. Box 19518 Washington, D.C. 20036 (Seattle Fire Chief, Retired)	487,000	x		
34. Dean Holzgrafe, Fire Chief Fremont Fire Dept. 4200 Mowry Ave. Fremont, Calif. 94538	118,000	x	x	x
35. Joseph R. Rizzo Philadelphia Fire Dept. 3rd and Spring Gardens Philadelphia, Pennsylvania 19122	1,816,000			
36. Vernon Van Scoy Omaha Fire Dept. 1516 Jackson St. Omaha, Nebraska 68102	371,000		x	x
37. Charles Kamprad St. Louis Fire Dept. Room 405, City Hall St. Louis, Missouri 63103	525,000	x	x	x
38. William J. Crossman New Orleans Fire Dept. 317 Decatur St. New Orleans, Louisiana 70130	560,000		x	
39. I. O. Martinez, Fire Chief San Antonio Fire Dept. P.O. Box 0966 San Antonio, Texas 78205	773,000			
Totals	32,354,000	18	20*	23+

*Plus one return from a person not in the original Delphi Group therefore not considered.

+Plus three returns from people not in original Delphi Group therefore not considered.

APPENDIX D

COVER LETTER AND FIRST DELPHI QUESTIONNAIRE

Cover letter which accompanied first
Delphi Questionnaire.

June 14, 1979

Raymond C. Picard, Fire Chief
Huntington Beach Fire Dept.
P.O. Box 190
Huntington Beach, CA 92648

Dear Chief Picard:

The purpose of this letter is to ask you to participate in a study designed to identify the functions and activities of the municipal fire chief. Through a random sampling process, 100 fire chiefs in the nation were surveyed with the results indicating that you are one of the top 40 most capable and respected fire chiefs in the nation.

This extremely important research study will attempt to pinpoint exactly the actual functions and activities of the fire chief. The results will be used to help develop materials for the executive development of the fire chief along with identifying existing management publications written for business and industry that could be utilized by the fire service.

This study, identifying the fire chief's functions and activities, will utilize a research technique known as the Delphi Technique. Three (3) questionnaires will be mailed to you (the first is enclosed) for the purpose of defining and then further defining the actual functions and activities of the municipal fire chief. Each questionnaire will require only a few minutes of your time with this first questionnaire being the hardest. Those who participate will be given credit in the dissertation.

This study will take several weeks. Your quick response each time will be greatly appreciated. Thank you.

Sincerely,

Thomas W. Dawson

TWD/bh
Enclosure

First Delphi Questionnaire.

DELPHI RESEARCH STUDY
on
The Functions and Activities
of the
Municipal Fire Chief

Return to: Thomas W. Dawson 1103 S. Pine St. Stillwater, OK 74074 Phone: (405) 624-2185
--

Participant's Name: _____ Fire Chief

Date: _____

In simple, but thorough, terms please list the functions and activities (daily activities) that you perform as a fire chief. (If you list planning, organizing, decision making, communications, controlling, etc., please give specific activities within these functions.)

<u>Function or Activity</u>	<u>Percentage of Time Spent Here</u>
1.	
2.	

Continued

Percentage of
Time Spent Here

3.

4.

5.

6.

7.

Continued	<u>Percentage of Time Spent Here</u>
8.	
9.	
10.	
etc.	

- Notes: (1) Your list should probably contain from 10 to 50+ listings.
(2) Attach extra sheets if necessary.
(3) This first questionnaire is the hardest. The remaining questionnaires will simply be a review and verification of data compiled from this first questionnaire.

APPENDIX E

COVER LETTER AND SECOND DELPHI QUESTIONNAIRE

Cover letter which accompanied
second Delphi Questionnaire.

Dear Chief:

My special thanks to those of you who responded to the initial questionnaire calling for a list of functions and activities of the fire chief. Eighteen of the thirty-nine participants were involved with this first step of the Delphi Technique study.

Enclosed you will find the second questionnaire. The information received on the first questionnaire was compiled and used as the basis to develop the enclosed outline of the functions and activities of the municipal fire chief.

Please review this outline, make suggestions or corrections you feel are necessary (if any), and then return it to me in the envelope provided. It is hoped that all thirty-nine (39) of the original participants will become involved with the second and third questionnaires. Those of you that did not respond to the first questionnaire now have a chance to have input by verifying the accuracy of the enclosed outline.

Thank you for your time and interest.

Sincerely,

Thomas W. Dawson
Graduate Student

TWD/bh
Enclosure

Second Delphi Questionnaire.

DELPHI RESEARCH STUDY
on
The Functions and Activities
of the
Municipal Fire Chief

Return to: Thomas W. Dawson 1103 S. Pine St. Stillwater, OK 74074 (405) 624-2185

Participant's Name: _____

Date: _____

- Directions: (1) Fill in your name and date
 (2) Read the outline
 (3) Make corrections and/or comments you feel are needed
 (4) Check appropriate box below

The outline appears:

Complete as it is. _____

Corrections are needed. _____

See comments. _____

Tentative Outline

The Functions and Activities of the
Municipal Fire Chief

(Compiled results of the first Delphi questionnaire)

I. PLANNING AND BUDGETING

COMMENTS

- A. Planning fire departments future activities and programs and then budgeting for these activities and programs.

1. Short-range planning (1 year)
2. Long-range planning (5, 10, 20 years)

- B. Solicite input from subordinates, superiors and others to formulate plans

COMMENTS

- C. Review resource requirements to better utilize manpower, equipment and facilities
 - 1. Purchase appropriate apparatus and tools
 - 2. Planning fire station location and design
 - 3. Planning personnel requirements
- D. Determine and/or approve of the tools, appliances and equipment to be used by the department
- E. Prepare the budgets
 - 1. Establish priorities
 - 2. Anticipate emergency expenditures
- F. Assure cost-effective fire prevention and fire suppression services
- G. Develop
 - 1. Policies, rules, regulations and standard operating procedures
 - 2. Fire codes and other needed legislation
 - 3. Fire department goals (set goals with subordinates)
 - 4. Uses of the computer
- H. Developing plans
 - 1. Master plan (analyze fire statistics and data)
 - 2. Fire prevention plans
 - 3. Training requirements
- I. Planning research needs
- J. Planning for meetings
- K. Plan innovations and creative activities
- L. Plan for major emergencies (pre-fire planning)

II. COMMUNICATIONS

- A. Physical activities
 - 1. Answer telephone

COMMENTS

2. Write:

letters	questionnaire for
memos	research studies
newsletters	reports and other
news releases	documents
legislative bills	articles for
	publication
 3. Dictate letters
 4. Talk to people
 5. Give speeches
 6. Radio and TV interviews
- B. Report verbally and in writing
1. To:
 - a. City Manager
 - b. General public
 - c. Community leaders
 - d. Immediate subordinates
 - e. Fire fighters
 - f. Peer department heads
 - g. Others
 2. About:
 - a. Conditions
 - b. Resources
 - c. Situations
 - d. Needs
 - e. Action
 - f. Etc.
- C. Answer mail, memos and telephone calls
- D. Attend meetings
1. Municipal government
 2. Fire department (departmental)
 3. Various committees
 4. Community civic and special interest groups
 5. Regional fire service organization
 6. National fire service organization (example: IAFC, IFSTA, NFPA, etc.)
- E. "Politicizing"--Contacting and talking with the appropriate leaders and politicians to achieve desired results

III. DECISION-MAKING

- A. Responding to (providing answers for) questions, needs and problems that are present and need solutions
- B. Determining the alternatives or various answers to a question, need or problem and then choosing the "best" alternative
- C. "The buck stops on the Chief's Desk"
- D. Decision making cuts across all the functions of the Fire Chief. For example:
 - 1. Planning--make decisions on where to locate a new fire station
 - 2. Communication--make decision on what to say and when
 - 3. Decision-making--decide when to make a decision and when not to
 - 4. Directing and coordinating--decide when to intervene in a situation and provide coordination
 - 5. Controlling--make decision on which division to monitor and when
 - 6. Organizing--make decision on how organization should be arranged and who should be placed in the various positions
 - 7. Social and personal interface--make decision on which professional organization to join
 - 8. Professional development--decide which management course to take during the fall semester

IV. DIRECTING AND COORDINATING

- A. Providing leadership--influence the behavior of others, set goals for the department and formulate the paths to achieve these goals--develop leadership in others
- B. Motivate those within the fire department and those around the fire department
 - 1. Provide the correct recognition
 - 2. Provide opportunity
 - 3. Provide job security

COMMENTS

- C. Resources management--direct and coordinate the available resources to best achieve the established goals of the department including utilization of manpower, equipment and facilities
 - D. Coordinate the activities of the divisions within the fire department including administration, fire suppression, training, fire prevention, maintenance, and communications
 - E. Direct (through the chain of command) the activities of the overall fire department
 - F. Supervise immediate subordinates, officers, and immediate office staff
 - G. Supervise the budget and expenditures
 - H. Approve department members to attend outside schools and seminars
 - I. Enforce fire codes in the community
 - J. Command major emergency situations
 - 1. Respond to and command (directing and coordinating) major fire emergencies (greater alarms) and major hazard incidents such as:
 - a. Explosion
 - b. Chemical or gas spills
 - c. Floods
 - d. Civil disorders
 - e. Life threatening situations
 - 2. Properly utilize fire resources and other city resources, such as public service, public works, Red Cross, Civil Defense, etc.
- V. CONTROLLING-MONITORING-OVERSEEING
- A. Watch and influence the divisions within the fire department
 - B. Use management by objectives (MBO's) to control actions of those within the fire department

- C. Confer with others about what is happening in the environment around the department
- D. Gather and analyze all available "feedback"
- E. Be briefed on past and future events with others such as city manager, assistant fire chiefs, other department heads, etc.
- F. Develop measuring instruments to monitor and control the activities within the department
- G. Conduct evaluations of personnel and programs
- H. Being aware of morale factors
- I. Review equipment bids
- J. Review and renew contracts with mutual aid agreements

VI. ORGANIZING (Arranging the Resources)

- A. Organizing, arranging or adjusting the fire department organization to most efficiently and effectively fulfill the goals of the department within the community
- B. Develop job descriptions and assign responsibilities for members of the department (arrange the "chain of command")
- C. Delegate authority
- D. Determine staff and line functions
- E. Recognize, motivate and insure training of key subordinates
- F. Personnel management
 - 1. Staffing the department with manpower through recruitment, selection and hiring, promotions, and manpower distribution
 - 2. Handle labor relations:
 - a. Union contract negotiations
 - b. Union contract administration
 - 3. Arrange the necessary disciplinary procedures
 - 4. Negotiate and administer the necessary grievance procedures

VII. SOCIAL AND PERSONAL INTERFACE (Liaison Activity)

- A. Act as liaison and/or technical expert
 - 1. Within the department. Furnish technical advice to division heads, i.e., training, fire prevention, fire suppression, etc.
 - 2. Outside the department:
 - a. Deal with other city departments and services such as water department, building department, etc.
 - b. Deal with local, county, state, and federal agencies
 - c. Deal with special interest groups and civic organizations
 - d. Deal with news media
 - 3. Interface with surrounding fire departments and fire chiefs
 - 4. Act as a fire protection consultant
- B. Keep in contact with people within the department and outside the department to insure a true picture of the "real world" (to keep from losing touch)
- C. Belong and/or contribute to service groups, such as Chamber of Commerce, Rotary Club, Kawanis, Lions, etc.
- D. Belong to professional organizations such as the state's fire chief association, IAFC, NFPA, IFSTA, etc. (hold offices in these professional organizations)
- E. Develop and maintain proper public relations activities to insure a favorable image for the fire department and municipality
- F. Develop contacts and interface with vendors and equipment representatives that deal directly with the fire department

VIII. PROFESSIONAL DEVELOPMENT

- A. Read magazines, bulletins and books
- B. Attend state, regional, and national conferences and seminars

COMMENTS

- C. Attend college or community course (credit or non-credit)
- D. Attend training sessions within the city and fire department
- E. Review current fire research
- F. Review current court decisions involving fire departments
- G. Review current local, state and federal legislation decisions dealing with fire protection
- H. Utilizing authorized vacation and management leave

ADDITIONAL COMMENTS:

APPENDIX F

THE FUNCTIONS AND ACTIVITIES OF THE MUNICIPAL
FIRE CHIEF

The Functions and Activities of the
Municipal Fire Chief

Compiled By
Thomas W. Dawson

This list is designed to be all inclusive and represent the fire chief of a small fire department as well as the larger metropolitan department.

All fire chiefs do not perform all these functions and activities. As the size of the fire department increases, the larger the number of these functions and activities that are delegated to subordinates. The fire chief is still, however, ultimately responsible for these functions and activities.

I. PLANNING AND BUDGETING

- A. Planning fire department's future activities and programs and then budgeting for these activities and programs
 - 1. Short-range planning (1 to 2 years)
 - 2. Long-range planning (5, 10, 20 years)
- B. Solicit input from subordinates, superiors, outside department people and others to formulate plans
- C. Review resources and programs to better utilize manpower, equipment and facilities
 - 1. Purchase appropriate apparatus and tools
 - 2. Planning fire station location and design
 - 3. Planning personnel requirements
- D. Determine specifications and/or approve purchase of the tools, appliances and equipment to be used by the department
- E. Prepare the budgets
 - 1. Analyze revenue sources
 - 2. Establish priorities
 - 3. Anticipate emergency expenditures
 - 4. Establish capital expenditures
 - 5. Establish operational expenditures
- F. Negotiate appropriations when needed
- G. Provide cost effective fire prevention, fire suppression services and emergency medical services, if used

H. Develop

1. Policies, rules, regulations, general orders, and standard operating procedures
2. Fire codes and other needed legislation
3. Fire department goals (set goals with subordinates) and objectives
4. Use of the computer

I. Developing plans

1. Master plan (analyze fire statistics and data)
2. Fire prevention plans
3. Fire suppression plans
4. Training requirements

J. Developing research projects

K. Plans legal strategies with attorneys

L. Planning for meetings

M. Plan for major emergencies

1. Pre-fire planning
2. Disaster planning
 - a. Floods
 - b. Earthquakes
 - c. Tornados
 - d. Large fires
 - e. Aircraft--train wrecks

II. COMMUNICATIONS

A. Physical activities

1. Answer telephone
2. Write:

letters	questionnaires for research studies
memos	reports and other documents
newsletters	articles for publication
news releases	standard operating procedures
legislative bills	policies
3. Dictate letters
4. Talk to people
5. Listen to people
6. Give speeches
7. Radio and TV interviews

B. Report verbally and in writing

1. To:
 - a. City manager, mayor, or commissioners
 - b. General public
 - c. Community leaders
 - d. Immediate subordinates
 - e. Fire fighters
 - f. Department heads
 - g. Others

2. About:
 - a. Conditions
 - b. Resources
 - c. Situations
 - d. Needs
 - e. Priorities
 - f. Actions
 - g. Etc.

C. Attend meetings

1. Municipal government
2. Fire department (departmental)
3. Various committees
4. Community civic and special interest groups
5. Regional fire service organization
6. National fire service organization
(example: IAFC, IFSTA, NFPA, etc.)

D. Testifies in court cases and civil service hearings

- E. "Politicizing"--Contacting and talking with the appropriate leaders and politicians to achieve desired results

III. DECISION-MAKING

- A. Responding to (providing answers for) questions, needs and problems that are present or perceived and need solutions
- B. Determining the alternatives or various answers to a question, need or problem and then choosing the "best" alternative
- C. Decision making cuts across all the functions of the fire chief. For example:
 1. Planning--make decisions on where to locate a new fire station.
 2. Communication--make decision on what to say and when
 3. Decision-making--decide when to make a decision and when not to
 4. Directing and coordinating--decide when to intervene in a situation and provide coordination

5. Controlling--make decision on which division to monitor and when
6. Organizing--make decision on how organization should be arranged and who should be placed in the various positions
7. Social and personal interface--make decisions on which professional organization to join and participate in
8. Professional development--decide which management course to take during the next semester

IV. DIRECTING AND COORDINATING

- A. Providing leadership--influence the behavior of others, set goals for the department and formulate the paths to achieve these goals--develop leadership in others
- B. Motivate those within the fire department and those around the fire department
 1. Set the example
 2. Provide the necessary training
 3. Provide the correct recognition
 4. Provide opportunity
 5. Provide job security
- C. Resources management--direct and coordinate the available resources to best achieve the established goals of the department including utilization of manpower, equipment and facilities
- D. Coordinate the activities of the divisions within the fire department including administration, fire suppression, training, fire prevention, maintenance, communications, and emergency medical aid
- E. Direct (through the chain of command) the activities of the overall fire department
- F. Supervise immediate subordinates, officers, and immediate office staff
- G. Delegate authority to subordinates
- H. Implement programs and activities within the fire department.
- I. Create environment in which innovative and creative activities flourish
- J. Initiate progressive change as a "change agent"
- K. Supervise the budget and expenditures
- L. Approve department members to attend outside schools and seminars

- M. Approve all major personnel transactions
- N. Insure enforcement of fire codes in the community
- O. Command major emergency situations
 - 1. Respond to and command (directing and coordinating) major fire emergencies (greater alarms) and major hazard incidents such as:
 - a. Explosion
 - b. Chemical or gas spills
 - c. Floods
 - d. Civil disorders
 - e. Life threatening situations
 - 2. Properly utilize fire resources and other city resources, such as public service, public works, Red Cross, Civil Defense, etc.

V. CONTROLLING-MONITORING-OVERSEEING

- A. Observe, evaluate and influence the divisions within the fire department
- B. Use management by objectives (MBO's) to evaluate actions of those within the fire department
- C. Meet and confer with others about what is happening in the environment around the department
- D. Review and analyze reports and other documents to assure compliance with established policies and goals
- E. Gather and analyze all available "feedback"
- F. Be briefed on past and future events with others such as city manager, assistant fire chiefs, other department heads, etc.
- G. Develop measuring instruments to monitor and control the activities within the department
- H. Conduct evaluations of personnel and programs
- I. Be aware of morale factors
- J. Review and renew contracts and mutual aid agreements

VI. ORGANIZING (Arranging and Resources)

- A. Organizing, arranging or adjusting the fire department organization to most efficiently and effectively fulfill the goals of the department within the community

- B. Develop job descriptions and assign responsibilities for members of the department (arrange the "chain of command") for both emergency and non-emergency situations
- C. Delegate authority
- D. Determine staff and line functions and relationships
- E. Personnel management
 - 1. Staffing the department with manpower through recruitment, selection and hiring, promotions, and manpower distribution
 - 2. Handle labor relations
 - a. Union contract negotiations
 - b. Union contract administration
 - c. Equal opportunity employment problems
 - 3. Arrange the necessary disciplinary procedures
 - 4. Negotiate and administer the necessary grievance procedures

VII. SOCIAL AND PERSONAL INTERFACE (Liaison Activity)

- A. Act as liaison and/or technical expert
 - 1. Within the department. Furnish technical advice to division heads, i.e., training, fire prevention, fire suppression, etc.
 - 2. Outside the department
 - a. Deal with other city departments and services such as water department, building department, etc.
 - b. Deal with local, county, state and federal agencies
 - c. Deal with special interest groups and civic organizations
 - d. Deal with news media
 - 3. Interface with surrounding fire departments and fire chiefs.
 - 4. Act as a fire protection consultant
- B. Keep in contact with people within the department and outside the department to insure a true picture of the "real world" (to keep from losing touch)
- C. Belong and/or contribute to service groups, such as Chamber of Commerce, Rotary Club, Kawanis, Lions, etc.
- D. Belong to professional organizations such as the state's fire chiefs association, IAFC, NFPA, IFSTA, Etc. (hold offices in these professional organizations)

- E. Participate as a contributing expert in professional conferences and seminars
- F. Develop and maintain proper public relations activities to insure a favorable image for the fire department and municipality
- G. Develop contacts and interface with vendors and equipment representatives that deal directly with the fire department
- H. Develop contacts and rapport with state and federal legislators

VIII. PROFESSIONAL DEVELOPMENT

- A. Read technical and trade magazines, bulletins and books
- B. Attend state, regional and national conferences and seminars
- C. Attend college or community courses (credit or non-credit)
- D. Attend training sessions within the city and fire department
- E. Teach acquired skills and knowledge
 - 1. To pass along valuable information
 - 2. Lesson preparation and presentation "sharpens" the teachers own skills and knowledge and builds self confidence and self awareness
- F. Review current fire research
- G. Review current court decisions involving fire departments
- H. Review current local, state and federal legislation decisions dealing with fire protection
- I. Utilize authorized vacation and management leave

APPENDIX G

COVER LETTER AND THE FINAL QUESTIONNAIRE

Cover letter which accompanied
third questionnaire.

September 7, 1979

Dear Chief:

My thanks to those of you who answered the second questionnaire. Twenty-one of the thirty-nine participants responded with needed verification and constructive comments. From these returns the final draft outline of the Functions and Activities of the Municipal Fire Chief has been developed.

Enclosed is a copy of the final draft for you to keep. If you see any "glaring" problems with this outline please let me know.

Also, enclosed is the third questionnaire of our Delphi Study. It is designed to supply information on how the present municipal fire chief acquires the skills and knowledge necessary to perform his job. Please fill out the enclosed final questionnaire and return it in the envelope provided.

Please feel free to contact me if you have questions concerning this research project utilizing the Delphi Technique. I hope that in my future travels I have an opportunity to meet each of you in person. Thanks again for your help and support throughout this most interesting research project.

Sincerely,

Thomas Dawson
Graduate Student
1103 S. Pine Street
Stillwater, OK 74074
Tel. (405) 624-2185

TD/bh

Enclosures:

- (1) The Functions and Activities of the
Municipal Fire Chief (Final Outline)
- (2) The Final Questionnaire

The final questionnaire.

DELPHI RESEARCH STUDY
on
The Functions and Activities of
of the
Municipal Fire Chief

Return to: Thomas W. Dawson
1103 S. Pine
Stillwater, OK 74074
(405) 624-2185

Participant's Name: _____

Date: _____

Note: This information will be compiled with that of the other participants to develop a general profile on how the present day fire chief acquires his skills and knowledge.

I. BIOGRAPHICAL DATA:

- A. Age: _____
- B. Number of years as a Fire Chief: _____
- C. Number of years in the fire service. Total: _____
- D. Number of years in the fire department of which you are presently Chief: _____
- E. Number of years in a supervisory position outside the fire service: _____
Name of position(s): _____
- F. Number of years as a company officer: _____
(Lieutenant or Captain)
- G. Number of years as a chief officer such as a Battalion, Assistant or Deputy Chief: _____
- H. Number of years as a Fire Marshal or Fire Prevention Officer: _____
- I. Highest grade completed in school:
- | | | |
|-------------------|-------------|-------------|
| 1 2 3 4 5 6 7 8 | 9 10 11 12 | 13 14 15 16 |
| elementary school | high school | college |

APPENDIX H

LIST OF PRIVATE AND PUBLIC SECTOR MANAGERS,
STILLWATER, OKLAHOMA

Private and Public Sector Managers

Stillwater, Oklahoma 74074

Title and Name	Company	Number of Employees
<u>Private Sector:</u>		
1. Plant General Manager Dale A. Coomer	Swan Hose Company 4115 N. Perkins Road	400
2. Director of Industrial Relations William J. Riley	Mercury Marine 3005 Perkins Road	900+
3. Retail Store Manager Dennis M. Silvers	Katz Department Store Box 430	48
4. Manager J. D. Frailey	Southwestern Bell 519 S. Husband	27
<u>Public Sector:</u>		
1. City Manager Lawrence Gish	City of Stillwater 723 S. Lewis	336
2. Hospital Administrator Robert E. Park	Stillwater Municipal Hospital P.O. Box 1008	316
3. Postmaster Bob Bennett	U.S. Postal Service 720 S. Husband	81
4. Dean George A. Gries	College of Arts and Sciences Oklahoma State University	450

Note: These names were secured with the help of John Fowler, Executive Director, Stillwater Chamber of Commerce.

APPENDIX I

THE FUNCTIONS AND ACTIVITIES OF THE MANAGER, A
"CAMOUFLAGED OUTLINE" OF THE FUNCTIONS AND
ACTIVITIES OF THE MUNICIPAL FIRE CHIEF

The Functions and Activities of the Manager

By
Thomas Dawson

This list is designed to be all inclusive and represent the managers of small departments or organizations as well as very large corporations.

All managers do not perform all these functions and activities. As the size of the department or organization increases the larger the number of these functions and activities that are delegated to subordinates. The manager is still, however, ultimately responsible for these functions and activities.

I. PLANNING AND BUDGETING

- A. Planning the department's future activities and programs and then budgeting for these activities and programs
 - 1. Short-range planning (1 to 2 years)
 - 2. Long-range planning (5, 10, 20 years)
- B. Solicit input from subordinates, superiors, outside department people and others to formulate plans
- C. Review resources and programs to better utilize manpower, equipment and facilities
 - 1. Purchase appropriate apparatus and tools
 - 2. Planning building location and design
 - 3. Planning personnel requirements
- D. Determine specifications and/or approve purchase of the tools, appliances and equipment to be used by the department
- E. Prepare the budgets
 - 1. Analyze revenue sources
 - 2. Establish priorities
 - 3. Anticipate emergency expenditures
 - 4. Establish capital expenditures
 - 5. Establish operational expenditures
- F. Negotiate appropriations when needed
- G. Provide cost effective services
- H. Develop
 - 1. Policies, rules, regulations, general orders, and standard operating procedures

2. The department goals (set goals with subordinates) and objectives
3. Uses of the computer

I. Developing plans

J. Developing research projects

K. Plans legal strategies with attorneys

L. Planning for meetings

M. Plan for major emergencies

1. Floods
2. Earthquakes
3. Tornados
4. Large fires

II. COMMUNICATIONS

A. Physical activities

1. Answer telephone
2. Write:

letters	questionnaires for research studies
memos	reports and other documents
newsletters	articles for publication
news releases	standard operating procedures
legislative bills	policies
3. Dictate letters
4. Talk to people
5. Listens to people
6. Give speeches
7. Radio and TV interviews

B. Report verbally and in writing

1. To:
 - a. Superiors
 - b. General public
 - c. Community leaders
 - d. Immediate subordinates
2. About:
 - a. Conditions
 - b. Resources
 - c. Situations
 - d. Needs
 - e. Priorities
 - f. Actions
 - g. Etc.

- C. Attend meetings
 - 1. Municipal government
 - 2. Departmental
 - 3. Various committees
 - 4. Community civic and special interest groups
 - 5. Regional organizations
 - 6. National organizations
- D. Testifies in court
- E. "Politicizing"--contacting and talking with the appropriate leaders and politicians to achieve desired results

III. DECISION-MAKING

- A. Responding to (providing answers for) questions, needs and problems that are present or perceived and need solutions
- B. Determining the alternatives or various answers to a question, need or problem and then choosing the "best" alternative
- C. Decision making cuts across all the functions of the manager. For example:
 - 1. Planning--make decisions on where to locate a new building
 - 2. Communication--make decision on what to say and when
 - 3. Decision-making--decide when to make a decision and when not to
 - 4. Directing and coordinating--decide when to intervene in a situation and provide coordination
 - 5. Controlling--make decision on which division to monitor and when
 - 6. Organizing--make decision on how organization should be arranged and who should be placed in the various positions
 - 7. Social and personal interface--make decision on which professional organization to join and participate in
 - 8. Professional development--decide which management course to take during the next semester

IV. DIRECTING AND COORDINATING

- A. Providing leadership--influence the behavior of others, set goals for the department and formulate the paths to achieve these goals--develop leadership in others
- B. Motivate those within the department and those around the department
 - 1. Set the example
 - 2. Provide the necessary training
 - 3. Provide the correct recognition

4. Provide opportunity
 5. Provide job security
- C. Resources management--direct and coordinate the available resources to best achieve the established goals of the department including utilization of manpower, equipment and facilities
 - D. Coordinate the activities of the divisions within the department
 - E. Direct (through the chain of command) the activities of the overall department
 - F. Supervise immediate subordinates
 - G. Delegate authority to subordinates
 - H. Implement programs and activities within the department
 - I. Create environment in which innovative and creative activities flourish
 - J. Initiate progressive change as a "change agent"
 - K. Supervise the budget and expenditures
 - L. Approve department members to attend outside schools and seminars
 - M. Approve all major personnel transactions
 - N. Command major emergency situations
 1. Respond to and command (directing and coordinating) major emergencies
 - a. Explosion
 - b. Chemical or gas spills
 - c. Floods
 - d. Civil disorders
 - e. Life threatening situations
 2. Properly utilize the resources
- V. CONTROLLING--MONITORING--OVERSEEING
- A. Observe, evaluate and influence the divisions within the department
 - B. Use management by objectives (MBO's) to evaluate actions of those within the department.

- C. Meet and confer with others about what is happening in the environment around the department
- D. Review and analyze reports and other documents to assure compliance with established policies and goals
- E. Gather and analyze all available "feedback"
- F. Be briefed on past and future events with others
- G. Develop measuring instruments to monitor and control the activities within the department
- H. Conduct evaluations of personnel and programs
- I. Being aware of morale factors
- J. Review and renew contracts

VI. ORGANIZING (Arranging and Resources)

- A. Organizing, arranging or adjusting the department organization to most efficiently and effectively fulfill the goals of the department within the organization
- B. Develop job descriptions and assign responsibilities for members of the department (arrange the "chain of command")
- C. Delegate authority
- D. Determine staff and line functions and relationships
- E. Personnel management
 - 1. Staffing the department with manpower through recruitment, selection and hiring, promotions, and manpower distribution
 - 2. Handle labor relations
 - a. Union contract negotiations
 - b. Union contract administration
 - c. Equal opportunity employment problems
 - 3. Arrange the necessary disciplinary procedures
 - 4. Negotiate and administer the necessary grievance procedures

VII. SOCIAL AND PERSONAL INTERFACE (Liaison Activity)

- A. Act as liaison and/or technical expert
 - 1. Within the department. Furnish technical advice
 - 2. Outside the department

- a. Deal with other departments and services
 - b. Deal with local, county, state and federal agencies
 - c. Deal with special interest groups and civic organizations
 - d. Deal with news media
3. Interface with surrounding organizations
- B. Keep in contact with people within the department and outside the department to insure a true picture of the "real world" (to keep from losing touch)
 - C. Belong and/or contribute to service groups, such as Chamber of Commerce, Rotary Club, Kawanis, Lions, etc.
 - D. Belong to professional organizations
 - E. Participate as a contributing expert in professional conferences and seminars
 - F. Develop and maintain proper public relations activities to insure a favorable image for the department and the organization
 - G. Develop contacts and interface with vendors and equipment representatives that deal directly with the department
 - H. Develop contacts and rapport with state and federal legislators

VIII. PROFESSIONAL DEVELOPMENT

- A. Read technical and trade magazines, bulletins and books
- B. Attend state, regional, and national conferences and seminars
- C. Attend college or community courses (credit or non-credit)
- D. Attend training sessions within the organization
- E. Teach acquired skills and knowledge
 - 1. To pass along valuable information
 - 2. Lesson preparation and presentation "sharpens" the teachers own skills and knowledge and builds self confidence and self awareness
- F. Review current research
- G. Review current court decisions
- H. Review current local, state and federal legislation decisions
- I. Utilize authorized vacation and management leaves

APPENDIX J

VERIFICATION STATEMENT

APPENDIX K

TABLE

TABLE I
SUBJECT AREAS DEALT WITH BY MANAGEMENT PERIODICALS
USED IN BUSINESS AND INDUSTRY

Periodical	No. of Issues/ Year	Planning & Budg- eting	Communi- cations	Deci- sion Making	Directing & Coor- dinating	Controlling, Monitoring, Overseeing	Organ- izing	Social & Personal Interface	Profes- sional Development	Tech- nical & Misc.	Total	%*
<u>The Academy of Management Review</u> , Vol. 1, Nos. 1, 2, 3, 4 (1976)	4	5	1	4	11	4	9	2	10	6	52	88%
<u>Administrative Science Quarterly</u> , Vol. 23, Nos. 1, 2, 3, 4 (1978)	4	1	1	4	5	5	5	0	1	3	25	88%
<u>Supervision</u> , Vol. XXXVII, Nos. 1 through 12 (1976)	12	6	14	8	16	3	6	2	11	9	75	88%
<u>Managerial Planning</u> , Vol. 26, Nos. 1 through 6 (July, 1977 to May, 1978)	6	24	0	4	1	4	1	1	0	8	43	81%
<u>Academy of Management Journal</u> , Vol. 21, Nos. 1, 2, 3, 4 (1978)	4	1	0	3	7	6	11	1	2	9	40	78%
<u>Sloan Management Review</u> , Vol. 19, Nos. 1, 2, 3 (Fall, 1977 to Spring, 1978)	3	6	0	1	4	0	0	0	3	4	18	78%
<u>Management Review</u> , Vol. 67, Nos. 1 through 12 (1978)	12	18	4	5	5	5	6	4	17	20	84	76%
<u>Journal of Systems Management</u> , Vol. 29, Nos. 1 through 12 (1978)	12	29	3	4	11	12	6	0	1	23	89	74%
<u>Journal of Management Studies</u> , Vol. XIV, Nos. 1, 2, 3 (1977)	3	3	0	2	0	2	2	0	5	6	20	70%
<u>Industrial Relations</u> , Vol. 17, Nos. 1, 2, 3 (1978)	3	9	0	1	0	1	10	0	2	10	33	70%
<u>Journal of Business Research</u> , Vol. 5 (1977)	1	3	0	3	0	0	5	1	0	9	21	57%
<u>California Management Review</u> , Vol. XX, Nos. 1, 2, 3, 4 (Fall 1977 to Summer, 1978)	4	7	1	1	1	2	5	4	4	19	44	57%

TABLE I (Continued)

Periodical	No. of Issues/ Year	Planning & Budg- eting	Communi- cations	Deci- sion Making	Directing & Coor- dinating	Controlling, Monitoring, Overseeing	Organ- izing	Social & Personal Interface	Profes- sional Development	Tech- nical & Misc.	Total	%*
Total in Each Category	67**	112	24	40	61	44	66	15	56	126	544***	
Percentage of Articles in Each Category		21%****	4%	7%	11%	8%	12%	3%	10%	23%		

*Percentage related to the municipal fire chief.
 **Total number of issues.
 ***Grand total.
 ****112/544.

VITA²

Thomas William Dawson

Candidate for the Degree of

Doctor of Education

Thesis: THE FUNCTIONS AND ACTIVITIES OF THE MUNICIPAL FIRE CHIEF

Major Field: Occupational and Adult Education

Biographical:

Personal Data: Born in Yuba City, California, May 21, 1942, the son of William R. and Alice E. Dawson.

Education: Received an Associate of Arts degree with a major in Liberal Arts from Yuba College, Marysville, California, in June 1966; received an Associate degree with a major in Fire Protection Technology from Oklahoma State University, Stillwater, Oklahoma, in May 1966; received the Bachelor of Science degree from Oklahoma State University with a major in Technical Education in May 1968; received the Master of Science degree from Oklahoma State University with a major in Technical Education in May 1970; completed requirements for the Doctor of Education degree at Oklahoma State University in May 1980.

Professional Experience: Worked as a full-time Fireman-Driver for a total of one year with the Yuba City Fire Department, California; worked as a volunteer firefighter for a total of four years with the Stillwater Fire Department, Oklahoma; worked as a Director of Fire Technology for a total of two years with the Delaware Technical and Community College, Wilmington, Delaware; worked as an Assistant Fire Chief for a total of one year with the Lawrence Radiation Laboratory Fire Department, Livermore, California; worked as a founding Dean of Extension with final faculty rank of Professor for a total of six years with the New Hampshire Vocational-Technical College, Laconia, New Hampshire; worked as a Graduate Teaching Associate for a total of two years with the Oklahoma State University, Stillwater, Oklahoma.

Professional Organizations: Member of Phi Delta Kappa, Tau Iota Epsilon, Fire Protection Society, American Vocational Association, National Fire Protection Association; listed in the International Who's Who in Education 1979 and the National Deans List 1978-79.