

ABSTRACT

THE EVOLUTION OF CALIFORNIA FIRE SERVICE

TRAINING AND EDUCATION

By

Ronny J. Coleman

May 1994

This study was concerned with the evolution of the California fire service education and training system. Using the documentary research method, the study was based on an analysis of information obtained from official records; minutes of meetings; newspapers, newsletters, and official publications; correspondence; and eyewitness accounts.

The concept of an American fire-training program began in the early 1920s as an effort of Chief Engineer Ralph Scott of the Los Angeles City Fire Department. His work was based on training programs from American metropolitan and suburban departments, which were in turn influenced to some degree by the European fire services.

Today, the California fire service education and training system is a complicated array of various delivery components that continue to evolve along both academic and vocational lines. This evolution into various components has created a difficult and often confused career development pathway for fire service personnel.

**THE EVOLUTION OF CALIFORNIA FIRE SERVICE
TRAINING AND EDUCATION**

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**In Partial Fulfillment
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Master of Arts**

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TABLE OF CONTENTS

Chapter	Page
1. THE FORMATIVE YEARS	1
Early History	2
Archaeological Evidence	3
Greek Civilization	3
Roman Fire Brigades	4
Medieval Fire Protection.....	5
Development of Guilds and Apprentices	5
Order of St. John and the Knights of Malta	6
The Great Fire of London	6
Creation of Fire Insurance	6
The American Colonies	7
Benjamin Franklin, America’s First Fire Chief	7
The Union Fire Company	7
David Hartley, the Scientist	8
Development of Educational Theory and Practice	8
The Volunteers in Their Halcyon Years	9
European Fire Training Concepts	9
James Braidwood, Firemaster	9
Sir Eyre Massey-Shaw, His Era and Influence	11
The Civil War and the Age of Industrialization.....	13
The End of an Era; the Beginning of Another	14

	Military Influence	14
	Industrialization and Education	15
	Knowledge of Fire	15
	The New York Fire Department	16
	Invention and Innovation	16
	The Reemergence of the Insurance Industry	16
	The National Fire Protection Association (NFPA) Organizes in Boston	17
	The Fire Chiefs Organize in Baltimore.....	17
	Firefighters’ Images and Reputations	17
	The San Francisco Fire Department	18
	Educational Philosophies Conflict	19
	Chapter Summary	19
2.	ENTERING THE TWENTIETH CENTURY	21
	The Philadelphia Fire Academy.....	21
	The New York City Fire College.....	22
	North Carolina Fire Training	23
	Methodology and Vocational Education	23
	The Smith-Hughes Act	23
	International Association of Fire Chiefs (IAFC) Gets Involved.....	24
	Ralph J. Scott	25
	Fire Fighting Bulletin 155.....	25
	The Los Angeles Fire Department (LAFD) Trade Analysis	26
	Fire Training Around the Country	27

Oklahoma Fire Training.....	27
International Fire Service Training Association (IFSTA)	28
Massachusetts Makes an Effort	28
The Los Angeles Fire College	28
The Portland Fire College.....	28
Seattle Fire Training	29
The Inception of California State Training.....	29
The George-Deen Act.....	30
The California Fire Chief’s Education Committee.....	30
Reorganization of the Program (1936)	32
First Meeting of the State Advisory Committee.....	34
Fireman Bulletin 199 (1939).....	35
World War II	36
Appointment of Samuel L. Fick.....	37
Concern for a State Fire Academy.....	37
Senate Bill 235.....	38
The Development of the Institutes.....	38
The Changing Character of the Fire Service.....	41
The Impact of the Korean War	41
Creation of the New York State Fire Academy	41
The University of Southern California Program.....	41
Characteristics of the Firefighter Change	44
The Statewide Advisory Actions of the 1950s	44

Two Sets of “Red Books”	45
The Instructors’ Workshop	45
Arson and Fire Investigation Seminar	45
The California Division of Forestry (CDF) Starts a Fire Academy.....	46
Expansion of Staff in Fire Training	46
Flammable Liquids Fire Training Program	47
Shifting Emphasis in Education.....	48
Community College Curriculum.....	49
Tom Ward Retires, Ed Bent Takes Charge.....	50
The Basic Recruit Academy Firefighter I.....	50
The Creation of the Instructors’ Society.....	51
The Start of the Fire Prevention Workshops.....	51
The First “Bombero” Program.....	51
The Area Instructor Program	51
International Association of Firefighters (IAFF) Resolution 111-1966	51
Growth and Expansion of Training and Education.....	52
Howard Emmons’ Comments.....	52
The Wingspread Conference.....	53
The Systems Approach by Hickey.....	56
Expansion of the Community College System	57
Chapter Summary	57
3. RESPONDING TO THE INCREASED DEMANDS	58
Professional Standards	58

The Study of a Fireman’s Occupation	58
Chief Porter’s Influence	59
CFCA Proposes Minimum Standards.....	59
Resolution 41-1968.....	60
The NFPA’s Involvement in Setting Standards.....	61
The Joint Council Forms.....	61
The Need for a Master Plan	61
Lake Arrowhead Workshops	62
The Concept of Position Orientation	63
The Career Development Guide Concept.....	64
Revision of the System	65
Certification as a Concept.....	65
Senate Bill 1805: Campbell	66
Role of State Association of Fire Educators (SAFE) in Revising the Core Curriculum	66
Formation of MACs.....	66
Creation of the California State University, Los Angeles (CSULA) Program.....	67
Reorganization: The Second Time Around	68
Shifting Emphasis in the Use of Staff.....	68
Creation of the California Fire Academy System.....	69
Apprenticeship as a Concept.....	70
John Gerard, Los Angeles Fire Chief	71
The Use of Average Daily Attendance (ADA) Funding Mechanisms	72

Regionalization of the Academy Courses.....	72
The Evolution of the Federal Fire Focus	74
America Burning.....	74
Howard Tipton: A California Influence.....	74
First Administrator of the National Fire Prevention and Control Administration (NFPCA)	75
Reorganization by President Carter	76
Californians at the National Fire Academy	76
First Superintendent, National Fire Academy	78
Site Selection for the National Fire Academy	78
President Reagan and His Impact	79
President Reagan Appoints Giuffrida	79
B. J. Thompson, Fire Academy Superintendent	80
Donovan Becomes Fire Academy Superintendent	81
Neville Becomes Fire Academy Superintendent	81
Clyde Bragdon Becomes Administrator	82
Revisions to the Master Plan.....	84
Chapter Summary	84
4. ALLIES, ADVERSARIES AND ECONOMICS	85
Senate Bill 456	85
Ed Bent Retires	85
Richard Wharton Appointed	85
California Fire Service Training and Education System (CFSTES) Incorporated....	86
Ron Bogardus Becomes the State Fire Marshal	88

AB 223 (Vasconcellos).....	88
AB 2818 (Johnston)	89
Bogardus Retires: McMullen Appointed.....	90
Curriculum Development Workshops	91
Wharton Leaves the System.....	91
Expansion of the JAC Program.....	91
Symposium I	93
Development of an Alternate State Academy Site	94
Senate Bill 1977	94
5. RETROSPECT AND PROSPECT FOR THE FUTURE.....	96
Prather's Testimony	97
Trends and Patterns from the Past	97
The Future of the Fire Training Program.....	99
APPENDICES.....	101
A. THESIS PROPOSAL	102
B. STATE FIRE TRAINING INSTRUCTORS, 1940 TO 1968	110
C. RESUME OF RONNY J. COLEMAN.....	112
D. THE MASTER PLAN CHART.....	114
E. NATIONAL FIRE ACADEMY SUPERINTENDENTS.....	116
F. LETTERS FROM CHIEF JOHN C. GERARD ENCOURAGING LOS ANGELES FIRE DEPARTMENT PERSONNEL TO SEEK ADVANCED EDUCATION.....	118
BIBLIOGRAPHY.....	126

CHAPTER 1

THE FORMATIVE YEARS

The concept of a fire service training program in America, based on occupational needs, was formalized in the early 1920s as the effort of one person, Chief Engineer Ralph Scott of the Los Angeles City Fire Department (Hawkins, Prosser, & Wright, 1951). Chief Scott based his work on preceding efforts that had been set in the development of training programs from both metropolitan and suburban fire departments in this country, which to some degree had been based on fire protection practices started by the European fire services.

The beginnings of fire service skill development were little more than on-the-job training. Initially, an experienced firefighter taught another less experienced firefighter. This delivery system was patterned in great part after the master-apprenticeship model found in vocational education. Today, however, courses are taught that require extensive instructor credentialing. And, there are several different types of post secondary academic programs available in or related to fire protection that range from basic certificate courses to associate, bachelor's, and graduate degrees.

Currently, there is a certification process for individual members of the fire service for both rank levels and technical specializations. The master-apprentice model has been part of the system including the existence of a joint apprenticeship program involving formal agreements between fire service labor and management. This complicated array of various delivery components to train and educate members of the fire service and its allied fields has continually evolved along both academic and vocational lines.

In many cases, course offerings and programs have been uncoordinated. Students sometimes have been unable to matriculate easily from one program to another. The array of program offerings has shared a common student population, many of whom shared common career needs, however the delivery system has not been an integrated system. There have been problems of reciprocity between programs, and there have been difficulties in maintaining funding levels for the programs. The coordination of resources for these programs has often been missing due to communication misunderstandings and policies that define the relationship between programs.

The evolution of the various curricular approaches has been the result of the efforts of many dedicated and responsible individuals. Government agencies at the state and federal levels; state, national and international professional fire service organizations; and various educational institutions have all been involved in the development of the public policy process that has created or changed the existence of the various programs.

The list of legislation, organizational policies, procedures, events, individual activities, expenditures, and contributions required to achieve the current level of training and education to cope with contemporary fire issues is lengthy. The list includes, but is not limited to, obtaining recognition as a vocation; conducting an occupational task analysis; creating a curriculum

(including texts and references); devising different curriculum delivery approaches; generating funding sources; obtaining organizational, institutional, and individual commitments; identifying and defining career development tracks; providing physical facilities; dividing up responsibilities among the various delivery approaches; and maintaining an active, involved instructional cadre.

Each of these activities has resulted in events and contributions that have moved the fire service closer to achieving a clearer pattern for planning career development. Yet, at the same time, these same individuals, organizations, and governmental entities have often quarreled and dissented regarding how to achieve the overall goal of an integrated system design.

From the inception of the concept of a fire training and education system, various role players have had a focus on the tasks needed to cope with the physical aspect of fire combat, as well as the cognitive aspects of preventing fire and educating the public. The curriculum had to be both manipulative and technical in nature.

The specifics in the curriculum have had to expand constantly as problems created by society have expanded and changed. Course offerings and the development of curricula within the various delivery systems have had to respond accordingly. This response has resulted in a proliferation of redundant course materials and alternative delivery approaches.

The positive aspect of this response has been a significant increase in the knowledge, skills, and abilities of fire service personnel. The negative aspects of this growth have been the fragmentation and competition for funding, resources, and system control.

In spite of all of these difficulties, training and education programs currently exist for the California fire service. However, in order to understand the overall system that has been evolving over the last two hundred years, an explanation of the development of fire fighting as a profession is necessary.

Early History

In the earliest years of human evolution, fire was treated as a gift from the gods. In Greek mythology, fire was given to humans by the god Prometheus. Almost all early cultures had some form of religious myth regarding the origin of fire. Accordingly, fire was treated with reverence and fear for eons. The person responsible to start or sustain a fire was often given a position of power or religious reverence in tribal hierarchy.

As humankind learned how to kindle fire and then manipulate it for various uses, the religious connotation waned. The desire to control the use of fires became more of a practical endeavor. Continued innovations in the use of fire for the preparation of pottery, smelting of metals, creating weapons of war, and controlling the temperature in dwelling environments had their impact on the beginnings of civilization.

Nomads found it difficult to maintain their migratory life style when attempting to use fire to create pottery. The firing process required the establishment of fixed facilities, which of course limited the migratory habits of a population. The development of methods for smelting

metal was even more complicated than pottery operations. Subsequently, more sophisticated structures and processes were required to control and use fire. Camps became villages, then towns, and eventually cities began to emerge. The concept of fire prevention and fire suppression of dangerous fires in these places of human habitation was practically nonexistent.

Archaeological Evidence

Early encampments were plagued with accidental fires that resulted in the loss of shelter and even life. Sometimes these fires were fought and in other cases the occupants merely left. As a result, the originator of the concept of fire suppression has been lost in antiquity.

Archaeologists have discovered entire communities that were burned to the ground, leaving only one clue – traces of carbon in the postholes. Fire was actually an important element in preserving evidence of the location of these early communities. Unburned wood would have rotted away. This material would have left no clue to a shelter's existence. Wood that had been consumed in a fire sometimes becomes charcoal. This type of evidence then survived over the centuries to provide modern-day scientists with some concept of early human living and working habits. In some cases, fires actually baked the clay from the ground into a fair semblance of the structural elements, giving archaeologists a clue to the construction technology of the times (History, 1960).

Initially, the very idea that a human being could intervene in the growth of a fire was considered to be a form of heresy. Because of the religious connotation of fire, accidental fire was initially considered an act of God. Most of the literature regarding the topic of fire among primitive societies deals with the mysticism of fire instead of fire control (Encyclopedia, 1892).

Greek Civilization

The desire to provide humanity with a civilization and a culture caused early societies to construct buildings that could easily be endangered from fire. In Athens, Greece, in the year 300 AD, public works projects costing over \$57 million in a sixteen-year period were documented (Barlow, 1967). What was not documented was the training of the craftsmen who constructed these buildings. Nor were there records kept of the fire fighting methods that were supposed to be used to protect these structures.

Based upon what is known about the early Greek civilization, these edifices were constructed mostly by slaves. In some cases, certain skilled jobs were done by freedmen. "Citizens" did not participate in manual labor. It can be reasonably assumed that this same constraint was applied to the task of fire control if one of these structures were endangered by an accidental fire.

The Greeks did not believe that education had anything to do with manual labor. To the Greek philosophers, thinking was a pure process. Education was an exercise in the use of thought. Manual skills were not acquired by a formal process, but instead were produced by a system of transferring knowledge from father to son. As stated by Barlow (1967), there is little

doubt that youths learned how to make tools, farm implements, boats, and weapons through the development of this type of apprenticeship relationship.

Destruction of major buildings by fire was a common event in the development of early civilization. Some of the destruction was deliberate, with the use of a weapon of war called Greek Fire. This weapon consisted of pots of burning oil that were tossed onto structures and used to repel invaders attempting to climb walls. Other catastrophes were accidental. Probably one of the most devastating examples was the burning of the library at Alexandria, Egypt. It has been estimated that the loss of that one library set back civilization further than any other single catastrophic event in early history. Many ancient cities were devastated by fire.

Roman Fire Brigades

The first recorded example of organized fire protection has been described in a text by a retired British fire officer (Blackstone, 1957). In 22 BC, the “Tresviri Nocturni,” or magistrates (a group of individuals), were responsible to maintain watch over slaves at night. Naturally, they were also in a good position to report the outbreak of fire. After suffering several catastrophic fire losses, the wealthier people in the Roman Empire assembled a larger organization referred to as the “familia publica.” The “Familia Publicia” was organized along military lines and was again supervised by the tribunal of the “Tresviri Nocturni.”

The laboring force consisted of slaves and conscripts. According to Blackstone (1957), this group had the basic function of fire fighting activities, but they were not very efficient. Emperor Augustus replaced them in AD 6 after a devastating fire. That group was renamed the “Cohortes Vigilum.” They were housed in large barracks and toured the streets in the evening hours to watch for conditions conducive to conflagration-type fires. They were supervised by the “Praefectus Vigilum” (Blackstone, 1957).

The personnel were given a rank structure and various job tasks to perform. Blackstone (1957) described these incipient job titles as “Siphonarius,” “Aquarius,” and “Uncinarius.” A “Siphonarius” was the individual who carried water to the scene. An “Aquarius” was the individual who used a siphon or pump-like device to squirt the water on the fire. The “Uncinarius” was a “hook-man,” trained to pull roofs off houses. The vigilantes were also responsible for policing the city at night and for recapturing runaway slaves.

At the height of the Roman Empire, this fire brigade organization had in excess of two thousand members. The group continued as a well-organized fire fighting force for over two hundred years.

Many of the basic concepts of fire department organization initiated by the Roman fire brigades survived in spite of the hiatus created by the Dark Ages. Many were carried forth when organized fire protection began again in Europe. Subsequently, some of these concepts were to be carried forth in the American fire service as these new lands were colonized.

Among the basic concepts was the idea that a fire service organization was a “para-military” organization. The idea of forming fire protection agencies around bands of individuals

supervised by military officers had its origins in the structure of the Roman Army. Further, the concept that officers were recognized by symbols of status, i.e., the color of their uniform, or the decorations on the helmet, or the positions of power, were an inherent part of this Roman fire brigade concept.

Medieval Fire Protection

With the fall of the Holy Roman Empire, the concept of having people trained to perform fire suppression fell into disuse for several centuries. During Medieval times, the study of fire sciences returned to examining mystical and religious implications. For example, during this era an individual in one country whose home was burned and subsequently caused the loss of another person's property, was sometimes burned at the stake because accidental fire was considered to be evidence of the presence of the devil. In another country, destructive fires were considered to be an "act of God." There are no records of well-organized and clearly identifiable fire brigades during the years following the demise of the Roman fire brigades until the middle of the fifteenth century.

The knowledge that had been developed during the Roman Empire was not destroyed forever. Monks carefully copied available documents. They transferred this knowledge from a wide variety of documents to one known as the "Scriptorium." This book was the primary source of retaining many other forms of knowledge besides fire suppression through the Dark Ages (Barlow, 1967).

A relationship also began to emerge between religion and the development of occupational roles. While knowledge of fire control methods may have deteriorated during the Dark Ages, religious orders began to play a strong role in establishing other occupational skills by formalizing the process by which people learned a particular job.

Development of Guilds and Apprentices

Religious orders in the monasteries cultivated the idea that hard work was an essential part of the religious experience and, therefore, part of a person's salvation. The use of the apprenticeship concept in the work of these monks was greatly increased. Knowledge once again, was transferred by the exchange of information from a skilled person to a younger, less-skilled person. During this time period "guilds," or groups of working class people, began to specialize into specific occupational areas (Barlow, 1967).

Mass printing was made possible by the invention of movable type by Gutenberg during the Renaissance era. Printers were among the first occupations to use apprentices on a wide scale. New technologies further encouraged the increased development of the apprenticeship concept. As job tasks became more complicated, this created a need for more information for a period to learn to become competent. The printing of books allowed information to be transferred to larger populations. Mass printing, therefore, reduced the emphasis on religious orders being the only conduit for knowledge. The Scriptorium concept fell into disuse. However, the record it had provided of the activities of the Roman fire brigades survived to be resurrected later.

Order of St. John and the Knights of Malta

The next organized group of individuals devoted to the saving of life and property occurred during the Crusades. Bands of knights going to the Holy Land to search for the Holy Grail were organized into “Orders.” One such Order was entitled the Order of St. John of Hospitaliers. This band of knights dedicated themselves to the treatment of their fellow knights’ serious wounds caused on the battleground, especially those inflicted by the enemies’ use of “Greek Fire” (Edgell, 1983).

During the Crusades, another group, the Knights of Malta, developed a reputation for saving lives by serving as stretcher bearers for the victims of these battles. The symbol of these knights, the Maltese Cross, became an icon of those who were willing to risk their lives to save others (Blackstone, 1957).

During this same era, several technological advances were simultaneously made in fire protection in other parts of the globe. For example, the Orientals were experimenting with syringe types of hand pressure pumps. They also created fire brigades to protect the major cities in China. No documentation could be located that outlines the activities of these organizations.

The Great Fire of London

In 1666, a major fire almost destroyed London. This fire, labeled the “Pudding Lane Fire,” resulted in an almost total destruction of the center of London. Unfortunately, with the proliferation of business and industry in the greater London area, there had not been a commensurate development of its fire brigade. Command of that fire was relegated to the Royal Family by default. The King of England and his brother, the Duke of York, gave directions on how to combat the fire. Eventually the fire went out of its own accord (Blackstone, 1957).

As a direct result of that fire and others that struck major metropolitan areas of Europe, a new focus was given to the entire fire problem. Private enterprise developed the concept of fire insurance. Blackstone (1957) described the organization of London’s fire fighting forces at that time as being very primitive and in a disorganized state. He noted that help to combat any individual fire often depended on the goodwill of neighbors, rather than the fire fighting forces.

Creation of Fire Insurance

It is difficult to identify the very first insurance business, but a detailed plan for creating one such company had been sent to the King of England in 1637-38 by William Ryley and Edward Mabb. The plan was approved on the 14th of August, 1638 by the attorney general. While the plan predated the London fire by twenty-eight years, it was not highly regarded until after the conflagration (History, 1960).

From 1700 through 1800, these beginning insurance companies provided the primary thrust behind the promotion of fire protection. The concept behind the creation of the “fire mark” was to identify occupancies protected by a particular insurance company. The motivation

of the insurance companies was to reduce their losses. They offered a reward to those who did respond to fight the fires. This approach provided a motivation for the organization of fire brigades to collect revenues from the insurance companies whose properties were protected and identified with these fire marks (Bulau, 1954).

The American Colonies

The North American colonies, which had suffered many serious fires, had very crude fire protection. According to J. V. Morris (1953), the two most hated words in the vocabulary of the early Americans were “Indians” and “fire.” Peter Stuyvesant, most often identified by his relationship to John Alden and the Indian Princess Pocahontas, was responsible for authoring most of the initial fire prevention measures in this country. Among the first laws put on the books by the early colonists were laws relating to fireplaces and the use of fire.

The insurance companies, which had gained considerable power in Europe, were not initially present in these pioneering settings. Instead, fire protection was considered to be a personal responsibility and fire prevention was considered to be the only viable means of protection.

Benjamin Franklin, America’s First Fire Chief

Benjamin Franklin, an activist in the political world and an entrepreneur in the private sector, has been credited with the popularizing of two major philosophical directions of the fire service in North America. He imported the European idea of an insurance industry, and he was concurrently responsible for encouraging formation of “volunteer fire brigades” in this country.

The Union Fire Company

Franklin authored the articles for the Union Fire Company on December 7, 1736, in which the Philadelphia Fire Company adopted several concepts of improving fire protection in the colonies. Among them was the suggestions that:

...we will each of us at his own proper charge provide two leathern buckets, and four bags of good oznabrigs or wider linen, whereof each Bagg shall contain four yards at least, and shall have a running cord near the mouth; which said buckets and Bags shall be marked with the initial letters of our respective names and company. (The Papers of Benjamin Franklin, 1960, p. 150)

The original members were B. Franklin, Isaac Paschal, Samuel Powell, William Rawle, and Phillip Syme (The Papers of Benjamin Franklin, 1960, p. 151). The second fire company attributed to Franklin’s organizational concepts was the Fellowship Fire Company, organized in 1738. George Washington was also involved in the development of the Friendship Fire Company in Alexandria, Virginia about this same time (Morris, 1953).

Following the European model, Franklin built the American insurance industry as a means of providing a buffer against losses by collectively insuring properties. The American fire mark was also a dual-purpose device. The mark served to identify properties protected by the various insurance companies and gave warnings to fire brigades whether or not they would be remunerated for their efforts in combating the fire.

There was little, if any, formal training of the volunteer fire brigades. Instead, they were organized around political, ethnic, or entrepreneurial needs. Most of the fire brigades were organized in neighborhoods where there were sociopolitical reasons for people banding together in support of one another at times of distress.

Shortly after the turn of the century, a minister addressing a meeting of the Massachusetts Charitable Fire Society spent the entire address on the subject of political dangers from abroad, patriotism, and moral conduct. Not one word was spent of fire issues (Gardiner, 1803).

David Hartley, the Scientist

The field of fire science was not without its students in this time period. David Hartley (1731-1813), a scientist, was a member of the British Parliament and a contemporary of Benjamin Franklin. He even continued to communicate with Franklin through the Revolutionary War and eventually lost his seat because of the relationship.

Hartley spent a considerable amount of time examining the combustion process and attempting to define the laws that controlled the ignition and destruction of building materials by fire. In some circles he has been referred to as the Father of Fire Prevention. His home, a three-story mansion at Putney Heath, a London suburb, was built with thin sheets of metal between the joists and boards in the floors. He often performed experiments with fires when he had house guests to emphasize his faith in the concept of built-in fire resistance.

Reportedly, he performed some of these experiments while the Royal Family dined on the upper floors (Tyrell, 1979). Unfortunately, his research information was primarily being reviewed by his peers in the scientific community, not by fire service practitioners themselves.

Development of Educational Theory and Practice

The sixteenth century religious orientation to the traditional concepts of education for traditional occupations started going through reform in the late 1700s. Johann Hunrich Pestalozzi, a Swiss educator, based an entire educational theory on the premise that children should be allowed to “learn by doing.” Pestalozzi developed the point of view that if the system cultivated knowledge without skill, it would not only produce a one-sided person, but also an individual out of phase with the environment. Pestalozzi’s influence was felt strongly in the United States in the 1800s. Neef, a student of Pestalozzi, taught at a school in vocational education in Philadelphia as early as 1809 (Barlow, 1967).

Other European educators, such as Phillip Emanuel von Fellenberg and Frederick Augustus Froebel, pursued the idea of knowledge and skill being companion concepts in

education. The Lyceum and Mechanic's Institute concept was created in Europe during the 1800s. In the United States, the Rensselaer Institute was founded by Stephen Van Rensselaer in Troy, New York in 1825. These institutions combined the study of science with practical knowledge (Barlow, 1967).

The Volunteers in their Halcyon Years

Printed accounts of fire fighting activities in these same years indicates the volunteer departments in this era were more interested in physical prowess than in education or fire prevention. They did not concern themselves with the changing philosophy in educational reform.

Starting with the first volunteer fire companies in the 1700s, and remaining somewhat stagnant for over one hundred years, the approach of the American fire service followed a pattern that did not change until the Industrial Revolution created a need to become more skilled.

First, there was the basic idea that fire protection was a local responsibility and, thus, the majority of the fire protection laws on the books in the United States were generally locally. Secondly, the orientation of the volunteer fire departments was towards the development of the apparatus and equipment to combat fires powered by human beings, not mechanical power technologies.

There was fierce competition for the development of apparatus and equipment to transport water from its source to be applied on a fire at a time of major emergency. For over one hundred years, the only power to apply water to the fire was generated by the personnel themselves. The majority of the emphasis on developing fire departments was on the creation of a defense against major fires. Little emphasis was placed on firefighters learning about the science of fire.

European Fire Training Concepts

The first clearly defined emphasis for training of firefighters was provided by two fire officers from the United Kingdom. They were James Braidwood and Sir Eyre Massey-Shaw.

James Braidwood, Firemaster. James Braidwood was selected as Fire Chief at the early age of twenty-three. He came to the job in the wake of several disastrous fires that occurred in Edinburgh. The City had developed an interest in creating a full-time fire brigade in the wake of these fires, and Braidwood was the City's choice to head the new venture. His appointment as Master of the Fire Engines was in October of 1824. He came from a family who consisted mostly of builders and cabinetmakers. However, he was originally trained as a surveyor. With his particularly keen interest in the fire service, combined with his inventiveness, initiative, shrewdness, and energy, he soon began to make his mark (Blackstone, 1957).

One of his first actions after achieving the rank of "Firemaster" was to choose a particular type of person to be a firefighter in this brigade. He selected only slaters, carpenters, masons, plumbers, and smiths. He explained his rationale as follows:

Men selected from these five trades are also more robust in body, and better able to endure the extremes of heat, cold, wet, and fatigue, to which firemen are so frequently exposed, than men engaged in more sedentary occupations. (Blackstone, 1957, p. 103)

Further, his concept of hiring firemen was limited to selecting individuals who were between the ages of seventeen and twenty-five because he believed that at that age group, they enter more readily trained than when they were older with many fixed work habits (Blackstone, 1957).

Braidwood published a book entitled, On the Construction of Fire Engines and Apparatus, the Training of Firemen and the Method of Proceeding in Cases of Fire in 1830. An original copy of this book is still in possession of the Chief Fire Officer of the Edinburgh Fire Brigade. The book has been signed by each of the firemasters of that Brigade (R. Edmonds, personal communication, September, 1989). Based on that book, Braidwood instituted a course of instruction for his firefighters. The book was highly regarded as an embryonic text for firefighters. Braidwood received requests for the book from all over the world after it was published.

Braidwood was not just an educated theorist, even though he held personal convictions about the training of firefighters. They were based upon his own experiences. In one fire, he personally saved nine people, dragging and carrying them to safety. Perhaps for that reason, Braidwood felt that physical fitness was an essential part of the firefighter's needed skills. Blackstone (1957) stated that for the first time in history, firemen were actually put through a course of gymnastics to reach and maintain peak fitness. As Firemaster, Braidwood was known to be a taskmaster. He had been witness to numerous conflagrations and the subsequent failure of firefighters to be equal to the task. He drilled his firefighters every Wednesday at four o'clock in the morning. He explained his rationale by stating:

The mornings too, at this early hour, are dark for more than half the year, and thus, the firemen are thus accustomed to work by torch-light, and sometimes without any whatever, except for the public lamps which are then burning. And, as most fires happen in the night, the advantage of drilling in the dark must be sufficiently obvious. (Blackstone, 1957, p. 104)

Braidwood was appointed London's Fire Chief in 1833. Interestingly, Braidwood by then had changed his mind about who made the best firefighters. Blackstone (1957) quoted Braidwood as saying:

Seaman are to be preferred, as they are taught to obey orders, and the night and day watches and the uncertainty of the occupation are more similar to their former habits, than those of other men of the same rank in life. (Blackstone, 1957, p. 118)

The end of Braidwood's career in the London Fire Establishment was as remarkable as its beginning. Like many other firefighters who followed in his footsteps, his life was cut short by the very event that he had worked so hard to eliminate. James Braidwood was killed at the "Great Fire of Toohey Street," Saturday, June 22, 1861, at approximately five o'clock in the evening. A wall collapsed on him while he was inspecting for the safety of one of his crews. He had led the London Fire Establishment for thirty-eight years. Fortunately, the course of action set in progress by Braidwood did not die with him. He was ultimately succeeded by another person of equal mental and physical stamina – Sir Eyre Massey-Shaw.

Sir Eyre Massey-Shaw, his era and influence. Sir Eyre Massey-Shaw was appointed as Fire Chief of the London Fire Brigade in 1873. Originally knighted for his activities in the military, Massey-Shaw was a combination of theorist, hard-headed practitioner, and flamboyant socializer. From his writings, he rarely credited his predecessor, Braidwood, for any major accomplishments, but nonetheless, he built upon the fundamentals of Braidwood.

Massey-Shaw expanded Braidwood's theories about fire protection, including the concept of the requirements for entry to the service. He too focused on seamen for his recruits.

A smart man, who has severed at sea for a few years, and has a taste for the work of a fireman, can be brought forward for duty within an average period of about six or eight weeks; a man equally smart, but without the advantage of a seaman's training, may possibly be brought forward within about as many months, but even at the end of that time he would hardly be as expert as a seaman in climbing and the use of ropes. (Massey-Shaw, 1876, p. 305)

Massey-Shaw's requirements for entrance into the Brigade included requirements that the candidates had to be less than twenty-five years old, they had to have a chest measurement that exceeded thirty-seven inches, be at least five feet five inches in height, and they had to be able to read and write. Further, they had to be able to raise a fire escape ladder with the tackle reversed. They had to pass a physical examination by a physician. All appointments were tentative and Massey-Shaw imposed a three-month probation period on all new candidates.

After the selection of the candidates, they had to complete basic training. Massey-Shaw thoroughly documented his efforts at providing a "curriculum" for the professional firefighter. In his textbook, Fire Protection, a Complete Manual of the Organization, Discipline and General Workings of the Fire Brigade of London, published in 1876, Massey-Shaw stated:

From the remotest periods of antiquity to the present time the business of extinguishing fires has attracted a certain amount of attention: but it is a curious fact, that, even now, there is so little method in it, that it is a very rare circumstance to find any two countries, or even two cities in one country, adopting the same means or calling their appliances by the same names. (p. v)

Massey-Shaw did not hesitate to state that he felt his methods were the best. In his book, he clearly indicated that he believed his book to be the first and only comprehensive study of the fireman's occupation. He gives no recognition to Braidwood's earlier work.

Under Massey-Shaw's administration, the London Fire Brigade had moved from a partially volunteer operation to the adoption of full-time paid firefighters. This was created to a large degree by the need to have skilled firemen combat large fires when they were in their first few moments of origin, instead of waiting until they had reached block-wide conflagrations. Sir Massey-Shaw expressed this clearly in statements such as follows:

The importance which I attach to a sound system of training will probably be understood when I state my conviction, founded on what appears to me the clearest and most positive evidence, that some of the greatest losses by fire, which the world has ever experienced, have been owing to want of skill on the part of firemen. It is true that want of discipline may justly be credited with a considerable portion of the blame, but, as a practical man, I do not hesitate to assert that, where there is no skill, discipline becomes almost impossible and is, at least under such circumstances, of very little use, so far as the extinguishing of the fire is concerned. (Massey-Shaw, 1876, p. 306)

His belief in formal training was proven when he established London's first fire training academy. The requirements were as follows:

Each on appointment joins this class and learns the use and manipulation of all the appliances, as explained in the foregoing pages. At the same time, he lives in the state, and by degrees is taught the general working of the brigade; but during this period never attends a fire, except on an emergency, and then only under the personal charge of his instructors. Nothing is so destructive of sound education in this way as permitting men to attend fires before they know how to handle the appliances properly, and the youngest hands are therefore brought out as little as possible. (Massey-Shaw, 1876, p. 305)

The seminal concept of training replacing sheer bravery and stress was continued in Massey-Shaw's observation that:

It may perhaps be said that great numerical strength will make up for deficiency of skill and knowledge; and this may, no doubt, be to some extent correct; at least it appears to be the theory established in many places; but I am inclined to believe that, for dealing with great emergencies, no amount of numerical strength, even when combined with discipline, can compensate for the

absence of skill and knowledge, and on this account, I consider a proper system of training, before attending fires, the only true method for making men real firemen. (Massey-Shaw, 1876, p. 306)

Massey-Shaw's system worked. His fire academy was originally established using a lead instructor and two assistant instructors. During the initial status of the recruits' training, they were constantly evaluated. Those who were unfit were released. Massey-Shaw's system was also dependent upon practical reinforcement of the knowledge gained in the academy. Massey-Shaw directed that:

When a man is pronounced competent by the instructor, he is removed from the drill class, and is posted to a station, where he receives further training and instruction from the officer in charge, who entrusts him, at first, with work of the simplest kind, and by degrees, as he gains experience, with all the duties of his position. (Massey-Shaw, 1876, p. 305)

In accomplishing all this organizational work, Massey-Shaw made it quite clear that he hoped that his efforts would not have to be "reinvented" by someone else. In the closing section of his introduction to his textbook, he stated:

In conclusion, I need not hesitate to say that, if such a work as this had been published some 16 years ago, it would have saved me much labor; and I therefore have every confidence that it will be of service to all who are interested in the preservation of life and property, and especially to those who have devoted themselves to the practical work of extinguishing fires and who, whether their claim be conceited or not, consider, when my fellow laborers and myself, that the business, if properly studied and understood, is work being regarded as a profession. (Massey-Shaw, 187, p. xiii)

The Civil War and the Age of Industrialization

Through the period of the Civil War, the American fire service's development was significantly slowed. Among the first group of individuals to volunteer to enter combat during the conflict was the legendary "Fire Zouaves" from the City of New York. The entire brigade was made up of volunteer firefighters. Their commanding officer, Colonel Ellsworth, was the first officer shot and killed as a result of the Civil War. The incident occurred within a few blocks of the location of the Friendship Fire Company in Alexandria, Virginia. A popular memorabilia plaque can still be found that states, "Firefighters in peacetime, soldiers in war!" Firefighters, when attending the National Fire Academy, often visit the statues of the Gettysburg Battlefield, devoted to the memory of the New York 27th Infantry Regiment, which consisted mostly of volunteer firefighters.

Unfortunately, the War also reduced the ranks of the volunteer fire service in many communities. According to Morris (1953), the increased sociopolitical nature of volunteer fire departments had turned these fiercely competitive freestanding organizations into bands of rowdies and hooligans that often found themselves embroiled in brawls rather than in effective fire fighting operations. When riots occurred in communities over the conscription program and involuntary induction into the Union Army, the volunteer firefighters often joined in.

The End of an Era; the Beginning of Another

The City of Cincinnati, after suffering a major fire loss that involved a riot among its volunteers, decided to put an end to its volunteer system. The City first looked for a technological solution. The answer they found was the “steam fire engine.” This piece of fire apparatus, designed by Erickssen, who also designed the ironclad Union ship, “The Monitor,” was an attempt to replace the massive numbers of volunteer firemen required to combat fire.

Almost overnight, the major metropolitan areas in the United States began to replace their volunteer fire departments with paid forces. First Cincinnati, then the cities of Boston, New York, New Orleans, Kansas City, and others went from volunteer to paid personnel.

San Francisco was a major city on the West Coast by this time. Almost all of its organizational structure and fire fighting methodology had been borrowed intact from the cities that had spawned the immigration to the “gold” country. However, in the late 1850s, the fire fighting capability of most small departments was not highly thought of by those who were writing the fire insurance for the newly formed cities. According to Kirschner (1922):

The fire protection was composed of volunteers and the machinery used in their battles with the flames was of the crudest and most unsatisfactory manner. The men were rarely drilled, and the science of fire fighting as we recognize it today, was undreamed of. (p.6)

Military Influences

At the end of the Civil War there were large numbers of returning war veterans looking for employment. A picture of the New York Fire Department from the late 1860s was almost indistinguishable from a unit of the Union Army. Many of the uniforms, rank titles, and organizational concepts were drawn almost directly from the military. For example, the term “captain” to denote the officer in charge of a fire company was different from what had been used by the volunteers. The volunteers had always referred to their leaders as “foremen.” The concept of the chief officer being called a “battalion chief” may have been taken from the military structure of the Union Army. Companies made up battalions in the military. The term battalion has not appeared in any of the literature before the Civil War.

Almost overnight, fire departments were forced to institute training procedures to improve the performance of the paid force over the sporadic and erratic training received by the

volunteers. The paid departments were often integrated by convening some of the volunteers to paid personnel.

A review of logbooks of this era revealed that most of the entries were written in a military jargon. For example, training was often referred to as “close order drill.” Personnel were referred to as “privates” (New York Logbook, 1882). The inference was that early firefighters with their military background were trained as they had been in the combat units of the Union Army. A major emphasis in the training at that time was on the development of teamwork and unity under stress.

Industrialization and Education

Despite the turmoil of the Civil War, federal legislators took time to focus on the concept of training and education for occupations necessary to support the Industrial Revolution. This era of mechanization and emerging technology created a need for a program to prepare people for job skills. In spite of the fact that the fire service was somewhat unaware of these changes, society was going through an educational reform period. A result of that federal focus was the passage of the “Morrill Act.” Passed in 1862, the Morrill Act provided for the establishment of agricultural and mechanical (A & M) or land grant colleges (Barlow, 1967). In years to come many A and M colleges (e.g., University of Maryland, Oklahoma State University, Texas A & M, University of Illinois, and Iowa State University) would become important centers for fire service training and research.

Knowledge of Fire

The Encyclopedia Britannica Dictionary of 1892 spent over six pages of single-spaced text referring to the historical and religious perspectives of fire. It devoted only four pages to fire extinction and almost a third of that was taken up by illustrations of the new steamer. One page was nothing more than a listing of tragic fires from the past. The dictionary explained the cause of the losses:

Wood buildings crowded together in narrow crooked streets, insufficient supply or absolute want of water, no fire engines or only the feeblest machines for pumping water, and no organized or trained and disciplined boy or firemen were the conditions in earlier times and in some countries they are the conditions still. (Encyclopedia, 1892, p. 237)

The above quote has an interesting connotation. The Great Chicago Fire occurred in October of 1872. The Encyclopedia Britannica Dictionary's definition further stated that the two essential elements to controlling conflagrations were fire resistant buildings and the organization of trained men who could make modern appliances effective. The Britannica admitted that the methods of organization and procedure were not the same in different countries.

The New York Fire Department

In defining the systems used in the world during the late 1800s, the Encyclopedia Britannica Dictionary (1892) listed the New York Fire Department as being the best example in the United States. It was described as being:

On a military basis, under the control of a board of commissioners appointed by the mayor. The active force is under the immediate command of the “chief of department,” and consists of 10 battalions, each of 6 companies, in all about 750 men. Each company, whether engine or ladder company, has its own house, where the men live and the apparatus is kept. The whole force is at all times on duty and in the house except such small detachments as are on street patrol or at their meals... The men are well disciplined and skillful (sic) firemen. (p. 237)

There was no mention in this publication of the methods used to assure that these men were adequately trained.

Invention and Innovation

The steam fire engine, which helped the City of Cincinnati eliminate its rowdy volunteers and which caused a major change in the way fire was to be fought, was not a simple step in the evolution of fire protection. It created several other immediate changes in the fire service. Close on the heels of adopting this technology was acceptance of the concepts of redistributing and relocating firehouses based on response time and distances, instead of social interaction. The use of horsepower instead of human physical power to draw apparatus to the fire scene caused a major shift in the amounts and types of personnel required to staff a fire department.

The 1880s saw a series of significantly large losses due to fires. These conflagrations occurred to communities in spite of the presence of trained professional firefighters. In quick succession, the communities of Chicago, Boston, and Portland were all leveled by major fires. It was readily apparent to observers of the fire protection scene at that time that having paid firefighters on duty was not the ultimate remedy for prevention of major fires. More importantly, these events heralded the return of fire prevention as a primary function of a fire department and created the need for fire insurance to be reevaluated as an economic factor.

The Reemergence of the Insurance Industry

The insurance industry was severely impacted by the major fires of the 1880s. The underwriters of the major insurance companies banded together to take a long, serious look at the effect of their insurance from an inadequately prepared fire department. In a landmark meeting conducted in Portland, Oregon in 1866, the insurance underwriters decided to form an organization to evaluate fire protection defenses in the major communities. This organization, originally labeled the National Board of Fire Underwriters (NBFU), had as its primary objective

setting engineering standards to evaluate fire departments. Unfortunately, there were not many standards to evaluate.

The National Fire Protection Association (NFPA) Organizes in Boston

A meeting was held in the office of Mr. Everett U. Crosby in Boston, Massachusetts to deal initially with problems that began to emerge because of the lack of standards in sprinkler designs. Attending the meeting were Uberto C. Crosby, Factory Improvement Committee; W. H. Stratton, Factory Insurance Association; John R. Freeman, Factory Mutual Fire Insurance Companies; Frederick Grinnell, Providence Steam and Gas Pipe Company; and F. Eliot, Boston Board of Fire Underwriters. Out of the meeting came the formation of the National Fire Protection Agency (NFPA), an organization that would have significant impact on the development of the “body of knowledge” used by the practicing fire professionals (Bugbee, 1971).

The Fire Chiefs Organize in Baltimore

In 1873, the fire chiefs of the major metropolitan areas gathered in a conference in Baltimore, Maryland to discuss their mutual problems and possible solutions. Fire Chief John S. Damrell of Boston, Massachusetts was elected as the first President of the International Association of Fire Engineers (IAFE). Included among the many matters that the fire chiefs discussed in the formation of the IAFE was the concept providing standardized training for professional firefighters.

An interesting finding was that Sir Eyre Massey-Shaw had visited the United States about this time and engaged in an exchange of information with many of the fire chiefs in the Eastern part of the nation. It was likely that this exchange resulted in the transfer of some of Braidwood’s (1830) and Massey-Shaw’s (1876) methodology to this country. An American in the late 1800s inferred this point in a section of a book that references Braidwood’s work. The author, Joseph Bird, credited London firefighters of that era with being drilled daily. The same author went on to state that he believed that every girl and boy who graduated from a grammar school in the United States should be “an educated fireman or firewoman” (Bird, 1873). The latter comment probably predates the issue of women in the fire service by almost one hundred years.

Firefighters’ Images and Reputations

This was a colorful era for the fire service. Most of the “traditional” images of the fire service came from the public’s acceptance of the “Currier and Ives” prints that depicted the actions and lives of firefighters in the late 1800s (Dunshee, 1939).

By the middle of the 1880s, most of the metropolitan fire departments had gone to the extent of creating their own fire training facilities. New York Fire Department has been credited with having the first official facility. This facility was constructed in 1882. Boston closely followed suite in 1889.

The San Francisco Fire Department

Dave Broderick, a New York volunteer firefighter, left to join the others who were populating California during the 49er Gold Rush. When he left New York, he was serving as foreman of Engine 34. In California he was elected later as a State Senator and ultimately was killed in a duel with Justice Terry (Dunshee, 1939). San Francisco Fire Department's history clearly demonstrates that the technology of fire fighting, especially the tools and methods, were brought to the area from New York practice. Some of the basic fire equipment was shipped around the Cape aboard a clipper, arriving at the same time those seeking their fortunes in gold.

Broderick was closely aligned with Frederick D. Kohler, the first Chief of San Francisco. Kohler, when elected as Chief on January 28, 1850, had three hand-pump fire engines, all of which came around the Cape. The methods of operating these pumpers were probably provided by expatriate New York and Boston firefighters like Broderick (San Francisco, 1967).

The "leap-frogging" of technological knowledge and methods from the East Coast to California, without evolving across the internal states, was a common phenomenon. Instead of having to wait until an idea had migrated across the country, had been accepted incrementally along the various intervals among cities, towns, and states between the two coasts, California firefighters tended to get the new concepts almost immediately upon their invention back East in the larger fire departments. The constant exchange between the coasts, made possible by a combination of the trips around the Cape and the intercontinental railroad, kept the California fire service current. In Petaluma, California, for example, the community installed brand new high-pressure fire hydrants in 1873. This type of hydrant had only been invented one year prior (Petaluma, 1964).

Retired Fire Chief Ray Picard of the Huntington Beach, California Fire Department has theorized that long railroad rides were a boon to the early California fire chiefs. He speculated that these long train rides gave them time to spend comparing ideas, thereby increasing their effectiveness in sharing new approaches to fire service management (R. Picard, personal communication, September, 1986).

Paintings and lithographs of fire departments of this era illustrated the development and use of basically the same manipulative skills by American firefighters, including the California firefighters as those present in the curriculum of the London Fire Establishment. The methods were only slightly different. The tools had different names, but the methods were very similar. These methods included the requirements that firefighters have the ability to work with ropes and knots, utilize ladders and hose, perform basic rescue skills, and use fire stream appliances.

John R. Freeman also conducted most all of the major work done on basic fire hydraulics in the late 1800s. This information was used to support the increased knowledge base required for firefighters to protect growing American cities. The NFPA rapidly became the custodian of much of this information. Hydraulics information formed the basis for printing and publication of the first Handbook of the Underwriter's Bureau of New England. This document was the precursor of the Handbook of Fire Protection.

During the 14th annual convention of the NAFE, Chief D. J. Swenie of Chicago raised the issue that there was no “manual of drill” for the fire service. In his remarks, he noted that there were manuals for “facing and marching,” but not for firefighting. He requested the Association to create a manual of practical instructions. Swenie did note that a pamphlet had been prepared by Chris Hoel of the St. Louis Fire Department on the Pompier Ladder. He closed by stating, “It is highly necessary that some system be adopted whereby better results than in the past can be obtained by the labor of 2,000 men who are now in the fire service of this country” (IAFC, 1973, p. 33).

A committee was formed to create the manual at a convention in Kansas City, Missouri. It was titled, Firemen’s Handbook, and had one hundred plates (IAFC, 1973, p. 34). By 1892, the issue of training and/or educating firefighters was considered a national issue. Chief Henry Goetz, in a speech titled “The Ideal Fire Department of the Future,” referred to a system that was similar to our military academies. Goetz predicted there would be specific institutions created to “educate young men in the science of preventing and fighting fire” (IAFC, 1973, p. 37). At the same conference, a paper was read describing the New York School of Fire Extinguishment.

Educational Philosophies Conflict

Educational leaders of this era were also trying to keep pace with the burgeoning needs of an industrial society. One leader, Calvin M. Woodward, advanced the theory that, in Manual Arts, the mechanical processes and the tools used in common in the trades and occupations should be arranged in a systematic course of instruction and incorporated in the general system of education (Barlow, 1967, p. 35).

Woodward was opposed in this thought by a contemporary, E. White, President of Purdue University. White drew a distinction between general and special education. He advocated that learning a trade was different than being educated. The conflict between these leaders affected training and education for years afterward (Barlow, 1967).

This controversy did not deter the development of a national focus on the topic of educational requirements for dealing with a rapidly changing society. William Harris, Commissioner of Education, was appointed by the federal government in 1889 to deal with the needs of a technologically changing society. The struggle was started between the concept of education being an end unto itself and education for the purposes of occupational preparation.

Chapter Summary

In antiquity, fire was a phenomenon that helped to create a stable civilization. It was feared at the same time. Along the path of the human race’s attempt to use fire for the creation of power and wealth was the increasing problem of accidental fires that destroyed property and life. The need for a special group of individuals, or an occupation such as the fire service, to deal with accidental fires, had been somewhat ignored for most of the history of the human race.

Over a short two hundred years of development, firefighting became a serious part of protecting civilization. This occurred primarily due to an increase in losses of life and property

from fire, especially in the major metropolitan areas. Developing education and training methodologies for the fire service has closely paralleled the development of other vocational training systems.

Each step along the evolution of methods in coping with the danger of fire was marked by the efforts of a few individuals to understand the phenomena of fire and to bring some degree of organization to the techniques used to control them. Until the actions of individuals such as Benjamin Franklin, John Harley, James Braidwood, and Eyre Massey-Shaw, the efforts were mostly improvised and usually fairly ineffective. The influence of these individuals upon the creation of a body of knowledge for the fire service was key to being prepared for the challenges created as cities became more densely populated and the Industrial Age brought on new types of fire problems.

The increased use of technology in the rapidly changing fire profession was soon to impact the debate over how a person was trained to fulfill the mission of the occupation. The debate was to start at the turn of the century and would permeate discussions for the next eighty years. It was for this purpose the study was conducted (see Appendix A).

CHAPTER 2

ENTERING THE TWENTIETH CENTURY

After the turn of the century, the fire service continued on the path that had been developed by the changes in the fire service from the previous century. Firefighting had become more and more technical and at the same time very dangerous.

In the early 1900s, the firefighters who worked for the various firefighting agencies began to discuss their need to become more organized in order to represent their interests. A strike that was called by the Tampa, Florida Fire Department on January 9, 1903 was the watershed event. That year, the International Association of Fire Chiefs (IAFC) convention was made complicated by the fact that one chief wanted to speak on the topic of unionizing firefighters and many of the attendees opposed it. After the argument was over, Chig Harris of Toronto, Canada gave the speech (Richardson, 1974).

The first local was then established by the Pittsburgh Fire Department in 1903. They were then later designated as Local #1 of the IAFF when it was formed.

Between 1903 and 1916, seventeen local fire unions were created. At the 1917 convention, delegate Thomas Spellacy presented a resolution to create an international union. It passed (Richardson, 1974).

The Philadelphia Fire Academy

According to a training manual published by the Philadelphia Fire Department for use by their recruit firefighters:

The dangers which a fireman faces every day and night in the performance of his duty are great. The risks which he must take are many. He is supplied with the best possible tools and equipment. But tools and equipment are not enough; he must know how to use them so as to conquer the fire in the shortest possible time and with the greatest safety to himself. It seems only fair play then to give a fireman any training or information which may make him better fitted for his task. (Philadelphia Fire Department, 1904, p. 133)

The training officers of that era also recognized the fact that their fire problem was changing and that the emphasis on training was not a substitute for personal capabilities, but a necessity for even the most motivated of individuals. The manual noted:

The great increase in the size of buildings during the past few years, and the complicated manner in which they are now arranged, have also made special training not only desirable but

necessary. Courage and self-sacrifice are no longer sufficient qualifications. (Philadelphia Fire Department, 1904, p. 133)

In the design of the system at that time they did not place all of their emphasis upon the entry-level firefighter. They also placed a great deal of emphasis on the training of officers by stating: “The superior officer of the present day must think as a trained engineer. At some fires even a slight knowledge of the strength of materials or the chemistry of explosives often proves to be the means of preserving lives” (Philadelphia Fire Department, 1904, p. 133).

The authors of this early fire manual are not identified by name, but it is apparent that they had a perspective upon the past and a focus on the future when they stated the goals of the training school as being for both the new and older members of the organization. They gave both generations a reason by stating:

The Training School was established, then, to accomplish these results: First, to give the younger men a chance to profit by the experience of men of long service, and second, to give the older men an opportunity to exchange experiences and to discuss new methods of checking the common enemy – Fire. (Philadelphia Fire Department, 1904, p. 133)

The New York City Fire College

Not unlike the Edinburgh and London Brigades, New York City had imposed some rather stringent requirements on their entry-level firefighter. By 1909, New York had created a “Fire College” that attracted interest from firefighting agencies around the country. Officers were allowed to attend this course from many agencies outside of New York. It was surmised by the International Association of Fire Chiefs and the U.S. Department of Interior that many of the individuals that attended this nascent course were responsible for introducing similar courses in their own cities over the next few decades (International Association of Fire Chiefs, 1939).

New York had been on the forefront of setting personnel standards also. In the late 1800s, they had a minimum age of twenty-one, the person had to be of good moral character, and they had to have a certificate signed by four “reliable men” certifying that they knew the candidate for a certain period of time. Lastly, they had to attest to the fact that the person had never been indicted nor convicted of a crime. If this was all satisfactory, the person was sent to a physician to be “measured, weighed, and the circumference of his chest taken” (Costello, 1887, p. 1062).

The fire academy that had been established by the City of Philadelphia required that:

All new men report to the Training School soon after appointment. Although they are assigned to companies and stations immediately after entering the service, they attend the Training School from 9:00 a.m. to 12:00 noon, and from 1:00 p.m. to 4:00 p.m. for thirty-

five consecutive days (Saturdays and Sundays excepted).
(Philadelphia Fire Department, 1904, p. 133)

North Carolina Fire Training

In 1912, a movement occurred in the State of North Carolina to start a statewide fire service training program. The concept obtained legislative support in 1914. Combining the support of the State Fire Chiefs Association, the State Fireman's Association, and the State Fire Marshal's Office, a statewide system was put into effect.

The following year the program was endorsed by a resolution passed by the International Association of Fire Engineers. (The name was changed from the National Association of Fire Engineers (NAFE) to the International Association of Fire Engineers (IAFE) in 1894.)

Methodology and Vocational Education

The American Federation of Labor had introduced a resolution providing for the study of industrial education in its Denver conference in 1908. Federal legislation was introduced in 1911 entitled, "The Page Wilson Bill." This was followed shortly by the Smith-Lever Act in 1914.

In Massachusetts, Governor William L. Douglas had established what was referred to as the Douglas Commission, which reported to the Governor the severe need for public instruction in the field of industrial education. This Commission ultimately led to further studies on the national level, resulting in a commission on the reorganization of secondary education which was established in 1913 (Hawkins et al., 1951, p. 15). The Commissioner of Education at that time, W. T. Harris, did not believe that such a study was necessary. Harris' position was essentially that a general education was separate from developing skills for the job market.

The federal government then replaced W. T. Harris as Commissioner of Education with Elmer Elsworth Brown. Brown essentially reversed the position of Harris and went with the idea that education had to deal with the real world.

This approach was an attempt to culminate the struggle between the concept of generalized education and manual arts or vocational education. On January 20, 1914, the United States Congress approved a joint resolution, the Smith-Lever Act, which resulted in the appointment of a commission to study the national needs for vocational education. This final report developed several major issues. Among these (and most critical for the fire service) was an issue that stated, "There is a definite need for national grants to the states for the purpose of vocational education" (Hawkins et al., 1951, p. 39).

The Smith-Hughes Act

On December 7, 1915, Senator Hoke Smith of Georgia's work resulted in the passage of Senate Bill 703, the Smith-Hughes Act. This was a controversial and hard fought Bill. The Smith-Hughes Act produced the Federal Board of Vocational Education with Charles A. Prosser

of Minneapolis as its first director. A seven-member board was created to study the question of vocational education. Further, the Smith-Hughes Act divided the United States into various regions. California was categorically placed into "The Pacific Region."

At that time, the Pacific Region of the U.S. Department of Education was supervised by Benjamin W. Johnson in San Francisco. William C. Wood, Commissioner of Secondary Schools for the State of California, met with Prosser. This meeting began a frequent and ongoing dialogue regarding the application of vocational education from a national policy point of view as related to the implementation in the State of California.

From the date of its original adoption to 1924, the Commission issued twenty-three bulletins. In 1925, one of these bulletins was issued emphasizing the fact that teacher training was extremely important to the development of any vocational education effort. In August 1921, J. C. Wright took over the Federal Board from Prosser. In 1927, the Board provided a report discussing the need for establishing "standards" for all types of vocational education (Barlow, 1967, p. 125).

International Association of Fire Chiefs (IAFC) Gets Involved

In 1919, the President of the IAFC was John Kenlon of the New York Fire Department. With his department's experience in the field of training, it was appropriate that he suggested an IAFC project dealing with the field. He suggested the compilation of a training manual for firemen and fire chiefs alike. Chief Kenlon's suggestion was to be discussed for the next five years. In 1920, there were a series of reports delivered to the IAFC convention in Toronto that dealt with a variety of training issues. Simultaneously, the New York Fire Department printed and distributed their training manual. Both of these projects could be classified as seminal in the development of fire training in the United States. According to the IAFC report:

During this period our libraries were filled with books dealing with various scientific subjects, yet, at the end of the first quarter of the present century, all of the publications dealing with actual fire fighting could have been placed on a bookshelf one foot long.
(International Association of Fire Chiefs, 1939, p. 117)

The IAFC Education Committee reported that as early as 1925, there were some states where the service was working in conjunction with an education institute to provide educational materials. Among the leaders in this area were the states of Iowa and Illinois (International Association of Fire Chiefs, 1939).

Unfortunately, the ending of the 1920s resulted in an economic era that set many programs back. The Depression placed many vocational education efforts into a holding pattern. However, the concept of providing training standards, coupled with the desire to have instructors with certain levels of competency, did not fall on deaf ears. It was soon to be the basis for a course of action by a California fire chief.

Ralph J. Scott

The first documented evidence of a California fire chief's concern about quality and standards of fire service training was created by Chief Ralph J. Scott, who was at the time Fire Chief of the City of Los Angeles and the President of the IAFC. He appointed the Education Committee for the Association and designated himself as the chairman. Chief Scott had been made aware of the existence of the passage of the Smith-Hughes Vocational Education Act by the Federal Congress in 1917 through his involvement in trade activities in Los Angeles.

It was also during this time period that Charles R. Allen developed and promoted the four step instructional method of teaching to speed up the production of ships during World War I. This methodology would have a big impact on the development of the fire services' occupational training methods.

The New York Conference of Mayors established a statewide training school for firefighters in 1928. The American Municipal Association listed enrollment from the fire service of 42,709 firemen and 108 fire instructors from 1928 to 1938 (Hawkins et al., 1951).

According to Hawkins et al. (1951), about 1930, Chief Scott, while serving as Chairman of the Educational Committee of the International Association of Fire Chiefs, was also a participant at the Western Regional Conference for Trade and Industrial Education. The Conference was held in Phoenix, Arizona in May of 1930. Firemen's training was discussed at length at the Conference. On September 29th, 1930, Chief Scott approached members of the Federal Vocational Education Board requesting funds to perform a job analysis of the fire service occupation.

At that meeting, Scott focused on two issues. The first was that there were many scattered attempts at developing comprehensive training programs around the country. His department had already developed one such program that proved that an organized systematic training program, based on a "job analysis," worked. His second point was that such a suitable training program could (or should) be available to every city in the United States (Hawkins et al., 1951).

The request was officially approved, with the provision that a study of the firemen's job be completed in order to verify the training needs. The Chief of Trade and Industrial Education, Frank Cushman, and two of his assistants, went to Los Angeles to work with Chief Scott's staff. Thirty experienced fire officers, likely including firefighters Baker, Gowell, and Tebbetts, worked eight hours per day for over three weeks to verify the information. While no evidence could be collected that illustrated that Chief Scott's original fire study was used in this analysis, it can be surmised that his entire reason for advocating the concept was to gain nationwide acceptance for the concept (Hawkins et al., 1951).

Fire Fighting Bulletin 155

The document that resulted from this evaluation was eventually published in 1931. The document was referred to as Firefighting, Bulletin No. 155, Series 44 (Federal Board of

Vocational Education, 1931). The material in this document is organized in accordance with “classes of work.” Interestingly, while Los Angeles was involved in the development of the trade bulletin and had conducted their own trade analysis, the two texts were not identical at all. The organization was drastically different, and they contain different groupings of tasks. The Federal Bulletin report was credited with being developed by the following individuals:

- Frank Cushman, Chief, Trade and Industrial Education Service, Federal Board for Vocational Education;
- C. F. Klinefelter, Special Agent, Federal Board for Vocational Education;
- James R. Coxen, Regional Agent, Trade and Industrial Education for the Pacific States;
- John C. Beswick, Chief, Bureau of Trade and Industrial Education, California State Department of Education;
- Professor Benjamin W. Johnson, University of California, Los Angeles;
- B. E. Mallory, Division of Vocational Education, University of California, Berkeley;
- W. S. Keinholz, Director of Vocational Education, Los Angeles; and
- L. G. Stier, Supervisor, Trade and Industrial Education, Los Angeles.

J. W. Stevens, State Fire Marshal, and the officers and members of the Los Angeles Fire Department assisted the preceding men. Notably, the names of the Los Angeles Fire officers were missing from the credit lines (Ward, 1963).

The job analysis subsequently went to other areas of the country to be validated. The report was checked by representatives of the fire departments of Berkeley and Oakland, California; Portland, Oregon; Omaha, Nebraska; Washington, D.C.; New York City; Atlanta and Albany, Georgia; Milwaukee, Wisconsin; St. Louis, Missouri; Nashville, Tennessee; Boston and Brookline, Massachusetts; Pittsburgh, Pennsylvania; and Baltimore, Maryland.

This was a landmark document for fire training: first, in the respect that it was establishing the minimum standards for firefighter training, and secondly, in the concept that it established a body of knowledge within the industrial education area treating the fire service as a separate occupation.

The Los Angeles Fire Department (LAFD) Trade Analysis

Chief Scott’s fire department then published their original document entitled Trade Analysis of Fire Engineering, Los Angeles Fire College in 1932. Captains Joseph L. Gowell and William W. Tebbetts and Fireman John F. Baker authored this document. In the foreword, Chief Scott acknowledged the work that had been done in the preparation of the federal document. They did not feel the Federal Bulletin had gone far enough. Their manual stated:

The analysis of the firemen’s job contained herein, however, is only a catalogue or list of jobs to be taught. In order to properly introduce the principles of vocational training in the Los Angeles Fire Department Fire College a more detailed analysis, arranged in instructional order and containing objectives clearly stating the

ability and knowledge to be developed in the learner, was found essential. (Gowell, Tebbetts, & Baker, 1932, p. II)

The material in the Trade Analysis book is organized according to the concept of blocks and units. The analysis contained 14 blocks, 44 units, 73 checking levels, and 309 jobs. Further, the jobs were categorized as 148 being technical in nature, 92 manipulative, and 57 being service jobs. This system would be the basis for the fireman's occupational analysis until a major revision in 1968.

Chief Scott blessed the report with these words:

The Trade Analysis of Fire Engineering, now for the first time presented, is worthy of attentive study on the part of fire department executives and those who aspire to be such. It represents the composite conclusions of three men, whom, in my opinion, there are none better qualified to speak. (Gowell et al., 1932, p. II)

Under the supervision of Chief Samuel H. Dodd, the three men had created a document that was the basis for the development of a training system. Chief Scott further recognized the importance of these men's efforts in the formation of the document by stating:

From beginnings which now seem infinitely small and insignificant, their brains and energy have built the existing structure. The writer of the foreword (Scott) claims no credit for the definite accomplishments attained in these educational lines... He is, however, proud of this institution which represents the evolution of his own personal and particular dream, and of his judgment in organizing the faculty which has functioned so well. (Gowell et al., 1932, p. II)

Their work, no doubt, was a source of pride to the entire Los Angeles Fire Department, but more importantly, it was a resource that Chief Scott wanted to expand to a higher use.

Fire Training Around the Country

The concept of vocational-industrial education programs grew in status during the 1920s and into the 1930s all around the country.

Oklahoma Fire Training

In 1926, the Oklahoma Firemen's Association held their conference in Enid, Oklahoma. President George Goff presided over the two hundred fifty registered attendees. During that conference, President Goff announced that the conference was not to be strictly a social affair; rather, a school had been prepared for the attendees. According to the minutes of that meeting,

the Oklahoma Firemen's Association felt that this was the first time that a "training school for firemen" had been conducted in connection with the fire conference (Quine, no date, p. 100).

International Fire Service Training Association (IFSTA)

Under the direction of the Vocational Department of Oklahoma A & M College (today known as Oklahoma State University), a fire school was held at the central fire station in Stillwater in 1932. They, too, recognized the lack of documentation. According to Hudiberg, the college conducted two 5-day schools under the supervision of fire service leaders from that part of the country. This team, consisting of Clarence Goldsmith, Smokey Rogers, H. J. Clark, Colonel Brayton, and Fred Heisler developed a long list of training needs for firefighters. Their list was divided into ten divisions. After the list was compiled, firefighters from all over the State of Oklahoma were invited to a two-week conference to create the training materials. Out of this humble beginning came the formation of the International Fire Service Training Association (IFSTA) and the creation of the famous Oklahoma "Red Books" (Hudiberg, 1977, p. 42).

Massachusetts Makes an Effort

In the State of Massachusetts, the Fire Chief Club, at its annual meeting on May 17, 1933, unanimously adopted a plan for a statewide training program. In their report of this meeting, they indicated that they had studied the firemen's training programs from over twenty-seven different states to come to the conclusion that a statewide program would be the best approach for them to follow (Federal Board for Vocational Education, 1933).

The Los Angeles Fire College

The vast majority of fire training done in the State of California was conducted by individual fire departments. The Los Angeles City Fire Department, for example, spurred by the insight and innovation of Chief Scott, developed their own "Fire College." The Fire College, as a training delivery system, provided upwardly mobile individuals within the Los Angeles Fire Department with an excellent resource for career preparation. While outside participation was not encouraged, the materials developed in these courses migrated into the hands of firefighters from other agencies (Gowell et al., 1932).

The Los Angeles Fire College consisted entirely of training classes that were conducted off duty. Individuals who participated in the Fire College tended to come out better on promotional examinations so there was a motivation to participate. At this time, there were no such things as "educational incentive programs." The costs for participating in these educational experiences were borne by the individuals (Gowell et al., 1932).

The Portland Fire College

Battalion Chief Edward L. Boatright of the Portland Oregon Fire Bureau attended the school in Los Angeles. Portland had been one of the departments that had reviewed the Trade Analysis, so they had a working knowledge of the curriculum. Chief Edward Grenfell, who had

already established a school of fire prevention in that department, aided the effort. The Portland Fire College was officially opened on September 6, 1930. The facility, located at 210 4th Street, was large enough to house up to one hundred students at a time (Portland, 1938).

Seattle Fire Training

By now the concept of training firefighters was well entrenched on the West Coast. Battalion Chief Robert B. Rogers of the Seattle Fire Department wrote in 1934:

The drillmaster is the basis and starting point of all successful training programs based upon drills. The drillmaster is a teacher, instructor, leader, commander, advisor, director, and trainer. He should possess certain qualifications. Some of these are leadership, experience in supervising and directing men, experience as a firefighter is actually extinguishing fires, and must be known as a direct actionist in the sense that he can get things done. It would then seem that a successful drillmaster should be a superman. It is believed that no fire department has in its membership a fireman who possesses all of these qualifications and who will measure up 100 percent. Every fire department, however, has in its ranks some one member who is qualified to act as drillmaster. For this reason, because of the qualifications required, every volunteer fire department shall have in its plan of organization an officer designated as drillmaster, who is vested with proper rank and authority to carry out the duties of the position; and who is responsible, under the chief of the department, for the drill and training program of the department. (Rogers, 1934, p. 7)

The Inception of California State Training

Meanwhile, in the State of California, industrial education had been made part of the State Department of Education. Utilizing the document originally developed by Chief Scott and the Los Angeles Fire Department, the State of California adopted a document entitled “The Occupational Analysis.” The occupational analysis was basically an expansion of the original set of criteria created as the original standards document.

This job analysis was unique in that it was developed long before the Civil Rights Act of 1947, the Equal Employment Opportunity Commission, *Griggs v. Duke Power Company* in 1971, and the Inter-Governmental Personnel Act of 1972 which challenged occupations to have a set of job related criteria to be used in the personnel selection process. After lagging behind so long in the development of a systematic body of knowledge, the fire service had developed a document of professional achievement that predated even these events.

While this was all done prior to the inauguration of any statewide fire training program in California, it had much to do with the program’s inception. In 1931, Jay W. Stevens, State Fire

Marshal, and John C. Beswick, Chief, Bureau of Trade and Industrial Education, State Department of Education, met with Chief Ralph Scott in his office in Los Angeles. Both had been involved in the development of Firefighting Bulletin No. 155 (Federal Board for Vocational Education, 1931). The purpose of the meeting was to discuss the possibility of actually organizing and placing in operation a statewide program of fire training.

After several meetings and much correspondence, a workable plan was agreed upon. The original plan called for the State Department of Education to pay the salary of a single instructor. The State Fire Marshal's Office agreed to pay his expenses. John F. Baker of the Los Angeles Fire Department, one of the prime movers in the development of the job analysis, was appointed as the first Instructor of Fire Training, with headquarters in Sacramento. It was soon apparent that one person could not render the service desired on a statewide basis. Even in an era of limited population within the State, the sheer geographical magnitude was overwhelming.

Realizing the value of a statewide program of fire training, Chief Hugh Morris of San Mateo began working for the expansion of the program. In January 1935, Morris appeared before a regular meeting of the Southern California Fire Chiefs' Club at Brawley. At that meeting, a resolution was passed urging the State Department of Education and the State Fire Marshal's Office to provide additional itinerant instructors for fire training for the State of California (Ward, 1963).

The George-Deen Act

In 1936, fire training received its first boost with the passage of the George-Deen Act. The Act, in general, provided funding for teachers, supervisors, and directors of trade and industrial subjects. This legislation included funding for these services to public and other service occupations (Hawkins et al., 1951, p. 89). The training of firefighters came under this category. The State of California was among the first to utilize these funds for purposes of a statewide fire training program.

While the George-Deen legislation provided funding for all types of vocational training instructors throughout the country, in California this funding was used to provide fire service instructors. As a result of the existence of the program started by Stevens and Scott, the State already had a vocational instructor operating out of Sacramento. Essentially, this individual was used as the "traveling training officer" responsible for visiting the smaller fire departments which were usually volunteer (E. W. Bent, personal communication, April, 1987).

The California Fire Chief's Education Committee

The Peninsula Fire Chiefs' Club also recognized the necessity for supporting the development of a statewide training program. At a regular meeting held at Mountain View, California in January 1936, the Club appointed a permanent educational committee to investigate the California Fire Training Program. The objective was to devise ways and means of expanding the program to meet the needs of the fire service, and, in general, to foster and sponsor the most efficient methods of training firemen (Ward, 1963, p. 1).

After two months of careful investigation, this committee made a report, which contained the following observations:

To anyone familiar with the type of public service required of the modern fire department, it is clearly evident that proper training to do the job efficiently is a vital necessity. The progressive members of the fire service have, themselves, recognized this necessity and have laudably attempted to meet this need. Drill towers, drill schools, fire colleges, regional fire schools, and university short courses have been established and operated with varying results. Training has thus been carried on in the fire service. But such training must be considered as unorganized and inadequate when compared with the training conducted by firemen who are, themselves, trained in vocational job analysis and training methods and are supervised by those who understand adult training problems.

The proper training of firemen presents a more complex problem than does training for the majority of occupations. The entire field of fire service activity is so broad in scope that it involves a part of some sixty-four different trades, occupations, and professions. None of the training conducted in the fire service in the past has been organized on so broad a basis. This is clearly evident by the fact that changes occurring in commerce and industry, involving new problems of fire control and suppression, are never completely solved by the entire fire service until approximately ten years after the change has been made. Numerous instances can be cited to prove this assertion.

In the past, too much reliance has been placed on experience as a means of "picking up" the ability to properly serve the public. This has proved extremely costly to the taxpayer. By the time the average fireman has "picked up" enough ability to be of value to his city, he has passed the age of his greatest usefulness. Furthermore, very little improvement in fire department operations, methods, and procedures can be expected under these conditions. The constructive and independent thinker usually is not encouraged. Too often the new fireman is expected to use his equipment and handle various types of fire exactly as his predecessors did. Although firefighting apparatus and equipment have been greatly improved in recent years, in many cases, the methods and procedures of handling equipment and fires are still the same as in the horse and steamer days. These conditions result in defrayed response and operation, greater wear and tear on apparatus and equipment, more fire damage and water loss than is necessary, waste, and general inefficiency, all of which is paid for out of the pocket of the taxpayer.

The advantages of a statewide, centrally administered Fire Training Program cannot be overestimated. At the present time, a large number of different methods of performing the same job are in use all over the state. To the efficient workman, there is only one best way of using tools and equipment. Obviously, many fire departments are using methods of operation which are inefficient and wasteful of time and effort. Fire departments operating on a mutual-aid basis, assisting each other on large fires, find themselves at a serious disadvantage because the methods of operation in each department are different, resulting in serious delay and increased fire and water damage. (Ward, 1963, p. 3)

Concluding their report, the Peninsula Fire Chiefs stated that fire training was not a local but a statewide problem, that the unsatisfactory conditions, difficulties, and hardships experienced at that time in connection with the State Fire Training Program were all due to the lack of sufficient number of itinerant instructors to serve properly the State. Citing John Baker's record of achievement for that year, they commended him, but condemned the fact that the effort was inadequate. They recommended the State Fire Training Program be enlarged and placed on a more permanent and secure basis to enable the fire service to discharge properly its many responsibilities to the citizens of California (Ward, 1963).

To carry out the conclusions reached by their committee, certain specific recommendations were made:

1. That a bill be introduced in the next legislature establishing a permanent statewide fire training program and appropriating the amount of \$20,000.00 to defray the expense of the program for the next biennium;
2. That the administration of the training program remain in the State Department of Education;
3. That a Bureau of Fire Training be established in the State Department of Education for supervising all fire training activities, and that said Bureau of Fire Training be under the direct supervision of the present Instructor of Fire Training;
4. That the Chief of the Bureau of Fire Training shall always be a man [it is interesting to note the use of the male gender in this context] familiar with both fire service problems and adult training problems;
5. That the Chief of the Bureau of Fire Training shall be responsible for the supervision of the instructional activities of the itinerant instructors. (Ward, 1963, p. 11).

Reorganization of the Program (1936)

After this report had been approved by the Peninsula Fire Chiefs' Club, Chief Hugh Morris called on Superintendent of Public Instruction, Vierling Kersey in 1936, to present the

report. Morris informed Kersey that the fire service of the State believed that the State Fire Training Program should be reorganized and the service expanded (Ward, 1963).

At a meeting between Superintendent Kersey and Chief Morris, it was suggested that a temporary State committee be organized to discuss a reorganization of the State Fire Training Program with Superintendent Kersey and John C. Beswick, Chief of the Bureau of Trade and Industrial Education, who was legally responsible for such a State program under the provisions of the California Plan for Vocational Education (Ward, 1963).

A group of firemen met in Sacramento on January 8 and 9, 1937 to discuss legislation relating to the fire service, and also to form themselves into a committee to discuss the reorganization of the State Fire Training Program with officials of the State Department of Education. Superintendent Kersey was unable to attend this meeting and requested Mr. Beswick to represent the State Department of Education at the conference with the following group, as well as a number of other representatives of the fire service (Ward, 1963):

Chief R. J. Scott, Los Angeles
Chief E. F. Coop, Pasadena
Chief C. J. Brennan, San Francisco
Chief H. F. Morris, San Mateo
Chief Thomas S. Ward, Red Bluff
Assistant Chief C. M. Lochard, Alhambra
Captain Elmer Anderson, Salinas
Battalion Chief C. J. Hildebrand, Pasadena
State Fire Marshal Jay W. Stevens
Deputy State Fire Marshal Charles Smith
Executive Secretary Richard Graves, League of California Municipalities

Chief Morris of San Mateo was appointed Chairman of this temporary State committee to work with Mr. Beswick to develop a suggested plan for the fire training service, thus meeting the requirements of the California Plan and of the federal and state vocational education acts. This plan, as outlined by Chief Morris and Mr. Beswick, and approved by the temporary State committee, was in keeping with the full provisions of the California Plan and George-Deen Vocational Education Act and the California Act of Acceptance. It made the following provisions:

First – A State Advisory Committee will be appointed, approved by the State Board of Education through the Commission for Vocational Education, the personnel of which shall be recommended by the fire service. This committee is to be a representative committee, and the number of members shall be limited in accordance with the provisions of the California Plan for Trade and Industrial Education, as approved by the federal government.

Second – A State Supervisor of Fire Training will be appointed who maintains his headquarters in Sacramento, and he

will have the necessary staff for carrying on an efficient program of fire training. The salary of his supervisor and of the necessary secretarial assistance will be paid out of the George-Deen Vocational Education funds, and the necessary traveling and per diem expenses of the supervisor will also be paid out of these funds by the State Department of Education. The expense for maintaining the service will also be paid from these funds.

Traveling and per diem expenses are to be allowed for up to seven members of the State Advisory Committee out of the federal and state vocational education funds available under the provisions of the George-Deen Vocational Education Act (fifty cents of State funds matched with one dollar of federal funds. In other words, one-third of an allowance will be made from the State funds and two-thirds from the federal funds available).

The duties and responsibilities of the committee shall be in accordance with the policies set up for the administration of vocational education by the Office of Education of the U.S. Department of the Interior. Meetings officially called by the State Board for Vocational Education (in California through the Commission for Vocational Education), shall be called to assist in formulating the policies for the State Fire Training Program and to render consultant service to the State Department of Education and its staff in order that the best interests of the work may be adequately safeguarded. These duties and responsibilities of the State Advisory Committee shall be as outlined in the California Plan for Trade and Industrial Education, and as recommended by the Commission for Vocational Education. (Ward, 1963, p. 17)

The rest of the country was doing likewise. By 1937, twenty-two other states had availed themselves of George-Deen funds to operate fire service training programs. Thirteen of these states were using the funds for the salaries of the instructors. Of these states, nine chose to operate programs, but without the subvention (Hawkins et al., 1951). While funding the salaries of the instructors was a real asset in this era, the ultimate elimination of these funds would cause considerable difficulty in the maintenance of fire training programs in the 1980s.

In all of the twenty-two states, a firm relationship was being established with the state supervisors of vocational education and with the teacher trainers in the trade and industrial education field. This relationship would have a considerable bearing on the development of instructor training in the fire service over the next fifty years. The programs that were conducted in these states fell into four different categories. There were zone or regional schools, extension courses, short course or institutes, and local training programs (Hawkins et al., 1951, p. 308).

First Meeting of the State Advisory Committee

On March 25, 1938, the first meeting of the State Advisory Committee on Fire Training was held in Sacramento in the State Board Room of the State Department of Education, with

John C. Beswick, Chairman of the State Advisory Committee and Chief of the Bureau of Trade and Industrial Education, presiding.

All members of the State Advisory Committee on Fire Training, with the exception of Richard Graves, Executive Secretary of the League of California Municipalities, were in attendance at the first meeting. At this meeting, Beswick stated that he had sent out qualification requirements for the positions of assistant supervisor and instructor of fire training and traveling instructors of fire training, with application blanks to be returned as soon as possible (Ward, 1963).

Sometime between the first meetings of the committee and this date, John Baker must have left the program. No documented evidence could be found to identify the date of his departure.

From the list of applications, the committee recommended the appointment of Chief David F. Glines of South Gate as Assistant Supervisor and Instructor of Fire Training, and Assistant Chief Cecil M. Lochard of Alhambra, Captain John F. Steinhauer of Fresno, and Chief Thomas S. Ward of Red Bluff as Instructors of Fire Training.

Upon appointment to the staff of the Bureau of Trade and Industrial Education, these four people were requested to report to Fire Department Headquarters in the City of Los Angeles on June 1, 1938.

One month was devoted to an intensive course of teacher training given by the members of the Los Angeles Fire College staff, and a course in the policies and procedures of the State Department of Education was taught by the Supervisor of Trade and Industrial Teacher Training at the University of California, Los Angeles.

At the conclusion of this one month, the staff reported to headquarters in Sacramento. They then devoted one month to the preparation of lesson plans and instruction materials. The instructors were sent into the field on the first of August. In their first year of operation, these four training officers rendered service to 163 fire departments with a total of 2,687 firemen participating in courses of instruction.

At the end of the first fiscal year of operation, Assistant Chief Lochard resigned and returned to his department with no replacement being provided.

Fireman Bulletin 199 (1939)

An additional input to the fire profession was provided in 1939 with the publication of another bulletin, Vocational Training for Firemen, Bulletin No. 199. Frank Cushman prepared this document. Cushman had been involved earlier in the preparation of Bulletin No. 155. The Office of Education also published Bulletin No. 17, The Fire Alarm System. This Bulletin had been developed as a direct result of a request from the Municipal Signalman's Association. They, like many others would do in the future, made their request from a convention floor. In

this case, the location was Cleveland, Ohio, August 30-September 1, 1937 (Hawkins et al., 1951).

World War II

In 1941, Captain Steinhauer resigned and was replaced by Captain Carl J. Kistle of the Sacramento Fire Department. The program continued to operate with only three people until shortly after the outbreak of World War II, when all of the members of the fire training staff were called into government service, either military or civilian war work. The staff dropped to zero in the program.

For a period of thirteen months, there was no activity of the California Fire Training Program. The war created a need for large numbers of military personnel and civil defense personnel to be trained in basics. The government published a document, Circular Letter 2321 on September 22, 1941, which made it possible to train auxiliary firemen on the same basis used for volunteer firefighters prior to the War. Another publication issued in August of 1942 made special provisions for teacher training for firemen (Hawkins et al., 1951).

Activities were resumed in August 1943, when Tom Ward was recalled to State service and appointed temporary Supervisor of Fire Training. The task was difficult for the program was operated as a one-person program for a statewide need. Service was rendered on a priority basis, and during the rest of the fiscal year 1943-44, 439 men were given a total of 406 hours of instruction (Bent, 1965).

The beginning of World War II also created another tremendous shift in the focus of fire training. The Los Angeles Fire College had become increasingly more sophisticated during the 1930s. It had gone far beyond the reaches of minimum standards and was moving in the direction of fire protection engineering.

Once the war started, the federal government felt a compelling need to train literally thousands of individuals in "basic" firefighting skills. As a result, the Fire College concept fell into disuse.

The Fire College was replaced by the focus used in the federal government for the development of basic fire fighting skills. Damage control school conducted by the United States Navy, crash fire control schools conducted by the Army, Air Force, and civil defense training all centered around basic fire fighting skills.

The majority of training materials developed for the military fire fighting at that time were very simplified. Utilizing the Occupational Analysis, the training system was still divided into blocks, units, tasks, and jobs, but the level of instructor was very basic. This concept was derived from the vocational education area.

Appointment of Samuel L. Fick

During this time, Samuel L. Fick was appointed Chief of the Bureau of Trade and Industrial Education to replace John C. Beswick who had passed away.

Requests were received by the California Department of Education from the U.S. Office of Education to assist in the furnishing of training programs for military establishments located in the State. This was done with the assistance of selected personnel from the various fire departments and from the Board of Fire Underwriters of the Pacific.

The development of firefighter training during the War was a mixed blessing. In the first place, there were large numbers of firemen who had to be trained in basic skills. From 1938 to 1944, there were over 230,000 firefighters enrolled in federally funded programs. In fact, up to the year 1945, almost 50% of the total enrollment of vocational education for the entire country was in the area of firefighter training (Hawkins et al., 1951, p. 309). The disadvantage was that the impetus to develop firefighter training beyond the basic skills had been lost.

Appointment of Ward Cockerton and Carl Kistle

At the first meeting of the advisory committee after the end of the War, Mr. Fick presided. It was recommended that at least three itinerant instructors be added to the staff. Mr. Carl Kistle and Ward L. Cockerton, upon their discharge from the Navy, were appointed as Instructors of Fire Training. This placed the program on the same basis that it was prior to the War. With three people operating in the field and rendering service, more requests began to come in until a backlog of nearly two hundred was on file (Bent, 1965).

Concern for a State Fire Academy

At a 1946 meeting of the California Fire Chiefs' Association, Northern Division, held in the City of Monterey, the Legislative Committee was directed to look into the possibility of establishing a permanently located central fire school. While this was the first documented evidence of the California fire services desire to see a State fire training facility, it was not to be the last. Of all the goals set by the fire service for accomplishment, it has proven to be the most elusive one.

The committee was composed of Chief Meinheit, Berkeley; Chief Mulligan, Sacramento; Chief Morris, San Mateo; and Chief Sullivan, San Francisco. They met with Samuel L. Fick, Chief of the Bureau of Trade and Industrial Education and Thomas S. Ward, Supervisor of Fire Training. The meeting took place in the Office of the Bureau of Trade and Industrial Education in the City of San Francisco, June 5, 1946 where they discussed enlargement of the program.

Following this meeting, the Legislative Committee drafted the necessary legislation and had several bills presented at the next session of the legislature calling for an expenditure of \$811,000. The legislature amended and adopted only one of the bills. The legislature only appropriated \$5,000 to the State Fire Marshal's Advisory Committee. This was probably the first, but certainly not the last, time that a fire service training bill would be reduced from its

original scope. These funds were limited to use by a committee to investigate the Fire Training Program and make a report at the next session of the legislature.

A subcommittee of the State Fire Marshal's Advisory Committee composed of Chiefs Alderson, Boltz, Meinheit, and Morris made this investigation. Their report to the committee recommended that the itinerant program be expanded to three times its present size and that, in lieu of a central fire school, a technical institute program be inaugurated using existing school facilities.

Senate Bill 235

This report was acted upon by the Fire Marshal's Advisory Committee resulting in the necessary bills being drafted and presented to the legislature by Senator Hugh Donnelly. The most important of these was Senate Bill 235. The entire fire service of the State and the League of California Cities working together secured the passage of this bill. As soon as the Governor had signed the bill, the program was placed in operation.

For the first year, the Cities of Santa Monica, South Gate, Stockton, and Berkeley assigned instructors to the program, under contract with the State Department of Education. Two of the fire officers were Fritz Becker and Ed Elliott. These men were given an intensive and comprehensive course of training at Training Tower No. 2 of the Los Angeles Fire Department prior to their field assignments. Chief John H. Alderson placed all facilities of the Los Angeles Fire Department at their disposal.

At the expiration of the 1949-50 fiscal year, four of the six instructors who were under contract returned to their respective departments. This necessitated securing four more instructors at the beginning of the 1950-51 fiscal year. These instructors were actually appointed to the staff of the State Department of Education, as it was not necessary to enter into any contracts with anyone at this point.

This gave a total of eight itinerant instructors and one supervisor, six of these instructors being provided for by funds of the expanded program. This permitted the recommendations of the advisory committee to be followed to divide the State into eight districts and establish headquarters in each district for the instructors. It was not possible to do this during the first year of operation.

Prior to their field assignments, the new instructors were given an intensive and comprehensive course of training at the Burbank Fire Department Training Center. Chief W. J. Taylor placed all facilities of the Burbank Fire Department at disposal of the group. Chief E. H. Aiman of the Glendale Fire Department also lent equipment and instructors.

The Development of the Institutes

A meeting of the Fire Training Advisory Committee was held in January 1950. The Committee felt that it was advisable to follow the mandates of the legislature through the passage

of Senate Bill 235. The Advisory Committee made the following recommendations to be carried out during the fiscal year 1949-50:

1. To conduct institutes for the personnel who were selected as instructors for the technical institute. This would be done during the 1949-50 fiscal year and plans, outlines, and study material would be prepared for the institute to be conducted during the 1950-51 fiscal year.
2. To cut the length of the institute from the original recommendation of five weeks to one week and to hold it in more than two locations. This would give a greater spread and permit more personnel to attend.
3. To conduct the institutes for key persons and persons in specialized fields within the fire departments. (E. W. Bent, personal communication, April 1987)

Upon investigation, it was found necessary to deviate somewhat from these recommendations. A decision was made to conduct as many institutes as possible prior to the end of the 1949-50 fiscal year. As time was short, the months of May and June were selected in which to conduct the institutes.

A question then arose as to whether attendance should be on assigned or voluntary basis. As this was an initial effort, it was thought that answers to some questions could be obtained more quickly if attendance was voluntary. A schedule was arranged which would permit men to attend on their off shift at no cost to their respective departments.

The department chiefs were contacted and were very cooperative. They selected the personnel in their departments best suited to each the subject as called for in the prepared curriculum.

In accordance with the amendment to Senate Bill 235, contracts were entered into between the State Board of Education and the Cities of Burbank, Pasadena, Los Angeles, Santa Monica, Oakland, and San Diego, which were to furnish fire department officers and firefighters as instructors for the institutes. These instructors were assigned to the state fire training staff for a two-month period between May and June 1950.

The next problem was to find facilities that would accommodate as many personnel as wished to attend these institutes. Three locations were selected – San Diego, Los Angeles, and Oakland. The institute at San Diego was to serve fire departments in San Diego and Imperial Counties, and the southern half of Orange County. The Los Angeles institute was to serve fire departments in the northern half of Orange County, all of Los Angeles, Riverside, San Bernardino, Inyo, Mono, Kern, Ventura, and Santa Barbara Counties. The Oakland institute was to serve fire departments in the remaining counties.

Classroom facilities were furnished free of charge. As soon as classrooms were assured, notices and application blanks were mailed to all fire departments. Within a short time, 837

applications were received, and it was necessary to ask the cooperating agencies for more space. This was furnished.

On the first of May 1950, the instructors assembled in the Los Angeles Office of the Bureau of Trade and Industrial Education, and the problem was placed before them to condense the curriculum developed at the joint meeting of the Fire Advisory Board and the State Fire Training Advisory Committee from 271 hours to 30 hours. This was solved by mutual agreement of the instructional staff, but no records can be found of exactly how they made the reductions. As the technical institute program was to be continued, the instructors decided the first thing necessary was to build a foundation for the future and to take from the curriculum those subjects that had already been developed and to construct a basic course in fire prevention and fire suppression. Then they wanted to create an “advanced” institute for those who completed the basics.

According to Retired Fire Chief Ray Picard:

The basic level of the curriculum they were doing was called the Old Block Program in which there were twelve or thirteen blocks and for the most part they were all manipulative training with, I think, one course in supervision, and there was a little management that was thrown in. (R. Picard, personal communication, September 1986)

The first two weeks in May 1950 were devoted to correlation and coordination of the subject matter by the instructional staff. The subjects to be presented were varied from fire prevention and its place in the fire service to salvage and overhaul (Ward, 1963).

At the conclusion of the institutes, each person attending was required to write a comment with “no punches pulled.” This was made a little easier by telling them that it was not necessary to sign their names. The subject matter for future institutes was predicated, in part, upon the requests contained in the comments. Facilities for these institutes were provided free of charge by the Oakland Public Schools; Fresno City Schools; Extension Division, University of California, Los Angeles; and the San Diego City Schools.

There was some disagreement about the effectiveness of the institutes. According to a report filed by Ward (1963), the recommendations of the State Advisory Committee for Fire Training had not been followed to the letter. Subsequently, it was recommended at a meeting of the Statewide Advisory Committee held in Sacramento on the 3rd of October 1951 that the basic institute be eliminated as such. The Committee recommended that only one institute be conducted and that it be on an advanced basis. Further, they recommended that members attending the advanced institute be certified by the chief of the department as either having had sufficient experience in the fire department or having taken the basic course of the itinerant program to qualify them for attendance at the institute.

The Changing Character of the Fire Service

This was the beginning of an era of many changes for the fire service. The term “population explosion” was not yet popularized, but was under way in the State of California. During the next ten years, many cities would be created that had not existed in the previous decade. Fire departments that had been largely volunteer would begin to acquire paid personnel. The larger cities would begin to see expansion of their forces too. In Los Angeles County alone, more than twenty-five fire departments went from volunteer to paid in the short span of five to ten years. The other major areas, Orange County, San Bernardino, Riverside, the Bay area, and others experienced the same increases.

The Impact of the Korean War

The Korean War started and ended in the 1950s. Like World War II, the hostilities had its impact on the fire training delivery system in California. While this War did not threaten the United States shores, it did result in continued interest in the development of basic fire control skills on the part of civil defense forces and military personnel.

By the end of the Korean War, the need for training in basic fire fighting skills was essentially satisfied. Because of the growth and expansion in so many communities, there were a considerable number of promotions available and it was apparent that the testing system would have to look to criteria outside the basic fire fighting skills for upward mobility.

The net result was a return to the pre-1940 concept of a “fire college.” However, most fire departments, unlike Los Angeles City, did not have the human and other resources to develop a college internal to their individual organization. Instead, the shift in emphasis was to the community colleges to provide this training.

Creation of the New York State Fire Academy

In 1952, Dr. Leonard Silvern, at the State University of New York, performed a job analysis for the position of fire chief as part of his doctoral dissertation. The dissertation was an excellent job analysis of fire management. It also called for the creation of a State Fire Academy for the State of New York. This was one of the first efforts for an entire state system to be based upon an academy located within the state structure.

While New York was making their academy a reality, California still talked about its problem. No funding was available for a statewide academy, and the fire service continued to focus its efforts on the use of the State fire training officers or the university system to provide it with needed educational opportunities.

The University of Southern California Program

In 1950, Chief John Alderson of the Los Angeles City Fire Department, and a number of other fire chiefs in this region, approached the University of Southern California (USC) and

talked with Dean Emery Olson and Dr. John Gerletti to persuade them to offer a program in Fire Administration in the School of Public Administration. At that time, there were no community college fire science programs in existence. Frank Black, Lecturer in Public Administration, was designated as the Acting Coordinator of the Fire Administration Program.

The USC concept was originally designed to offer a bachelor's degree. The original planning committee notes indicated that they wanted to establish a program leading to a certificate, a bachelor's degree, and then advanced work in the field of public administration with a specialization in fire administration. The program was to be integrated into the School of Public Administration curriculum, as it had already been established and was receptive to the new program.

The statement of purpose of the USC program was written by William J. Taylor, Burbank Fire; John H. Alderson, Los Angeles; Charles N. Carrell, Santa Monica Fire; S. H. Edmondson, Pasadena Fire; James M. Nellis, Arcadia Fire; and Frank S. Sandeman, Long Beach Fire.

The committee wanted to make sure that the program would be supported by the fire service. They adopted a list of standards that were quite sophisticated. They included the following:

1. That the material presented in the courses be above that taught in the departments, or which can be had free under the State program.
2. That the emphasis of the degree should be on administration and not technical problems.
3. That the program be dovetailed into the operating program of the University to give the men the benefit of the entire facilities of the University.
4. That the degree should stand up and be recognized with any other University degree.
5. That only qualified fire personnel be allowed to obtain a certificate or degree.
6. That if the program is to succeed the courses should be well planned and meet a definite need of the men.
7. That a professional library, second to none, be developed at the Civic Center and that it be made available to all fire departments in the Southern California area. (Fire Training, 1951, p. 1)

The program was greeted with enthusiasm among the fire services of Southern California. Among the early participants were fire officers who were to later shape the system in a dramatic fashion. Among these fire officers were James Black, John Marshall, and Raymond Picard. Almost every officer who participated in the curriculum eventually ended up as a fire chief.

Chief Picard remembers, "...USC was really where the whole thing was. People would take public administration or some other kinds of courses at the university and get their degree going along those particular lines" (R. Picard, personal communication, September 1985).

As stated in the original statement of purpose, the curriculum was a departure from the types of programs that had been given by the State fire training instructors. It did not deal with the manipulative aspects of the occupation at all. Dr. Gerletti utilized general management theory and textbooks from the schools of Public Administration and Business Administration to develop a different knowledge base for these chief officers.

In 1954, building on Dr. Silvern's analysis, a proposal was written at the University of Southern California for the creation of another four-year baccalaureate program in fire administration at San Jose State College. While this was a good proposal in concept, the timing was premature. The student population of firefighters in that era had not advanced to a level to be interested in a four-year program. As a consequence, there were not enough students in a position to support a bachelor's degree level program. Thus, the San Jose program failed before it started.

Many of the individuals participating in this educational experience were able to take advantage of the GI Bill of Rights from World War II. This was the first form of educational incentives provided to the fire service and provided returning veterans compensating them for going to college. Tuition reimbursement, as well as a stipend, was available for veterans who participated in college courses on a full or part-time basis. There would be another version of this type of support given in the late 1950s after the Korean War.

The USC program continued to do well for a period of about ten years, when, roughly translated, "the GI Bill of Rights ran out." Chief Picard remembers:

About 1954 to 1956, the cost of education at USC was getting higher. The cost of units was increasing and because it was in Los Angeles, downtown in the Civic Center campus and so on, people who were there were basically ex-GIs who were using either Cal Vet or the GI Bill, and that started to die off a little bit. The students had to start self-funding and they said, "Hey, I don't want to travel that far; I don't want to pay that kind of money." So there was a general thrust in there – let's take some of those SC courses and put them out into the community colleges. (R. Picard, personal communication, September 1986)

USC administrators understood this financial dilemma. The USC staff actively supported the transfer of the educational concepts from the private school system to the public school system, in spite of the fact that it occurred when the program was still being well attended.

In about 1953, East Los Angeles College started a community college fire science program. Unfortunately, there was not much information available upon which the faculty of that college based its curriculum upon at that time.

Characteristics of the Firefighter Change

The fire service (as well as law enforcement) became a subject of interest to those who were looking at the selection of public employees. A study was conducted in the late 1950s, which attempted to capture some of this flavor. The report concluded, "These successful Civil Service applicants are of high intelligence (IQ 113) and have superior personality adjustments. Interests...of firemen are primarily technical and business in orientation..." (Matarazzo, Allen, Saslow, & Wiens, 1964, p. 9).

The Statewide Advisory Actions of the 1950s

The Statewide Advisory Committee, meanwhile, had continued at their task of improving upon state fire training offerings. At their meeting in November 1953, they discussed the technical institute program at great length. The committee felt that the institutes, as set up, were still not accomplishing the purpose for which they were intended. Originally, they were supposed to be for key personnel within a department who would attend and take the information they had received back to the departments as a whole. This was not being done, since most of the individuals were attending on their own time and securing the information for their own benefit.

Committee members felt that more good would be accomplished department-wide if the program returned to the original concept of conducting institutes for drillmasters, training directors, and key people who were assigned to attend at city or district expense. These people then could bring back this information to the other members of their departments through their local training programs. This would not supplant or replace the itinerant program, for there would always be a place for this type of instruction. It was also felt that an instructor's conference or institute could be operated for far less than it cost to operate the existing institute program.

It was recommended that the technical institute program be discontinued and replaced by an institute or conference with a course developed and designed to offer training for those responsible for training in their own departments. This was the birth of the concept of a California Fire Training Officers' Workshop. During its short life of four years, 3,080 firemen availed themselves of the opportunity offered by the technical institute program, so it was certainly a significant contribution (Ward, 1963).

The first instructors' conference was held in two locations, one in Santa Monica for the southern part of the State and one in San Mateo for the northern part. There were 117 training officers from 91 departments who attended the first conference. It was recommended by the committee that better coordination would be secured if the conference was held in one location rather than two and that the one be in the vicinity of Fresno, which was near the geographic center of the State (Ward, 1963).

Two Sets of “Red Books”

Due to differences between the various training organizations’ approach to materials development, California and the International Fire Service Training Academy (IFSTA) were developing almost identical sets of basic training manuals during this period. In the State of California, Tom Ward had decided that California needed a set of basic manuals utilizing the block, unit, and job approach. He assigned the task to the various instructors on staff at the time. Ed Bent had joined the staff, along with Bob “Curly” Lewis in 1950. Bent, a former member of the Los Angeles Fire Department, recalled that the staff performed the writing, but that the photography for these manuals was done in conjunction with the Cities of Santa Monica, San Mateo, and Fresno (E. W. Bent, personal communication, April 1987).

These manuals were characterized by the fact that all of the personnel from the State staff were always photographed wearing overalls instead of fire department uniforms. The books were bound with a red cover.

The IFSTA organization at Oklahoma State University was actively involved in producing a series also. The Oklahoma State Program, interestingly enough, also chose red material to bind its series of books. Therefore, the two series of books were both known as “The Red Book Series.” From the late 1950s until the late 1960s, the State of California and IFSTA continued to work on the development of parallel basic training materials. In the 1970s, the California Training Officers began to participate in the IFSTA validation process and the California red books became obsolete.

The Instructors’ Workshop

In 1955, the instructors’ conferences, later called the Fire Training Officers’ Workshop, began being held in the City of Fresno. (The conference was cancelled for a period in the 1970s as a result of the formation of the California Fire Academy in Monterey.) It was reinstated in the late 1970s as a result of the activities of the California Fire Chiefs Association, Training Officers Section. In 1991, it was moved to San Jose to take advantage of much larger accommodations needed for the growing attendance, meetings, and exhibits.

The Fresno training program was originally conducted in four sections or classes: Section 1, instructor training; Section 2, organization for instruction; Section 3, conference leading; and Section 4, personnel development. One day was scheduled as a field day at which time new techniques and procedures were demonstrated, or a building was burned under controlled conditions to demonstrate the most effective way to extinguish fires. Originally, the instructional staff of the Fire Training Program was assisted by the Trade and Industrial Teacher Training Division of the University of California (Ward, 1963).

Arson and Fire Investigation Seminar

In cooperation with the Extension Division of the University of California and the California Conference of Arson Investigators, there was conducted on the Berkeley campus the

first Arson and Fire Investigation Seminar in the spring of 1954. The policy of the Extension Division was to have like offerings on both the Berkeley and the Los Angeles campuses. Consequently, the schedule was so arranged that the seminar would be held on the Berkeley campus in the even numbered years and on the Los Angeles campus during the odd numbered years (Ward, 1963).

By the end of the 1950s, the majority of the paid fire departments in the State of California had initiated some form of internal training programs. Due to increased population growth in many areas such as Los Angeles, Orange County, and Santa Clara Valley, paid professional fire departments replaced most of the volunteer organizations between the early 1940s and mid-1950s.

The California Division of Forestry (CDF) Starts a Fire Academy

California Division of Forestry leaders found by the end of the 1950s that they needed to create a training program for their personnel that was more extensive than they had required in the past. Their first efforts were to set up two different training sites. One was located at Sutter Hill in Amador County and the other in Ramona in San Diego County. Senator Begovich provided the legislative sponsorship to create the facility. The first training program was held at Ramona, California in November 1957 and consisted of training for new driver-operators, which were at that time called “forest fire truck drivers” or FFTD.

The classes were five weeks long and had approximately twenty students per class. Within a few short years additional offerings were given in the field of heavy equipment operation and some courses for foremen. Both facilities were to remain in operation until the CDF opened its current facility in Ione.

A Regional Forester Jim Mace, the Region VI Deputy State Forester, and Training Officer Dean Bennett from Sacramento, with the support of State Forester Francis Raymond, made the decision to combine the Sutter Hill and Ramona facility in an attempt to standardize training. This process took from 1964 to 1967. Ray Banks was in charge of the Sutter Hill facility and Curley Francis in charge of Ramona when the consolidation discussions were held. Both participated in the design of the new facility at Ione. Originally there were four sites considered. Ione was chosen because there were twenty-four acres of state-owned property.

There was not a great deal of strong support from the top level CDF executives at the time for the creation of the facility. This was because the funding for such a facility was in competition with other expansion activities. The original staff consisted of only one chief officer, two captain-instructors, a cook, and a secretary. The original plans called for fifty students (J. McFadden, personal communication, June 1991).

Expansion of Staff in Fire Training

By 1960, the State Fire Training Program had expanded from the original team of three in the 1940s to a group of eleven people in the field. A listing of the individuals who have served in this program appears in Appendix B. The role of State Fire Training from 1940 to the late

1960s was almost exclusively to serve as itinerant instructors traveling around the state supporting training conducted on a local basis.

Some of the instructors such as Clyde Pope became quite popular with the departments they visited. In fact, records of many of the smaller departments, especially the volunteer departments, indicated that the annual visit by a “State Training Officer” was a real event. The training sessions conducted by these training officers were almost always given high marks by the attendees and the attendance was almost always the best of any event for the department (San Clemente, 1957).

Over the intervening years, it also became desirable to put on schools that combined the efforts of several different departments. In some areas of training, it was difficult to put on good manipulative skills training unless sufficient personnel and training props were pulled together in one area.

Flammable Liquids Fire Training Program

For example, California State Fire Training staff initiated, in cooperation with the Western Oil and Gas Association (WOGA), an oil fire control school, which was conducted annually and was aimed at training firefighters in basic flammable liquid fire fighting skills. Due to the limited State Fire Training staff, it was important that the system develop instructors from the local areas to support these classes. To accomplish that goal, State Fire Training initiated, in cooperation with the University of California system, the beginnings of “Instructor Training” using the UCLA teacher training methodology.

There were also many technological changes that occurred in the fire service from 1940 through the late 1950s. For example, radio dispatched fire equipment was unknown until World War II. The old fire alarm box system was slowly but surely changed over into a telephone alarm system. Some cities then adopted radio-operated alarm systems. The “Occupational Analysis,” initiated by Chief Scott in the 1920s, would have become obsolete in this period of time if it had not been revised periodically. Under the supervision of the State Fire Training staff, the “Occupational Analysis” was updated frequently to try to keep up with the change, but it was difficult.

The term “information half-life” is an appropriate explanation of the phenomena. Information half-life is the time it takes for about 50% of the known facts to become obsolete to a profession (Coleman, 1981). In the first one hundred years of fire protection, the half-life was probably seventy-five years; from the buckets of the 1700s to the hand-pumpers of the 1800s was a long period. But, the period from the hand-pumpers to steamer was less than fifty years. The steamer to the automobile was in the neighborhood of twenty-five years. As each decade saw new technology emerge, the old information disappeared. This had, and continues to have, an impact on the “body of knowledge” contained in the “Occupational Analysis.” A fairly rapid acceleration of this process was about to occur in the 1960s.

Shifting Emphasis in Education

According to Picard in a personal interview in September 1986, Ward Cockerton provided the initiating force behind the changes in using the community colleges in the early 1960s. At that time, Cockerton was a member of the State Fire Training staff and he had proposed to several of the community colleges that the basic fire fighting skill programs be taught as part of the community curriculum, specifically under vocational education.

There was considerable debate among the training officers in the State of California at that time over whether basic skills should be taught in the community colleges; some felt that they should be and others felt that a college degree would provide academic credibility for the fire profession. Picard stated:

As the community colleges started searching around, the only thing that was available was what Ward Cockerton was doing. Well, I was president of the Cal Chiefs Training Officers, Southern Division, at that time. Plus I was also attending SC [University of Southern California]. And, when they started this move, I said, "This is atrocious. They are going to be doing salvage as a course in community colleges expecting firefighters to come out of fire stations and go take salvage in the community college! No way!" So the training officers' group formed a committee and I was chairman of the committee. Other members were Gene Mahoney and Carlton Williams, among others.

We sent out questionnaires to different people asking what should be in a community college and what's wrong with the existing programs and so on. There was really a lower division, upper division conflict in this thing. Maybe [an] AA was going to be terminal for most of the people who would go...it would be a regular AA degree program. So, after doing the survey and investigation, we wrote a report and the conclusion was [that] the upper division has to be there, the full marriage of AA, the whole gamut, math and English and general education, as well as specialized, leading to the AA. We were really setting up a two-tiered system. If the SC program needed to expand, it would extend into the four-year university throughout the State, but basically there needed to be a unified curriculum at the community college level.

So, based on that, I said, "I'm just going to do it." I took the basic materials, like some of the hydraulics, the fire fighting tactics (which was in Tom Ward's Block Program), and I took the 13th Edition, I think, of the NFPA Handbook. There was no reference to lay any community college courses on, other than the salvage books and the block program. I got other references like Fire

Engineering, the Layman's Fire Fighting Tactics and Strategy, Fire Officers' Guide, and basically brought that intact with courses they were doing in the SC program. I felt there had to be nineteen sessions, including an introduction and testing station, plus the mid-term and so on; took all that subject matter and laid it into a community college program.

I had fire dispatchers on duty in Pasadena type that up. I still remember that it was a sixty-three page, 8½ x 11 format. I distributed it to the committee. There was a little bit of a conflict with Gene Mahoney, but the majority of the committee went for it. (R. Picard, personal communication, September 1986)

The question of which direction the system would go was answered when the California Fire Chiefs' Association, conducting their quarterly meeting at Lake Tahoe, requested that a presentation be made to resolve the issue. Picard and a training officer from the Los Angeles Fire Department drove to Lake Tahoe to debate the issue with Tom Ward and Ward Cockerton before the CFCA Board of Directors.

Community College Curriculum

Picard's committee proposed that the fire science curriculum in the community college be based on the National Fire Protection (NFPA) Handbook of Fire Protection instead of the Red Book Series. The logic presented to the Cal Chiefs' Board was that the California Red Book Series dealt with basic skills, whereas the NFPA Handbook dealt with fire engineering skills and that they should be kept separate.

After the CFCA Board heard both sides of the presentation, the decision was made to move forward with the development of a "Uniform Fire Science" curriculum utilizing the NFPA Handbook as the "body of knowledge" for the entire curriculum.

Picard and Vic Stevens of the Pasadena Fire Department actually developed the first "Uniform Fire Science" curriculum by doing a systematic outline of the NFPA Handbook. The first "Uniform Fire Science" curriculum proposed a series of classes that would carry the individual from the front of the NFPA Handbook to the end. There were no supplemental texts in place at that time. In 1969, the NFPA would reproduce a similar outline in a pamphlet for distribution to community colleges all across the nation as a recommendation for using the Handbook in fire science courses.

Up to this point in the evolution of educational and training opportunities, there had been two distinctly different courses of action. In the State Fire training program, the initial focus was on in-service personnel at the fire company level. The community college courses were in between the two, but were academically oriented. Both the State fire training courses and both of the college curricula consisted almost entirely of individuals who had already obtained a position in the fire service but were interested in gaining additional knowledge for promotional purposes.

By elevating the knowledge base of the in-service personnel, it also became apparent that entry-level firefighters needed a higher level of knowledge to interface in the organization. While some fire departments had their own recruit academies, there were many that did not have anything more than an orientation period.

Tom Ward Retires, Ed Bent Takes Charge

On July 1, 1965, Thomas S. Ward retired as Supervisor of Fire Training after serving the State for twenty-seven years. In September 1965, Edward W. Bent was promoted to the vacant position. Ed Bent, a tall, fatherly figure, soon had to preside over a series of events that unfolded one after another in rapid succession. The system that he had been a part of for almost fifteen years was in need of revision.

The Basic Recruit Academy Firefighter I

Vic Stevens, working in cooperation with Pasadena City College, proposed that a recruit fire academy be conducted as part of the fire science curriculum. The Pasadena City College Advisory Board endorsed this concept, and the first recruit academy sponsored by a community college was initiated at Pasadena City College.

The course was taught as a six-week curriculum. The individuals had all been hired by fire departments but had not been put in service yet. The instructors consisted almost exclusively of company and chief officers from the fire departments. Many, if not most of them, had obtained educational backgrounds and instructor training through the community colleges.

A similar program was started in Orange County in 1967. Chief Picard had left the Pasadena Fire Department and was the Assistant Chief in Huntington Beach Fire Department. A discussion was held with his training officer, Battalion Chief Bill Anson, about the possibility of developing a similar program in conjunction with Santa Ana College. A program on fire service training had been attempted at Orange Coast College in the late 1950s, but failed due to lack of support. Santa Ana College then made an agreement with all of the fire chiefs in Orange County that they would support a comprehensive fire training program if there was a central focus on only one community college in the region.

A meeting was conducted in Costa Mesa Fire Headquarters to discuss the matter of creating a basic fire academy. The meeting was among Battalion Chief Bill Anson, Huntington Beach Fire Department; Captain Ron Coleman, Costa Mesa Fire Department (Appendix C); Battalion Chief Paul Ravize, Garden Grove Fire Department; and Norm Crocker, a training officer for the California Division of Forestry. The decision was made to approach the Fire Science Advisory Board of Santa Ana College to support a fire academy for new hires. The Pasadena model was used in this proposal.

The Creation of the Instructors' Society

A group of training officers, mostly from the East Coast, Southern states, and the Midwest, recognizing the increasing complexity of fire training, formed an organization to help network the rapidly changing methods. This group was called the International Society of Fire Service Instructors (ISFSI). With such a bulky acronym, the group's title was often reduced to "They Society." This organization has served in a leadership role in many policy issues relative to fire training, especially in their activities at the National level and their involvement with the fire department instructors' conferences. While they were essentially based in the Eastern part of the country, and have not had much interaction in the State of California, they have nonetheless made a significant impact on the California delivery system by their involvement in the Joint Council and the National Fire Academy.

The Start of the Fire Prevention Workshops

At this time, most of the requests for expansion of the State Fire Training direct delivery system came from the user groups themselves. For example, a request of the Fire Prevention Committee of the California Fire Chiefs' Association resulted in the fire prevention seminar being inaugurated. This seminar was initially conducted with the cooperation of the Extension Division, University of California, and the Fire Prevention Inspectors' Section of the California Fire Chiefs' Association. The first seminar was held on the Berkeley campus of the University of California in 1961.

The First "Bombero" Program

In 1966, the first "Bombero" Program was inaugurated. Through this program, Mexican firefighters are invited to come to California for a week's intensive training in some aspect of the fire field. These firefighters are transported from the Mexican border to the training site, housed, fed, and trained for a week at the expense of the California fire service.

The Area Instructor Program

In order to cope with the burgeoning demands upon the system, the system had to be changed. The first significant change that occurred in State Fire Training was the initiation of the Area Instructor Program. Prior to its development, a majority of staff time was devoted to direct instruction in basic skills. The Area Instructor Program, however, provided the means for finally achieving the State Department of Education philosophy: leadership and direction, rather than direct instruction. What it meant was that the State Fire Training staff was to become the trainer of trainers instead of the delivery system themselves (E. W. Bent, personal communication, April 1987).

International Association of Firefighters (IAFF) Resolution 111-1966

In 1966, the International Association of Firefighters passed Resolution 111-1966. This Resolution, authored by Ernest A. Emerson and Alcus Greer from the State of Texas, called for

the setting up of standards for areas such as recruiting and training in the fire service. (Emerson was later to become the State Fire Marshal in Texas.) The IAFF was instructed to prepare a booklet that included a recruiting program, a training program, and a recommended associate in arts and bachelor's degree program. The call was out for improved training opportunities and more importantly the establishment of some standard criteria to measure a firefighter's competency.

Emmett Cox, an eminent member of the fire service, was called out of retirement and asked to direct this important study committee. He did so with a number of other committee members, including Carl McCoy and the Oklahoma State University International Fire Service Training Association.

Growth and Expansion of Training and Education

The rapid expansion of the fire service in California in the 1950s was nothing compared to the tremendous increase in the population in Southern California in the 1960s. There was a significant increase in the number of firefighters hired as many volunteer fire departments converted to paid fire forces. An increase in the number and complexity of the fire training and educational opportunities and requirements was a natural result.

By the late 1960s, the California fire service had developed a very complex training and educational delivery system. The mixture of State Fire Training, the universities, community colleges, and local needs was a dynamic formula. It was changing constantly. The introduction of new technologies, methodologies, and programs into the California fire service delivery system caused a constant re-evaluation of the "Occupational Analysis."

Howard Emmons' Comments

On the national level, fire authorities such as Howard Emmons questioned whether or not the fire service was approaching these changes in a scientific manner. Speaking at the First Symposium for the Needs of the Fire Service, he stated:

On problems of this kind, on which we know how to proceed, we should have vigorous research programs to develop understanding and resultant answers. This has not been done well in the fire services and it is not necessary to look far to see why not. The present organizational structure of the fire services, arranged municipality by municipality, has advantages, but it also has serious disadvantages. Fragmentation does not develop an organization of highly technical people in successful combination with people who have know-how in various areas and who can spend all day, everyday with these problems, considering methods of attack and transferring appropriate technology from all fields to the use of the fire service. (Emmons, 1968, p. 1)

The Wingspread Conference

The first “Wingspread Conference,” conducted in 1966, published many statements regarding needed changes in the fire service. Among these were a series of statements regarding education and professionalism in the fire service:

Professional status begins with education. Thus, the Wingspread team drew on the Gordon-Howell Report which suggested four criteria for defining a “profession:”

1. A profession should rest on a systematic body of knowledge of substantial intellectual content and on the development of personal skill in the application of this knowledge to specific cases.
2. It must set up standards of professional conduct which take precedence over the goal of personal gain.
3. It should have an association of members, among whose functions are the enforcement of standards, and the advancement and dissemination of knowledge.
4. It should prescribe ways – controlled in some degree by the members of the professional association – of entering the profession by meeting certain minimum standards of training and competence.

A systematic and deliberate educational program leading to a broad knowledge base which is acceptable to the academic community is the surest approach to professionalization.

It is unrealistic to assume that every member of a fire department has a formal education (college degree). Therefore, levels need to be established within the profession. (Wingspread, 1966, p. 4)

The chart that was provided to illustrate this section was much more simplistic than its predecessor from the 1930s. The reason for this simplicity was that it focused on educational levels instead of courses of instruction.

In elevating the professional expectations in the fire service, the Wingspread group also directed a change in the philosophy of professional achievement. They continued with:

Formal education achievement should help a person acquire a considered sense of values that will give direction, meaning and integrity to his life and his work. He will need certain basic abilities and skills that are widely transferable and needed in nearly every walk of life, including:

- Mastery of the scientific method – that is, the process of objectively seeing and solving problems.
- An understanding of human relations.
- Skill at communicating – in speech and writing.
- An ability to organize limited resources to achieve set goals and objectives.
- An ability to concentrate and apply himself wholeheartedly to the job at hand until it is completed.
- An open and flexible mind that, nevertheless, has a foundation of fundamental convictions and principles.
- An ability to keep on learning on and off the job.
- A fire executive is likely to achieve more if he also finds zest, satisfaction, and sense of fulfillment in the exercise of his abilities.

7. The scope, degree and depth of the educational requirements for efficient functioning of the fire service must be examined.

- Many individual fire departments do have specific educational and skill requirements which must be met by existing fire service personnel.
- Virtually all crafts, vocations, technical areas, and professions have established minimum in-service training requirements. Specific educational requirements are achieved or internships completed before they are allowed to practice in their field.
- Today, craftsmen serve as apprentices, being required to have approximately 8,000 shop hours and 760 related hours before they can become journeymen. The technician occupational fields have seen a rapidly expanding technical institute program, leading to the Associate Degree. These graduates are the highly skilled technicians who complement many of the professional activities.
- Each of the true professions has very rigid educational criteria to be met before one can enter the profession.
- Although efforts are being made in the fire service in several sections of the country to follow such guidelines, at present no uniform criterion is established for the individual or the service as a whole to determine the degree of competency expected of the fire service.

- To date, we have approached this problem from one extreme of minimal education, to the other end of the continuum requiring a college degree. An investigation must be made to determine what the educational needs are at various organization levels.
 - This whole area needs to be thoroughly studied to arrive at acceptable knowledge and skill requirements to be met by fire service people to achieve the craftsman level, the technician or specialist level and the executive level.
8. Increased mobility at the executive level of the fire service will be important to the achievement of professional status.
- Mobility is present within virtually all fields of endeavor. In the fire service, many restrictions have been established which limit mobility. Some of these archaic restrictions are individual state pension programs and individual residential requirements. Others have been devised by local and state groups which limit mobility in any level in the fire service.
 - If uniform knowledge and skill criteria were established on a nationwide basis, there should be no reason why mobility at the various levels in the fire service could not be facilitated.
 - Professionalism and mobility go together. The parochial attitude that all advancement must come from within the department stifles many competent persons and precipitates incompetency. In many respects, the service may be admitting that educational standards for fire officers are lacking and implying that service with a particular department is the only way to career advancement.
 - Some states have achieved a degree of mobility for executive and specialist levels in the fire service. However, a comprehensive study needs to be made to determine specific ways in which increased mobility can be attained within the fire service.
9. The career development of the fire executive must be systematic and deliberate.
- As in any other professional field or quasi-professional field, the requirements for the fire executive must be identified. Once this is

accomplished, ways and means of individuals to meet the need and requirements should be established.

- This gives rise to the thought of direct entry into the executive level of the fire service as well as coming up through the ranks or higher levels and then attempted to train and educate the individual to meet requirements of the level to which he has been promoted. This is contrary to the practice in virtually all other professions and technical areas.
- The hit-or-miss approach which assumes that x number of years experience is the criterion for advancement cannot meet the needs of today, much less tomorrow. Some ways must be found to identify those individuals with potential and develop them for future responsibility, providing a comprehensive program of career development.
- Once a systematic and deliberate course of action is established for development of the fire executive, programs need to be established in educational institutions for in-service training of executives as well as those who are interested in entering the field of fire service management to acquire a wider educational background. (Wingspread, 1966, p. 14)

The lack of adequate textbooks, especially those that bridged the gap between basic firefighting skills, encapsulated in the Red Books and the highly technical knowledge base of the NFPA Handbook was causing a certain degree of conflict and contradiction for the student firefighters.

The Systems Approach by Hickey

Hickey (1973), in his book Public Fire Safety Organization: A Systems Approach, presented the case that training is a subsystem of a total fire protection system. His concept included a wide variety of functions that heretofore had not been looked upon as being interrelated. They included recruit orientation, total in-service training criteria, work study programs, continuing education requirements, programmed instruction leading to promotional opportunities, external organizational training, and educational coordination and guidance.

Hickey (1973) advanced the rather controversial opinion that the education and training coordinator should possess, at a minimum, a bachelor's degree in adult education, industrial education, or guidance education. This was a far cry from the backgrounds possessed by the officers of the Los Angeles Fire Department who had developed the first Fire College.

Expansion of the Community College System

More two-year colleges entered the fire science field. Most of them continued to base their entire curriculum upon the Uniform Fire Science material developed by Picard. There were fourteen different fire science classes in the curriculum at that time. The number of colleges offering courses was to grow to an inventory of over fifty community colleges at its zenith. However, the California Department of Education workload in direct field instruction did not lessen as a result. In fact, it increased as evidenced by the fact that there were more than six hundred backlogged requests for instruction on file at one point in about 1965. The program had to alter its operations significantly in order to meet the emerging challenges.

It was time to re-evaluate the system. However, California was not alone in the need to re-evaluate how it was going to train and education future fire personnel. It was the same in the other forty-nine states.

Chapter Summary

The period of time from the beginning of the twentieth century to mid-century was filled with actions aimed at creating a body of knowledge for the fire service. The pioneers of this effort, Scott and Hudiberg, along with the institutions that were created such as the International Fire Service Training Association (IFSTA), laid the foundation. Not unlike a relay race where the baton was passed from one runner to another, the task of creating the system was pushed on from one individual to another. The second generation of leaders, such as Jay Stevens, Thomas Ward, and Hugh Morris, actively pursued the goals creating a system of vocational education that was both fundamental and, at the same time, comprehensive. The baton was given to a new generation in the 1950s, which placed a higher priority on institutionalizing the concepts.

CHAPTER 3

RESPONDING TO THE INCREASED DEMANDS

The formative years laid a foundation upon which to focus the fire service's professionalization process that would take place in the late 1960s, 1970s, 1980s, and early 1990s. This professionalization effort included the Wingspread Conferences, UCLA's A Study of the Fireman's Occupation (Allen, Bodner, Lano, & Meyer, 1968), the proposals and studies to establish minimum standards, the development of community college fire science curricula, the creation of the California Fire Academy system, and the diligent, dedicated commitments of several individuals and study teams. At the federal government level, the United States Fire Administration and the National Fire Academy enjoyed a special cross-fertilization with California's fire service leaders, resulting in benefits for the involved parties.

Professional Standards

Occupational and job analysis studies in many fields have often naturally led to establishment of minimum job standards. The California Fire Chiefs' Association, the IAFF, and the NFPA in the later 1960s and early 1970s began concerted efforts to establish minimum occupational standards for the fire service.

The Study of a Fireman's Occupation

With the proliferation of new directions for professional development came additional problems. Despite the fact that there was a uniform fire science curriculum in the community college and that there was a separate state fire training program, there were often conflicts, contradictions, redundancies, and omissions in training. Some sources which were essentially aimed at recruit level firefighters contained material that was entirely too complex and, in other cases, advanced courses contained manipulative skills requirements which were inappropriate.

It was time to reanalyze the delivery system and to develop some minimum standards for each of the delivery systems. Unfortunately, this was extremely difficult to do at this time, as there was no clear-cut picture of how the system was functioning.

According to Ed Bent, Supervisor of State Fire Training, several meetings were conducted in an attempt to assess the state of the system, without success. One such meeting was conducted with Ed Bent, Supervisor of State Fire Training; Chief Dean Holzgrafe, Fremont Fire Department; Chief Rod Porter, Berkeley Fire Department; and the remainder of the CFCA Training and Education committee. Bent recalls that the meeting was conducted as a result of a request from the San Diego area to create a new training program (E. Bent, personal communication, April 1987).

Chief Porter's Influence

Chief Rod Porter, a seasoned veteran who had gone through many of the changes in the delivery system over the previous twenty years, raised a rhetorical question at that meeting. "How can we possibly straighten out our training system when we don't know what it is a fireman does?" (E. Bent, personal communication, April 1987).

Chief Porter's observation, while succinct, was significant. Essentially the "Occupational Analysis," which had been in existence since the 1930s and had been revised several times, was badly still out of date and in need of revision. Changes in methodology and technology in the fire protection services had made many of the tasks on that list obsolete, and further, there were many tasks being performed by firefighters that were not present in the document. In addition, there was no discrimination among those tasks with regard to what level of competency was required or whether the tasks were appropriate for each rank in the fire service.

In other words, the firefighters occupation had been described in a general way, but was not defined in a specific fashion. Dean Holzgrafe, Chair of the California Fire Chiefs' Association, Training and Education Committee, took that concern away from the meeting. When the committee met next, the issue was raised again. It was generally conceded that Chief Porter's observation was correct. However, it was going to be hard to create a new view of what a person was expected to know in the fire service without a review of what the fire service was really doing (D. Holzgrafe, personal communication, 1989).

CFCA Proposes Minimum Standards

Ed Bent and the Training and Education Committee took the comment seriously. Bent felt that this might be an opportunity to utilize some of the services of the State Department of Education. State Fire Training at that time was still part of the State Department of Education. Over a period of a year, they worked to develop a resolution to be adopted by the California Fire Chiefs' Association regarding an updating of the entire system. That resolution was delivered to the general body of the CFCA in a meeting conducted in San Diego in 1966. Chief Ray Picard and John Marshall, members of the California Fire Chiefs' Association, Training and Education Committee, prepared and delivered the resolution with Bent.

Titled the Minimum Standards, Fire Service Personnel Recruitment, Education and Training, this thirteen page report by the Joint Committee on Professional Standards and Training (1966) was to cause a significant reaction by the fire service. Essentially, the resolution recommended that the State Fire Training Program work in conjunction with a university or college to develop a study of the firefighter's occupation. It passed unanimously.

Bent, using these documents, contacted the University of California, Los Angeles. At that time, UCLA was also the institution that sponsored instructor training for vocational education teachers. When an individual took instructor training under the auspices of the California State Fire Training Program, it had to be in conformance with standards set by UCLA for the training of all vocational education teachers.

A grant proposal was submitted to UCLA by Bent's office. Bent's staff in State Fire Training, at that time, included both Carlton Williams and James Meidl. Both of these men were pioneers in the development and implementation of the Uniform Fire Science Curriculum in the previous decade. Meidl had written several textbooks and served as an instructor. Carlton Williams had been a training officer with El Monte Fire Department and was previous President of the California Fire Chiefs' Association, Training Officer Section.

Working with Dick Lano, Dr. David Allen, and Dr. Bobra of the UCLA staff, a proposal was prepared. Essentially, the concept was to conduct a computerized study of the "Occupational Analysis" to verify whether or not a task was being performed by an individual rank in the fire service and, at the same time, to gather information on how this knowledge was acquired and what application it had on the job.

The fire departments in California were contacted by Ed Bent's office to participate in the data collection. Over fifty workshops were held around the State and a variety of individuals invited to participate. At each of the workshops there were representatives of the various ranks from firefighter all the way up to and including that of fire chief. Each individual was required to fill out numerous computer cards that included a wide variety of questions.

Upon completion of the data collection, the information was entered into the computer at UCLA and assembled into book format. This voluminous document contained more information on what firefighters did performing fire protection services than any other single previous document. It resulted in the development of a document so complex and containing so much information, it was literally incomprehensible to the average firefighter or fire chief. It was apparent that if the Study of a Fireman's Occupation was going to have any value to the fire service, it had to be further interpreted and divided into meaningful elements that could be dealt with on a practical level.

Resolution 41-1968

In 1968, the IAFF, meeting in Toronto, Canada, continued its focus on the issue of standards. Resolution 41-1968 once again called for the development of national standards. The Texas contingent, once again, provided the impetus to the action, and was joined by Local 21 of St. Paul, Minnesota. The resolution called for the creation of a commission on firefighters' minimum standards and education.

The committee was formed with Emmet Cox as its chairman. Cox, an active member of Local 664 since 1934, had also been the Director of Education for the Indiana State Fire Marshal's Office. Other members of this committee included Vernon C. Cook, Percy Clark, Alcus Greer, James F. Casey, Max Pearson, and Dr. Roswell Atwood. The latter had been an educational consultant to the IAFF since 1945 and was on the faculty at the Harvard University Trade Union Program.

The NFPA's Involvement in Setting Standards

Concurrent with the development of (a) the California Study of a Fireman's Occupation, (b) the IAFF's request for standardization, and (c) the emerging federal focus, another event took place, which added to the impetus for the continued evolution of the training system. Deputy Chief Leonard Marks, DPA, made a presentation to the NFPA in their annual meeting conducted in San Jose, California in May 1971. The gist of that presentation was that the fire service should begin to develop a "set of national standards" for the performance of fire personnel (L. Marks, personal communication, March 15, 1991).

This concept, while it had been discussed previously by the IAFF, had never been completely institutionalized. It was clear that while each individual state had various types of training programs and that the IAFF had published its document for recruit training, there were no comprehensive minimum standards for which a person could subscribe that covered the entire fire service profession. In addition, there was no way that an individual who had received basic training in one area or state with one program could correlate that training to what the basic academy delivered in another locale.

Deputy Chief Marks' idea was accepted. The NFPA established a committee which began to look into the "professional qualifications" of fire service personnel. The first document produced by this committee was entitled, "NFPA 1001." This research document established minimum standards for the physical qualifications, mental qualifications, and basic criteria for entry-level firefighters. It also had far-reaching implications for raising entry level requirements and further, it was to be used as source documentation for equal opportunity and affirmative action hiring procedures.

The Joint Council Forms

The national fire service groups, which up to this point were relatively fragmented in their approach to all fire service issues, began to hold meetings to discuss their common concerns. One such meeting with national representatives in 1970 resulted in the formation of the Joint Council of National Fire Service Organizations. In 1972, the Joint Council established committees to oversee and validate the use of NFPA 1001 standards by various user groups. This resulted in the formation of what is now referred to as "The National Professional Qualifications System" or Pro Board (Gratz, 1978).

The Need for a Master Plan

The Training and Education Committee of the California Fire Chiefs' Association (CFCA), upon receipt of the Study of a Fireman's Occupation, realized an immediate difficulty: there was too much data for them to absorb. The document, which was approximately one inch thick, had to be further analyzed and restructured for it to have a bearing on the delivery system. It was also clear that for the training system to coalesce, it needed to have some type of focus. The Training and Education Committee, chaired by Ray Picard of the Huntington Beach Fire Department, proposed that the Study of a Fireman's Occupation be utilized as the source

document for the development of a statewide Master Plan of Training and Education (R. Picard, personal communication, September 1986).

Lake Arrowhead Workshops

It was decided to continue with the UCLA grant proposal by creating a series of workshops to further dissect the study back into manageable elements. The first such workshop was proposed to be conducted at the UCLA Teacher Conference Center in Lake Arrowhead, California.

A selected group of individuals who had participated in the data collection of the study were invited to go to Lake Arrowhead. Over a period of a week's time, this group was broken into committees to define and structure the material implied by the Study of a Fireman's Occupation. For approximately three days, the group was engaged in a great deal of philosophical discussion regarding the system, but very little went down on paper. It is unfortunate that many of the discussions lead by veteran fire officers like Chief Rod Porter went undocumented.

Many of these officers had experienced the transition of the fire service from the early 1940s and were the source of a wealth of information regarding the historical developments. While the group's comments were not written down as such, the participants in that original workshop were motivated to remain involved. A review of the list of the participants reveals that, at the time of the writing of this study, almost all of them were actively in fire training and education.

The group identified the need to have representation from a wide variety of "user groups." These "user groups" included the community colleges and training officers' associations among others.

The Lake Arrowhead workshops were originally intended to focus on the document itself. However, it was soon clear to those participants that the document had further implications. These implications, while limited in number, would have a great impact on the fire service training and education delivery system. It was proposed that a political focus be developed on the fire problem at the State level. Many of those participating in the process were aware of the political implications of a federal fire focus being developed in Congress.

It was proposed at that meeting that an organization be formed at the State level, comparable to the Attorney General's Office. The goal of writing a "Statewide Master Plan of Training and Education" was expanded to include the formation of a concept of writing legislation in California government to create a State Board for the Fire Services. This Board was to function somewhat like the Peace Officers Standards and Training (POST) Commission.

Beginning on the third day and moving through the fifth day of the workshop, one of the subcommittees, lodged in a hot attic room lacking air conditioning and other comforts, toiled extensively over the development of a flow chart. The chart they ultimately drew formed the backbone of the action plan that was to be implemented by the State Fire Training Office.

Initially, the flow chart was designed as a vertical structure which carried an entry level firefighter all the way up through and including positions such as fire chief. The original flow chart was drawn on “butcher paper” and pasted to the walls of the attic room. Dick Rossmesler of Miramar Community College and Captain Ron Coleman proposed the flow chart to the group after retuning from lunch one day. Chief Picard, chairing the group, expanded the concept. He changed the perspective by turning the flow chart on its side to indicate the passage of time. Instead of relating the achievements of an individual based on rank, it was based on opportunity and the sequence of events that occurred on a calendar or time element basis. The original Master Plan Chart, which closely resembled a wiring diagram for a sophisticated electronic technology, was extremely complex. (Appendix D contains the final version of the Master Plan Chart.)

Chief Picard became infamous among the training cadre for his enactment of what was later referred to as “The Moonwalk.” He attempted to explain the chart by role playing as he proceeded from one side of the room to the other, illustrating how an individual moved through a career development path. Moving back and forth, sideways and at oblique angles, this theatrical delivery convinced the participants at the workshop that the flow chart had realistic implications and should be printed and distributed to various individuals.

The Lake Arrowhead workshop teams worked many hours to explain and expand this flowchart by writing down the facts and systematically analyzing the system.

Another task identified at the Lake Arrowhead workshops was the need to “certify” individuals at various rank levels in the fire service. The concept of the National Fire Protection Association (NFPA) Pro Board was integrated into the Master Plan idea and served as another reason to establish a State Board of Fire Services.

As a result of that Master Plan, each of the elements had to be further defined and clarified. It was obvious that it would be impossible to accomplish this in the one week workshop. A second workshop was scheduled one year later with almost the same participants. Subcommittees were designated and individuals went to work writing the role statements of the various elements of the Master Plan.

The Concept of Position Orientation

The last concept, and among the most significant to come from the Lake Arrowhead workshops, was the idea that training and education should be position-oriented instead of task- or content-oriented. What this essentially meant was that the Study of a Fireman’s Occupation clearly illustrated that the needs of an entry level firefighter were totally different than the training needs of a company officer. Heretofore, courses of instruction were based upon the content of the class instead of the need of the individual taking the class. For example, many courses of instruction might have a topic entitled “hydraulics.” Utilizing the course content approach, an individual could take a course that took hydraulics from the basics of water all the way up through and including the most sophisticated of formulas.

The Study of a Fireman's Occupation indicated that it was necessary for individual firefighters to have certain knowledge of water movement, but it was not necessary for them to do friction loss formulas in their head.

This concept also integrated with an emerging field of methodology in instructor training referred to as "Student Performance Goals." This concept, adopted from the work of Robert Mager, proposed that whenever instruction was provided to individuals there would be three elements to make that instruction meaningful: a given, the performance and a standard. The rewriting of courses of instruction based on these criteria was an exhaustive effort, but it was more measurable, and therefore, related directly to the concept of certification.

Another implication of this concept was that the Uniform Fire Science Curriculum, which was content-oriented, was possibly obsolete. With the emphasis shifting to the competency-based approach, and with an emerging student population that was becoming more pre-employment than post-employment, the direction for community colleges needed to be evaluated too.

There were three Lake Arrowhead workshops. In each of these workshops a different element of the four items previously discussed were attacked. Upon completion of the Master Plan, which was later printed and distributed to all training officers and fire chiefs in the State of California, the next subject addressed was certification and system design.

Carlton Williams and Jim Meidl, both members of the State Fire Training staff, were instrumental in developing the study performance goal concept. Williams is credited with being the prime mover behind the modification of the Uniform Fire Science Curriculum. Meidl, on the other had, developed the officer classes that led to the regional and California fire academies.

As this system evolved, it soon became clear that a collection of student performance goals aimed at specific rank could very clearly point to the path the individual needed to follow to move from one rank to another in career preparation. The result of this was the development of a new concept called the "Career Development Guide" (CDG).

The Career Development Guide Concept

The CDG was a radical departure from the method of course design used previously. A brief review of the Uniform Fire Science Curriculum in print at that time draws a startling contrast. The Uniform Fire Science Curriculum, which is content-oriented, stated a series of facts, but did not discriminate between the levels of importance or the degree of achievement expected of the student (J. Meidl, personal communication, October 1987).

On the other hand, the CDG had many different elements. First was the concept of "level of instruction." This level of instruction implied that in some cases it was okay to just know about something, and in some cases it was very important that the individual be able to do something. The figures "I, II, III" stood for the levels of instruction. These became important milestones for both instructor and student. Secondly, the CDG clearly pointed out that a person could acquire knowledge in different locations. The standard references used to support a

performance goal included in the CDG in some cases identified multiple resources where an individual could go to acquire knowledge to meet that career objective.

One of the most important projects to come out of the Lake Arrowhead workshops was the Basic Firefighter Career Development Guide. The entry level position in the fire department is among the most important for establishing the knowledge base. Establishing that knowledge base, utilizing the student performance goal, therefore, allowed recruit academies throughout the entire State of California to agree on the minimum skills and abilities of recruits. This move into the area of standardization was most important toward the further development of similar standardization at the apparatus operator and fire officer levels. Almost immediately upon its publication, the various recruit academies around the State began to adopt it into their curricula.

After extensive discussions on the previous issues, it was also clear that one of the considerations must be an assessment of the delivery system with regard to professional qualifications. The NFPA by this time had moved through the committee process and had established several "standards." It was proposed as an implication of the Master Plan that the training education delivery system result in "certification of individuals." This was among the most controversial of issues.

Revision of the System

In 1971 there was the first attempt to upgrade the curriculum. The process of setting up career development guides was still in the formative stages. A curriculum revision team had been convened in El Segundo to look at the curriculum. It was a difficult time for the instructors. On the one hand they had an occupation that was going through a lot of technological changes, and they had a student population that was undergoing significant changes. The first thing that occurred in the revision process was to add more courses to the program. Larry Borgelt, a fire protection engineer, suggested in a letter to other members of the team that we were moving towards a "state of confusion" by adding more titles to an already obsolete program (L. Borgelt, personal communication, January 1971).

Carlton Williams, who had been instrumental in the Study of a Fireman's Occupation, left the State training program in the early 1970s to go to work at Los Medanos College. Williams, a fatherly figure, prone to puff on his pipe when contemplating a point, was firmly convinced that the curriculum was out of step with the times. He proposed a major change to the system: rewrite the curriculum around a "core" concept that was primarily for pre-entry students.

Certification as a Concept

The primary issue of certification was whether the system would make it mandatory or whether it would remain voluntary. Essentially the labor unions were opposed to any mandatory certification process for fear it would have a negative impact on incumbents in the position. Many chief fire officers saw the mandatory certification process as taking local control out of their hands. Others saw the certification process as the first step of professionalism. The issue polarized many fire fighting agencies.

Senate Bill 1805: Campbell

There were so many changes to the delivery system as a result of all the philosophical discussions during the three years of Lake Arrowhead workshops that it became harder to operate without adequate coordination. The most obvious thing to do was to author legislation to bring about this coordination. Senator William Campbell, long a supporter of the fire services, agreed to be the one to carry the bill. This enabling legislation established the State Board of Fire Services and simultaneously created the California Fire Academy system. The more subtle changes to the system were to be found in the new ways of using the State fire training staff and in the direction of dividing the fire services into two different student populations: pre- and post-employment.

Role of State Association of Fire Educators (SAFE) in Revising the Core Curriculum

Williams suggested that the project be supervised by the State Association of Fire Educators (SAFE). The proposal was approved by the State Board of Fire Services, shortly after it was officially seated. The first meeting of the revision committee was held in San Clemente in July 1977. The committee met again in September at Chaffey College. Copies of the suggested revisions were sent all over the State for review by community college fire science faculties. The final draft was reviewed in January of 1978. The State Board of Fire Services adopted it without revision. The community colleges, which over the twenty years of development had gone from 100% employed firefighters to over 50% pre-employed students, had a new curriculum to prepare candidates for employment.

Formation of MACs

Another element in the original Master Plan was the concept of regionalization of the training elements. When the Plan was first adopted, in concept, there were regional supervisors of State fire training located in various parts of the State. Bent directed that the supervisors should attempt to implement as many elements of the Plan as possible, despite the funding limitations. Among the components that could be accomplished was the development of advisory committees. Ray Russell, Supervisor of Fire Training for the Southern California Region, took the initiative to form two such committees. They were called Metropolitan Advisory Committees (MACs). One was in OES Region I (Los Angeles, Orange, Ventura, Santa Barbara) and the other one was in Region VI (Imperial, San Diego, San Bernardino, Riverside, Mono, and Inyo).

Russell contacted several of the chief officers who had been involved in the development of the Master Plan and asked them if they wished to help identify further training needs in the areas covered by the Committee. Fire Chief B. J. Thompson, Santa Fe Springs, was the Chair of the Committee in Region I. Chief Jerry Shaw of San Bernardino was the Chair of Region VI. The Committees consisted of about six other fire officers.

Ken Phillips, Chair of Industrial Studies from California State University, Los Angeles (CSULA), was interested in expanding the University's industrial technology program. However, there was a serious limitation to the effort. As a result of the Bannister Study, the various campuses of the California State University system were not allowed to repeat programs in

existence on other campuses. Phillips contacted Russell at the offices at the State Department of Education and asked if the fire services had any interest in exploring a program in upper division education. Russell expressed interest, but had to make contact with the Supervisor, Ed Bent. A meeting was arranged between Phillips, Bent, Russell, and Meidl (R. M. Russell, personal communication, March, 1990).

It was pointed out at this meeting that an advisory board would be required in order to put together a program. Russell suggested that the Region MAC could serve in that capacity. After the meeting was conducted, Russell was directed by Bent to take the issue to the Region I MAC meeting.

The committee enthusiastically supported the idea. Chair Thompson arranged for a meeting of the group to be held on the CSULA campus. In attendance at that meeting were Earl Fordham, Los Angeles County Fire, and Chief Ron Coleman, San Clemente Fire Department. It was agreed that the committee would work together with CSULA's faculty and administrators. Chair Thompson asked the MAC to develop an outline for the program.

Over a period of several months the committee reviewed previous upper division programs, including the University of Southern California (USC) program from the 1950s, a limited program that had been conducted in the 1960s at California State University, Long Beach (CSULB), and other information that was contained in professional publications. Chair Thompson, who at the time was involved in a Doctor of Philosophy program at the Union Graduate School, took responsibility for the final draft of the curriculum. It too was submitted to the State Board of Fire Services (SBFS) (B. J. Thompson, personal communication, July 1990).

Creation of the California State University, Los Angeles (CSULA) Program

Shortly after the enactment of the State Board of Fire Services, as a result of SB 1805, the curriculum was approved by the SBFS. In the shortest time possible, approximately one year, the Fire Protection Administration Bachelor of Science curriculum moved from rough draft to final draft through numerous CSULA committees to the CSU Chancellor's Office review and finally to recommendation by the California Postsecondary Education Commission. The Program began operation in the fall of 1973 and graduated its first class in the spring of 1975.

The first staff liaison for the Program was Professor Keith Gummere. He was replaced in 1976 by Dr. Richard Resurreccion. Both professors served on an interim basis with the anticipation that a former chief officer would eventually direct the program.

Initially, the Program was heavily impacted. The reason was simple. For almost fifteen years the community college had been producing graduates with fire science degrees with no place to go. The existence of a four-year degree program, within driving distance of one of the most heavily populated areas, coupled with relatively inexpensive student fees, resulted in a ground swell of initial students.

Over the next decade the student population would fluctuate drastically. The realization that a degree was a lot harder to achieve than community college courses disenchanted some.

Others failed to respond because of changing career opportunities. For some, the four-year degree was not viewed as being job-related. And, in some cases the reduction could be attributed to changing policies in municipalities regarding both promotional requirements and educational reimbursement programs.

Reorganization: The Second Time Around

Jerry Brown was Governor at the time of passage of SB 1805, and Phil Favro was the State Fire Marshal. Concurrent with the development of SB 1805, the State Fire Training Program under the direction of Ed Bent, was transferred from the State Department of Education to the State Fire Marshal's Office. The staff had finally returned to the same organization that had given it birth in 1932. It was felt by the majority of the chief officers involved in the decision process at the time that the Fire Marshal's Office was a more natural location for the continued implementation of the Master Plan than the State Department of Education.

This move was prompted by the fact that funds for vocational education coming from the federal government were beginning to dry up, and the federal focus on vocational education was shifting. The State Department of Education was suffering severe financial problems at that time and was looking for ways and means of reducing staff. It was natural that the Fire Marshal's Office be considered for a potential home for this program.

Unfortunately for the system, when this program was transferred from the State Department of Education to the Fire Marshal's Office, there was no accompanying transfer of funds. Essentially, the only thing that was transferred from the State Department of Education was the salaries and some small logistical support of these positions. This was a tremendous liability at the time, and, in fact, saddled the Fire Marshal's Office with the responsibility and limited resources to achieve it. Unfortunately, the fire service, in preparing the Master Plan and in working to support the passage of SB 1805, was anticipating a significant change in the direction of the program that did not materialize.

Phil Favro accepted this responsibility, and this program was integrated into his office. This was a major risk on the part of Fire Marshal Favro as it meant the reallocation of other resources in the office, which at the time were primarily code enforcement and fire inspections. Few fire officers have recognized the credit due to Fire Marshal Favro for his decision to accept this responsibility. If it had not occurred, State fire training and the implementation of many of the lofty goals of the Master Plan would have died a sudden death. However, Favro's decision was like a last minute reprieve. The system did not slow down in its evolution because of the change, but it did change direction.

Shifting Emphasis in the Use of Staff

One of the outcomes of the change was to reorient the use of staff in delivering the programs to the fire service. Over the previous decades the State Department of Education had used the personnel in the fashion of itinerant instructors, then coordinators of institutes, and then instructors of specialized courses. The new course of direction that came from the regionalization of supervisors was to convert them from teachers to teachers of teachers. The new emphasis in

this era was on the development of course materials that could be handed off to local instructors. The objective in this action was to maximize the number of students that could receive the necessary instruction.

Among the first courses to be treated in this fashion were the instructor training series. James Meidl, Ray Russell, and Carlton Williams developed the "Master Instructor" series. As the authority to teach teachers had evolved from the vocational education days, and an agreement with UCLA, this program had rigid requirements. The first two instructors who were graduates of this regional approach were Ray Bachtelle, Santa Ana Fire Department and Roy McCarver of the Encinitas Fire Protection District. Later this system would evolve into the "Regional Fire Academy" concept, an adjunct to the California Fire Academy system.

Creation of the California Fire Academy System

Among the first major projects adopted by the State Board of Fire Services was the creation of the California Fire Academy system. A coalition was formed including the State Fire Marshal's Office, the California Fire Chiefs' Association, and Monterey Peninsula College to form a framework for a delivery system. Members of the State Board of Fire Services conducted extensive research to review several locations prior to the selection of Monterey Peninsula College. However, the site of the Asilomar Conference Center gained support of all the user organizations and it was selected.

This selection was not without its controversy either. Many felt the Fire Academy was too remotely located from the bulk of the population centers of California. Complaints were heard that transportation in and out of Asilomar was inadequate. The issue was raised as to whether or not the Academy would be permanent in a location that was owned by another state agency. Nonetheless, the California Fire Academy moved forward.

The consortium was formed to implement the California Fire Academy, utilizing the State Fire Marshal's Office and the financial resources of Monterey Peninsula College. Jim Cardwell and Jim Meidl, among others, began to develop the initial planning for the first classes. According to records, the first course in the California Fire Academy system conducted on site was held in 1976.

The work that had been started at the Lake Arrowhead workshop was far from completed by the formation of the California Fire Academy system. According to Meidl, there were only the rudimentary documents to support the development of the concept. Numerous advisory committees were created under the aegis of the State Fire Marshal's Office and State Fire Training to fill in the blank spaces in this documentation. While a complete listing of these advisory committees is almost impossible to locate, it can be categorically stated that from 1973 to approximately 1978, almost all of the major fire service organizations in California had the opportunity to participate in the formation of either performance goals, career development guide, or course design of materials that were delivered at the California Fire Academy in Monterey (J. Meidl, personal communication, October, 1987).

The dynamics of the development of the Fire Academy were a lot more complex than the average firefighter was aware of at the time. Jim Meidl, after reviewing the task analysis and interpreting the implications of the Study of a Fireman's Occupation, came to the conclusion that it was absolutely essential that these tasks continue to be broken down into job-related or assignment-related functions. What this meant was that it was impossible for everyone to know everything about the job of being a firefighter, engineer, fire captain, battalion chief, and fire chief. Instead, this information had to be developed incrementally over a person's entire career.

The National Fire Protection Association, in the development of its professional standards, had decided that many of the officer ranks had five levels. This interpretation resulted in considerable difficulty interfacing the California system with the NFPA system for an extensive period of time.

Due to the speed of development of this concept, there were many courses of instruction that were held without adequate documentation. Among the first to be developed was the fire command series. These were followed soon by courses in the fire management area and fire prevention series. Among the most comprehensive courses taught at that time were the instructor training series, as they were already based upon a body of knowledge developed through the UCLA teacher training courses and were relatively intact.

The greatest problem the Fire Academy faced with the enactment of SB 1805 was inadequate funding. Practically from the first day of operation there were never adequate monies allocated for either the administration or implementation of the provisions of SB 1805. What followed over the next several years was a constant struggle between the three organizations involved in the Fire Academy system to keep it financially viable.

Apprenticeship as a Concept

The apprenticeship model discussed in Chapter 1 was revised in the 1970s. Essentially, it involves a master journey-level person passing on the skills and knowledge to a trainee (i.e., apprentice) until the competencies of an occupation are achieved. The International Association of Fire Chiefs and the International Association of Fire Fighters (AFL-CIO) in the 1970s developed the Fire Fighter Joint Apprenticeship program under a US Fire Administration grant. At that time, the Carl D. Perkins Act was the foundation for literally all of the vocational education funding. Since the passage of the Fitzgerald Act in 1935, formal Department of Labor approved joint apprenticeship programs have involved agreements between labor and management. When the fire service began to establish job standards, some segments of the field turned to the apprenticeship concept as a means for ensuring that these competencies would be achieved by fire service personnel. The IAFC/IAFF Joint Apprenticeship Program was relatively short-lived and dealt primarily with the Fire-Medic and EMT field. On a national basis, this program stuttered and came to a halt in the early 1980s, when grant funding was removed.

The International Society of Fire Service Instructors (ISFSI), in conference in Memphis, Tennessee in 1976, passed a resolution supporting the idea that all newly hired career firefighters be indentured into an apprenticeship program and that the Society endorsed the idea of us minimum standards for their training (ISFSI, 1976).

The era of the 1970s was one of rapidly expanding civil rights. As a result of many lawsuits filed against fire departments for their hiring practices, there were many fire departments severely impacted by court-ordered restraining orders. While many fire service leaders agreed that affirmative action was absolutely necessary in the fire service, it did create somewhat of a dilemma. In numerous cases, judges were making decisions regarding the training and selection of firefighters to meet these affirmative action needs without regard for the fire service's needs.

With the appointment of Governor Edmund G. Brown, Jr., the issue of affirmative action began to take even more of a direct and positive turn. Governor Brown, in a meeting with his newly appointed State Fire Marshal Phil Favro, told him to do what he could to expand the role of women in the California fire service. Dan Terry, President of the Federated Firefighters Association of California (later known as the California Professional Firefighters) met with Phil Favro and discussed this important issue. The unions had a track record of working collectively in the arena of vocational education in support of target group recruiting.

In the State of California, it was recognized by Donald Vial, the Director of Industrial Relations, that the fire service was a trade; however, it was not listed in the apprenticeship training. He recognized that the fire service as an occupational field was eligible to receive funds for apprenticeship training. At that time, there was a considerable amount of money available for apprenticeship training through the Vocational Education Act but no one in the fire service was accessing it. A decision that was made in the development of the JAC Program was that this Program would be managed under an agreement with the Superintendent of Public Instruction and not the community colleges.

It must be remembered that the California community colleges had been designated as the delivery arm of the California fire training and education system. By putting the Joint Apprenticeship Committee (JAC) system under the Superintendent of Public Instruction, it prevented them from being in competition with ADA funds for the California community colleges.

As a result of AB 64, the Montoya Bill, passed in 1981, there was a specialized reallocation and categorization directly resulting in the fire service being able to access these funds. Brian Hatch represented the union (CPF) with the State Legislature to develop a specialized loan program to fund the beginnings of a California Joint Apprenticeship Committee. The Bureau of Apprenticeships and Standards met with the IAFF over a period of time and made arrangements to develop an adequate funding base to establish the program. Rosco Hamby of the Federal Fire-fighters was originally given this assignment of pulling the organization together.

John Gerard, Los Angeles Fire Chief

The spirit of Ralph Scott, John Kenlon, and others was alive and well through the 1970s. Chief John Gerard wrote a letter to all members of the Los Angeles Fire Department emphasizing the need for formal education in the fire service. The January 26, 1978 letter was an important step in supporting the development of the system. By the late 1970s, the community college system had been almost abandoned by the in-service student and the upper division

courses were sadly under attended. Gerard's letter, which advised the department of his feelings, is made more significant when it noted "it may soon be necessary to have significant formal education to be competitive in the promotional examination process." (Appendix F contains copies of letters Chief Gerard sent to his personnel encouraging them to seek advanced education.)

The Use of Average Daily Attendance (ADA) Funding Mechanisms

The initial funding of the California Fire Academy came from two sources. The first was the Average Daily Attendance (ADA) funds generated by the classes conducted at Asilomar under the auspices of Monterey Peninsula College. The concept of ADA being utilized as a funding mechanism is directly related to the community college pro-grams, in that student contact hours were translatable into a given amount of funds.

Further, the students who attended the Academy paid a form of registration and tuition that was used to offset some of the operational costs. Primarily, these revenues were used to pay for clerical services and administration of the office, to pay some of the overhead costs of administering the registration and fees, and to assist with the reimbursement of the instructors' expenses.

Phil Favro, the State Fire Marshal, also contributed a significant amount of funds to the program in terms of "in kind services." This consideration was the use of the State Fire Training staff to teach classes for which there were no instructional costs and to provide staff to administer the Fire Academy programs. These funds never appeared as part of the annual budget of the California Fire Academy and were never properly credited to the Fire Marshal's Office as a contribution to the system.

The struggle to maintain financial viability of the program took its toll in several ways. It was extremely difficult to engage in long term planning for the program, for the cash flow was never there to provide for adequate research development to support that planning effort. In a short span of time, the tri-party agreement of the administration of the program reversed itself several times. Initially it was administered by the Fire Marshal's office, then it was transferred to the California Fire Chiefs' Association office, then it went back to the State Fire Marshal's Office. In each case, the attempt was being made by either the executive board of the California Fire Chiefs or by the Fire Marshal to preserve the dwindling financial resources to support the program.

Regionalization of the Academy Courses

The California Fire Academy had identified several tracks that had emerged from the Career Development Guide concept. There was a series for command, management, instructor training, and fire prevention. Each had several levels of courses. The entry level was Level I. In some cases the vertical structure went to Level III and in others to Level IV. Initially, the courses were heavily attended. In due time, however, the vertical structure did start to have a problem. If the student population for Level IV classes had to have attended the previous levels and prerequisite courses, the attendees at the Level IV course were directly linked to those that came

into Level I. Obviously, if there was only one Level I course taught per year, this limited the student population for the on-going system.

A precedent had already been set in the instructor training area. Despite the fact that Instructor IA and IB were being taught at Asilomar, they were also being taught in other areas. The same could not be said for the other tracks, especially the command series. Chief Ron Coleman, in a conversation with Jim Meidl, questioned whether or not a Fire Command I course could be taught off campus. The answer at that time was no. Coleman contacted Ray Russell State Fire Training Supervisor, and requested that Ed Bent be contacted for approval.

Bent agreed that there was a problem, but in conferring with Meidl felt that standards had to be conformed to in order to assure quality control. By this time, Meidl had developed an inventory of tasks from the Career Development Guide and the recently published NFPA Standard 1021. The proposal was made to create a cadre of instructors to teach the Fire Command I course. Bent organized a meeting of potential instructors in Marysville. Chief Coleman and Ray Russell prepared an outline for the course based on a combination of a notebook that had been produced by Operations Chief Frank Kelly of the Huntington Beach Fire Department and a list of the tasks provided by Meidl.

The two-day workshop was repeated in two other locations--San Clemente and Bakersfield. Out of these workshops came a new concept of conducting courses. The first concept was the student workbook approach. Coleman and Russell designed a "format" for the materials that consisted of student notes, student readings, and instructor guides. The Fire Command Regional Academy was offered as a thirty-six hour course of instruction. The local agency was given the option of teaching the course as a weeklong academy or as a community college course in hourly increments.

Meidl monitored the system to ensure the formats conformed to vocational education methodology. Student performance goals were written for the sessions. The notebooks were assembled in the Sacramento offices and distributed to the attendees. Each of the attendees was designated as a Regional Instructor and the Fire Command series was given to the various areas for implementation.

Several years later Meidl, in a letter to Chief Coleman, asked that the Fire Command I course be expanded to include some new tasks identified in the NFPA Standard 1021. Coleman replied by stating that the tasks were entirely too complicated to be included in the thirty-six hour curriculum. Coleman suggested that an entirely new course be developed, entitled Fire Command IB. This new thirty-six hour course was to focus on the responsibilities for the fire officer in handling hazardous materials incidents. Meidl agreed and the same system was put into effect for developing the course. Over the next several years several advisory committees were assembled to perform this task on the Management and Fire Prevention Level I courses.

Major contributions in this area were made by Fire Chief Ann Murphy Springer of the Bodega Bay Volunteer Fire Department, Fire Chief Martel Thompson, Orange Fire Department, and Fire Marshal Lynn Michaelis of the Fountain Valley Fire Department.

The Evolution of the Federal Fire Focus

President Lyndon Johnson had, in 1967, introduced S1124-HR 11284, otherwise referred to as the Fire Safety and Research Act of 1967. The Fire Safety Act of 1968 proposed funding of about one million dollars to study technology improvement, fire prevention, fire service training, and all other national fire related programs. Title II of this Act proposed the appointment of a national commission on fire prevention and control (Emmons, 1969). This funding level fell far short of expectations of many fire professionals. But, it was considered a start. While fire service education had gained a foothold in the academic world, the system was anything but comprehensive at that point. A national survey, conducted in 1968, found that there were only approximately one hundred community college fire science programs in existence in the United States. About half that number was located in California (Favreau, 1969).

Keith Klinger, the Fire Chief of Los Angeles County, was actively involved in national fire service issues at this time, including the development of contacts in Washington, DC. His presence had a great deal to do with the ultimate selection of a California city manager to head the embryonic federal fire focus.

America Burning

The Presidential Commission was formed after the passage of Public Law 90-259 (90 Congress, S. 1124, March, 1968). The report developed by the National Commission on Fire Prevention and Control, entitled America Burning (1973), has been recognized in the American fire service as another keystone to the evolution in fire training and education. In the first place, it documented the rapidly changing field of fire protection and gave public scrutiny to the major fire loss phenomena in the United States.

Howard Tipton: A California Influence

A key figure in the development of America Burning was a California City Manager, Howard Tipton. Tipton, who had served as the City Manager of Glendora, was very interested in public policy regarding the fire service. He had come to the attention of Chief Klinger for a variety of reasons. First, because he had written some position papers challenging the ISO Grading Schedule, and secondly, because he had been involved in a consolidation of fire services with Los Angeles County. He admits that his primary interest in both areas was prompted by concerns over life safety issues (H. Tipton, personal communication, July, 1987).

Keith Klinger, who had originally asked if he was interested in working on the project, called Tipton on the phone and asked if he would work on the development of a document that would emerge from the federal hearings on the national fire problem. Tipton, along with Tom Hughes, John Christian, Ed Budnick, and Gene Sober, then spent the next several years compiling the document that galvanized many of the issues in the fire service. With respect to this writing, his influences on the development of Chapter 6, "The Need for a National Fire Academy," are pertinent. For without Tipton's advocacy, there is a distinct possibility that the National Fire Academy would have been another stillborn dream of the fire service.

Tipton states that there were numerous opportunities for the concept of a federal fire focus to have been aborted. In his opinion, Senator Warren Magnuson was the pivotal person. The Senator, accompanied by an Alabama Democrat named Sparkman and a Republican Ted Stevens lead the advocacy roles. After America Burning had been published, there was a basic question to be answered: "What are we going to do, let the report just set here on the shelf" (H. Tipton, personal communication, July, 1987)?

Tipton, with the assistance of his staff, wrote Public Law 93-498. A considerable lobbying effort began right after its introduction. The labor unions were very supportive, but the NFPA only gave a qualified support to the measure. There were several compromises that had to be resolved or the Bill would have gone down into defeat. The Office of Budget and Management opposed the Act. There was considerable controversy over what position the potentially new federal fire administration should be placed under in the federal hierarchy. It was even stated that President Richard Nixon was prepared to veto the Bill. However, with the emergence of the "Watergate" controversy, he had little time to deal with Public Law 93-498.

In the aftermath of "Watergate," President Ford received the Bill. It was a case of perfect timing, at least from the fire service point of view. At that time the country was undergoing a catharsis, and the Presidency was at odds with the Congress. Tipton was convinced that President Ford signed it into law on October 29, 1974 as an act of conciliation to the entire country, not just the fire service. Regardless of the reason, the opportunity was created to form a National Fire Academy.

First Administrator of the National Fire Prevention and Control Administration (NFPCA)

Tipton was appointed as the first administrator for the National Fire Prevention and Control Administration (NFPCA). He recalls that he was most intrigued by the fact that the person who called to tell him of his successful appointment was Howard McClennan, the President of the International Association of Fire Fighters (IAFF). The reason that this was interesting to Tipton was the implications regarding future working relationships (H. Tipton, personal communication, July, 1987).

Almost immediately after a location had been chosen for the site of the National Fire Academy (NFA), a controversy ensued regarding what would be taught at the Academy. McClennan wanted a "manipulative skills academy." Tipton wanted an academic campus. Tipton characterizes the differences between himself and McClennan as, "He wanted the tailboard, and I wanted it for leadership" (Tipton, personal communication, July, 1987).

The same discussions that had been transpiring in California over technical training or educational bases were escalated to the national level. Tipton, schooled in the California methods, stood firm on the concept of an academic campus. He was supported by Secretary Elliott Richardson. President Ford lost the 1976 election to Jimmy Carter, a democrat.

Reorganization by President Carter

President Carter, upon his election, instituted what was referred to as "reorganization plan number three." This particular plan is what resulted in the creation of the Federal Emergency Management Agency, later referred to as FEMA. During the election process, Carter made a number of commitments to the Public Affairs Committee of the Joint Council guaranteeing the continued support and integrity of the NFA during the creation of the new agency (FEMA). The majority of the members of the Joint Council felt that these commitments would be honored. Gordon Vickery, retired Fire Chief of Seattle, Washington, was the first acting Director of FEMA and the first Administrator of the US Fire Administration.

The ill feelings that remained in the Congress over the organizational placement of the US Fire Administration and the controversy over the campus came to a head during Carter's administration. A compromise was developed that resulted in a reorganization of the fire programs, the selling of the Marjorie Webster College campus in Washington, DC, and the purchase of the former St. Joseph's College facility located at Emmitsburg, Maryland.

Tipton eventually left the NFPCA to become the City Manager of Daytona Beach, Florida. His legacy to the fire service is the formation of the system that created the National Fire Academy. In his words, "The thing I am the most proud of, that I take the greatest pleasure from, is the fact that I got that legislation through Congress" (H. Tipton, personal communication, July, 1987).

Over the next decade the National Fire Academy went through a series of changes that were beyond the scope of this project. However, it is interesting to note that in the continuing evolution of the national focus on fire training that fire officers from California have been continuous contributors to the program.

Californians at the National Fire Academy

The impact on the California fire training system by the presence of the National Fire Academy is complicated. Thousands of fire officers from the State of California have participated in NFA programs. Many of the programs taught at the NFA are borrowed quite liberally from the California training system. There has been a synergy developed between the State of California and the national focus on fire training. Course developers from California's system have brought about significant changes in fire training for the entire country because of this involvement. On the other hand, participants in the NFA program from other states have made significant contributions to the development of California's state and local programs. The systems that have formed as a result of the federal fire focus have created a nationwide network that provides fire services personnel with an almost unlimited resource.

America Burning, the document that formed the foundation for the federal fire focus and the creation of the National Fire Prevention and Control Administration (later to be renamed the US Fire Administration--USFA), including the National Fire Academy, had many of its roots in California. In spite of the fact that the document was produced by a federal administration located in Washington, DC, the role of Californians in creating America Burning, and especially

in the creation of the philosophy and direction of the National Fire Academy, was shaped by those who had emerged from the California fire training and education system.

Over the last twenty years, there have been inextricable relationships between the California fire training system and the National Fire Academy that could best be characterized as symbiotic. As the California system has emerged, it has created philosophical and educational methodologies that have impacted the National Fire Academy. Conversely, as the National Fire Academy has developed, it has created programmatic elements that have looped back to have an impact on the California delivery system.

President Richard M. Nixon, a Californian by birth, was the one who was responsible for the appointment of those people who wrote America Burning (National Commission on Fire Prevention and Control, 1973). There were twenty-four individuals on the Commission including California State Fire Marshal Albert E. Hole, Congressman Jerry L. Pettis, and Fire Chief Keith E. Klinger of the Los Angeles County Fire Department. Klinger was one of the driving impulses behind the creation of the administration. Klinger's influence was directly related to the selection of Howard D. Tipton to head the team that wrote America Burning. It was no surprise to most fire service leaders in California that America Burning had a chapter that dealt with training and education.

This was not merely an idea that had just been created overnight. For example, Dr. Leonard Marks, who had been teaching at the National Fire Service Staff and Command School, and who was a former Deputy Chief at the San Jose Fire Department (also one of the early advocates of the Professional Qualifications System), had created a curriculum that was vastly different from what was being taught at the community college levels.

There were other players in the game at that point, including participants in the 1966 Wingspread Conference who called for more federal involvement in the training and education of firefighters (Wingspread, 1966). The IAFF, which had been a member of the Joint Council, was adamant at that point about the creation of a National Fire Academy. Interestingly enough, at that time, the Joint Council was primarily staffed by the leaders of the various organizations instead of staff personnel. From the 1960s until the mid-1970s, there was much emphasis on the organizational philosophies with regard to the National Fire Academy.

Hearings before the Commission consisted of a considerable amount of debate over what would not happen at the Fire Academy. According to Wayne Powell, who has been a participant from the days of origin on the National Fire Academy, there was constant conflict over whether the Academy would be patterned after the FBI Academy or whether it would consist of hands-on training (W. Powell, personal communication, July, 1990). The majority of the fire service were interested in creating a system that would not supplant state fire training programs and, therefore, the direction was to move away from the hands-on training. Further, America Burning clearly indicated that officer training and "other allied professions" needed to be involved in the Fire Academy curriculum.

First Superintendent, National Fire Academy

The first Acting Superintendent of the National Fire Academy is a name that very few people remember: Herman Weisman. Weisman, on loan from the National Bureau of Standards, was assigned to this position on an interim basis while the selection process occurred to appoint the first full-time superintendent. David M. McCormack of New York City, supported by the International Association of Firefighters (AFL-CIO), was appointed as Superintendent on August 1, 1975.

Among the very first members of the California contingent to be involved in the Fire Academy was Richard B. DeLong, the City Manager of San Mateo. Richard DeLong had been heavily involved in the training programs of the California Fire Chiefs' Association and in the creation of the California Fire Academy. He brought to the discussions of the NFA Board of Visitors a strong focus on the use of the Fire Academy for the purposes of officer development.

The creation of the Academy was not without considerable controversy. Dr. Betsy Ancker-Johnson, an Assistant Secretary in the US Department of Commerce (the original home of the NFPCA/NFA), was heavily involved in the creation of the Academy. Its first physical location was at 2400 M Street, NW, Washington, DC at the former Marjorie Webster College campus. There was considerable pressure by some professional fire service organizations to make sure that the Academy be located within the Washington "beltway." However, political reality was that there were many sites that needed to be looked at and evaluated for the National Fire Academy. There were 269 sites ultimately proposed. Over sixty of them were actually visited.

Site Selection for the National Fire Academy

A site selection committee consisting of Fire Chief John L. Swindle, Birmingham, Alabama; NFA Superintendent David McCormack; and Texas A & M University Chief of Fire Service Training, Henry Smith, made a formal recommendation that indicated their first choice was the former Marjorie Webster College campus. Their second choice was the former St. Joseph's College in rural Emmitsburg, Maryland, approximately ten miles from Gettysburg, Pennsylvania. Because of the emphasis on keeping the Academy within the "beltway," the Marjorie Webster site was purchased. (The term "beltway" refers to Interstate 495, a freeway that passes through Virginia and Maryland in Washington, DC metropolitan area.)

According to Wayne Powell, it was estimated that there was approximately \$2.5 million expended on the acquisition of the Marjorie Webster site. This was the subject of much debate as some individuals did not feel that the facility was appropriate for the type of courses and the logistical demands could not be met there. Eventually, the detractors of the Marjorie Webster campus won the debate and a change of direction occurred. Gallaudet College from the Washington, DC area eventually bought the Marjorie Webster campus from the US Government for only \$1.00.

In 1979, for what could easily be referred to as a bargain price, the United States Government then purchased the Emmitsburg facility in March of 1979 for \$2.5 million. The Daughters of Charity (an order of Roman Catholic nuns), owners of the St. Joseph's College, had expended some \$2.5 million in 1965 for the construction of what is now called the "J" building. Emmitsburg was a highly desirable site. As a matter of fact, the Job Corp had been lobbying to acquire the same site for their administrative and training facilities. The Fire Service soon lost sight of the fact that the Emmitsburg campus was not the first choice.

At that time, the National Fire Academy was still a part of the National Fire Prevention and Control Administration. It appeared to be well on its way toward fulfilling the recommendations cited in America Burning and its assigned purpose in the enabling legislation, Public Law 93-498.

President Reagan and His Impact

With the defeat of President Carter in 1980, President Ronald Reagan assumed office. As a former Californian, one would anticipate that he would have had a basic philosophy that would be knowledgeable about fire service issues that had historical precedence in California. In actuality, it was quite the reverse. When President Reagan served as Governor of California, he showed very little, if any, support for fire issues. Reagan immediately reversed many of the commitments that had been made by the Carter Administration regarding fire service visibility within FEMA.

The influx of Reagan and California philosophy at the major policy level was actually regarded by many fire service leaders as very negative for the National Fire Academy. The Office of Management and Budget (OMB) had a very low-key approach on the issue of fire. During the discussions, Wayne Powell recalls that the individuals who were attempting to protect the interests of the Fire Academy were told rather bluntly that there was no such thing in the United States as a fire service; there were only fire services (the emphasis was on plural).

More importantly, during the mid-1980s, the Reagan Administration took the position that fire in America was not really a federal problem. There were repeated attempts during the Reagan years to "zero-fund" the USFA. One Californian, William (Bill) Patterson, former Fire Chief of Santa Barbara County, and Federal Region IX Administrator of the US Fire Administration, fought the proposals. This was especially risky considering the consequences of potential termination. Patterson became a highly visible opponent of the Administration's direction.

President Reagan Appoints Giuffrida

The Reagan influence was felt most greatly, however, by the appointment of California National Guard's General Louis O. Giuffrida as the Director of FEMA. Giuffrida then appointed Fred J. Villella to head up the training activities at FEMA. Villella was given the title of FEMA Associate Director for the Training and Fire Programs Directorate. Many had anticipated that the incorporation of Giuffrida's philosophy into FEMA would have a positive impact on the fire

service. He and Vilella had been with the California Specialized Training Institute (CSTI) in San Luis Obispo.

Giuffrida and the Reagan Administration took the National Fire Academy out of the United States Fire Administration. With this one single action, many links were broken that would prove to be negative to the development of fire training and education and detrimental to the development of the National Fire Academy as the center-piece of professional fire office development, and would involved a large number of Californians. When the system was originally created, the various arms of the federal fire focus, including the Center for Fire Research at the National Bureau of Standards, the US Consumer Product Safety Commission, the US Fire Administration, and the National Fire Academy, plans were all tied together.

A quick review of the goals and objectives adopted in 1976 indicated a definite relationship between the instructional objectives being taught at the Academy and the activities occurring elsewhere in the federal fire focus. The window into the Administration in the 1970s was through the National Fire Academy. At that time, the NFA was considered to be the delivery arm of USFA initiatives.

With the move of the National Fire Academy from under the US Fire Administration, a series of controversies started that has reverberated throughout the training system ever since. David McCormack, who had become the Fire Superintendent in August of 1975, left the Academy in February of 1980. Since the beginning of the records of Superintendent tenure in October of 1974, the NFA has had an Acting Superintendent more often than it has had an actual Superintendent. The list of individuals who have served as superintendents of the Fire Academy are listed in Appendix E.

B. J. Thompson. Fire Academy Superintendent

It was time, however, for another Californian to come on the scene. In January of 1980, Giuffrida selected Fire Chief B. J. Thompson to serve as the Superintendent of the National Fire Academy. According to Wayne Powell (personal communication, July, 1990), most of the staff members at the time were shocked and surprised at the selection of B. J. Thompson because of his previous lack of visibility in a national fire service context. However, as stated elsewhere in this document, Thompson had been active in the training and education system in California.

As Chair of the Metropolitan Area Advisory Committee (the MAC), Thompson had been intimately involved in the development of the California State University, Los Angeles program. Powell, in his personal communication (July, 1990), believed that Thompson, who had served as Fire Chief and City Manager for the City of Santa Ana, became a highly stabilizing influence on the development of the National Fire Academy. His bringing of educational theory into the Fire Academy at the national level was directly responsible for the creation of the first educational plan. This educational plan replaced the previously tiered plans, which had tied together with the Center for Fire Research, the US Fire Administration, the Consumer Product Safety Commission, and the National Fire Academy.

Powell, who had become a member of the National Fire Academy staff on January 3, 1977, is considered to be among the "second wave" of NFA staff personnel. The first wave was considered to be those serving through the 1974-75 start-up period. Most of them did not stay for long periods of time. His tenure to date has resulted in his serving as an unofficial historian for the NFA.

Powell recalls that there was considerable debate over whether the National Fire Academy should be modeled more after the United Kingdom system based in Moreton-in-Marsh. While the intent of the National Fire Academy is clearly stated in public law, one of its important benefits was to place in context the state fire training programs of the 1960s and 1970s, which began to compete with what was being done at the national level.

B. J. Thompson's primary impact on the Academy was to get educational plans established and, at the same time, get the National Fire Academy accredited by the American Council on Education (ACE). He later went on to become head of the US Fire Administration. Due to the anguishing and very difficult budget battles in those times, the Fire Academy, once again, was provided direction through an acting superintendent.

Donovan Becomes Fire Academy Superintendent

At this time, a search went out again for a National Fire Academy Superintendent. General Giuffrida and Fred Villella interviewed several individuals for that position. Fire Chief Ron Coleman from San Clemente, California was asked to come to Washington, DC for an interview with the General and members of the FEMA staff. The other candidate was Joseph Donovan who had been the head of the Massachusetts State Fire Fighting Academy.

Donovan was selected Superintendent of the Academy and the Fire Academy went into a series of years in which controversy was more predominant on the campus than achieving educational objectives. During this same era, there was much conflict between the state fire training directors and the National Fire Academy. Donovan left the Academy in the midst of some of the controversial discussions and another Californian emerged as a player in the National Fire Academy.

Neville Becomes Fire Academy Superintendent

William M. Neville became Superintendent of the National Fire Academy in November, 1986. Chief Neville had been Chief of the Hayward Fire Department and had served formerly as an Assistant Chief with the Los Angeles City Fire Department. In addition, he had been actively involved in the National Fire Prevention and Control Administration's master planning efforts and was already knowledgeable of the federal bureaucracy. According to Powell, there was considerable involvement during the Donovan and the Neville years with California. However, he was quick to point out that California was always a "difficult system to figure out" (W. Powell, personal communication, July, 1990).

From 1977 through the 1980s there was a considerable amount of change in California itself. By the latter part of 1988, the National Fire Academy was experiencing budgetary

impacts. By that time, the basic philosophy driving the Fire Academy had more to do with bureaucracy than educational methodology. According to Powell, "There are more people here to make sure that you do things the right way than there are here to do the job. You simply have to know how to be able to live by the rules."

Ed Bent, Superintendent of the Fire Training in California, had been heavily involved in the process of providing input to the National Fire Academy; however, as is mentioned in other chapters in this report, the same era was the time in which California's own training program was moved from the Department of Education to the State Fire Marshal's Office, and the budget battles at home did have an effect on the federal system being able to interface effectively with California.

Clyde Bragdon Becomes Administrator

Another Californian emerged as part of the process. Clyde Bragdon, who had been a successful leader in the Los Angeles County Fire Department, was selected as the new head of the US Fire Administration to replace B. J. Thompson. According to Powell, at this point the National Fire Academy and the US Fire Administration were strongly impacted by the personal philosophies of "whoever the leader was." Powell further recalled that, "We certainly remember the philosophy of support that came from California. It was always encouraging and, of course, we in turn were encouraging to them for the development of their own state plans" (W. Powell, personal communication, July, 1990).

What most people fail to recall about this transition was that when B. J. Thompson had been appointed by President Reagan as the US Fire Administrator, he was given the mission to downscale and eliminate the US Fire Administration. According to staff members, there was a problem with a "lost connection" between the role players at the National Fire Academy and the remainder of the fire services.

However, Californians were participating in the National Fire Academy at that point at a wide variety of levels. This author, for example, was a participant in the curriculum development projects for the Executive Development Series and the Financial Management Series. Adjunct faculty, such as Battalion Chiefs Jim Hunt and Frank Kelly from Huntington Beach, California and Fire Chief Bob Madden were brought on board from California. Madden was one of the individuals instrumental in the development of the NFA curriculum for the hazardous materials courses.

According to administrative records, approximately 10% of the on-campus students at the National Fire Academy have consistently come from the State of California. However, the number of individuals who were teaching at the Fire Academy was far in excess of 10% of the curriculum. A listing of the individuals included such leaders as: George Tockstein, active in the fire training system in California; Dick Minor; Mike Mitchell, Bob Burns; and Bill Blair.

As a result, the National Fire Academy, by the late 1980s and early 1990s, can best be reviewed as being somewhat fragmented in California, and at the same time an influential aspect of fire training at the national level. Given that much of its time and resources were having to be

devoted to keeping the day-to-day system operational, little time was left to plan or create a vision of the future for fire service training and education issues. The National Fire Academy had no way of actually equating what ought to be done in an educational arena with respect to priorities. On the other hand, the number of individuals who have participated in the courses of instruction and those who have served as adjunct faculty have been bringing the material back to the state level and incorporating it in the California State Fire Academy and in the remainder of the California delivery system.

Powell and others at the Fire Academy have stated: We simply do not understand how Californians think. Your acceptance of multiple agency operations, your handling of massive incidents, your radio systems, your networking, and your philosophy of cooperative activities have been foreign to the remainder of the fire service. (W. Powell, personal communication, July 1990)

On the other hand, a quick review of the activities and events over that same era in other parts of the country clearly indicate there was a tremendous growth in the use of incident command systems (ICS) that emerged from the California fire experience. California's emphasis on using multiple agencies created an increased ability of the fire service to deal with widespread emergencies. As a result of these developments, Californians were participants in major networking systems including the organization of the executive fire officer development program.

One would not be hard pressed to be able to prove that the Fire Academy has affected California or that California has affected the Fire Academy. Both systems changed. A review of those individuals who have served in the Fire Academy, either as adjunct faculty or as the students, would seem to point out the fact that the majority of them have been promoted one, two, and even three times over that period of time, and the majority of these Californians are exercising some form of leadership in California.

The California State Fire Academy and its various State fire training programs has many of these same individuals serving as both instructors and curriculum development leaders. The relationship between California and the federal fire focus remains to this day. It is likely that with the reorganization of putting the National Fire Academy back under the US Fire Administration (effective January 15, 1991), it may once again see the restoration of educational methodology being the driving force behind the delivery system at the Fire Academy. Initial indications regarding the reunification of the NFA and the USFA have been generally regarded by fire service leaders as encouraging. A new perspective from FEMA seems to reflect a better understanding of the critical role that fire services play in emergency situations. The change may be, in part, as a result of the Loma Prieta Earthquake. Many fire service leaders believe Californians are likely to become an integral part of that process.

Over the years that have passed since the adoption of America Burning, the federal fire focus has been impacted by the fact that two of the four permanent NFA superintendents and two of the five USFA administrators have been from California.

Revisions to the Master Plan

Over the period of 1971 to 1977, the Master Plan was discussed many times. Mission Research, a consulting firm, revised the Plan in 1977. This effort expanded the Plan into the area of educating the general public. The elusive comprehensive system for training still had not materialized. And, one of the reasons was the lack of funds. Over the next ten years, the problems created by trying to develop and utilize funds were to be a serious problem to overcome.

Chapter Summary

The creation of a Master Plan and the identification of specific instructional methodologies provided some fundamental building blocks for creating a system of training and education. Economic factors became a strong influence over the various ways that these methods and plans were to be implemented. In addition, the rise of the national forces in fire issues diverted a percentage of the leadership and resources away from the specific California-based training and education efforts. The promise of a well-developed body of knowledge was diluted by the presence of influences and forces that diverted attention from competency to whatever entity was to pay for the system.

CHAPTER 4

ALLIES, ADVERSARIES AND ECONOMICS

In the 1980s and 1990s, the fire service accepted the concept that certification was desirable for position training. Many fire departments adopted the system for both hiring and promoting personnel. The more individuals there were to access the system, the more demands to deliver. And, almost all of the demands to deliver cost money to implement. This created a demand for either an adequate funding source or a need to reevaluate the delivery system.

Senate Bill 456

In an attempt to resolve the funding issue, the California fire service once again marshaled behind the development of State legislation. Senator Bill Campbell was requested to author another bill that would result in adequate appropriation to operate the California Fire Academy system. This Bill, AB 456, was introduced once again as Governor Brown was in his second term. While the political climate at that time was not supporting of the expansion of State services, SB 456 proposed an annual budget to operate the Academy at \$456,000. Governor Brown signed the Bill; however, he reduced the funding of the program to \$80,000 and established a sunset clause on the Bill, which terminated the program in less than five years.

The signing of the Bill was considered a victory, but the reduction of funding resources to provide the implementation had a chilling effect. The administration of the Fire Academy under Favro's auspices was surviving, but essentially the certification system to parallel that program was nonexistent.

Ed Bent Retires

Ed Bent, who had supervised the State training program for over eighteen years, retired on April 29, 1983. Because Bent had served as mentor for thousands of fire officers, they named a special award after him. This award, given each year at the training officer's conference, is granted to the training officer who best exemplifies the spirit that Ed Bent placed into the State fire training program.

Richard Wharton Appointed

Richard C. Wharton replaced Ed Bent upon his retirement. Wharton, who had previously been the Fire Chief of the City of Willows and a former member of California Fire Chiefs' Association Board of Directors, was then facing the dilemma of how to get the certification system off the ground. It had been determined that certification, while authorized by the legislation, was not mandatory and, therefore, there were no funds to implement the concept except what the individual firefighters or departments would pay in fees. Phil Favro, California State Fire Marshal, was interested in supporting the system, but was in a quandary as to how to implement it.

Favro, Wharton, and their staffs explored several options as a result of Governor Brown's reductions. It was noted in Governor Brown's budget message that his rationale for reducing the revenues for the program was that "local government and the private sector can do this job more cheaply" (Brown, 1977, p. 1). Phil Favro requested a series of options to be explored. The California Fire Chiefs' Association, still actively involved in trying to implement the program, was suffering financial difficulties of their own and was unable to provide financial support. The answer lay in getting the State government to accept the responsibility of the implementation of a program with statewide significance. The problem was that the State government did not recognize this responsibility and made a major policy statement by refusing to fund the program.

The California Fire Chiefs' Association, which had been part of the original consortium to implement the California Fire Academy, perceived that the Academy was a financial drain upon their resources also.

The administration of the Fire Academy at Asilomar suffered frequent directional changes during that time. Ced Rowntree retired and a series of individuals served to supervise the Academy.

California Fire Service Training and Education System (CFSTES) Incorporated

Chief Ron Coleman, in a phone conversation with Wharton in approximately May, 1982, discussed an idea to form a private, nonprofit corporation to help manage the financial aspects of the system. Governor Brown's veto of SB 456 was on the basis that the private sector and the community colleges should be involved in the solution to the funding issue. The private, nonprofit corporation concept was based on using that same premise. It was known in advance that the California Fire Chiefs' Association (CFCA) would not be pleased with the proposal. They had experienced many difficulties in keeping the funding alive at the Fire Academy. Differences of opinion on how to handle the Fire Academy funds had already resulted in the CFCA withdrawing from the three-party agreement at Asilomar.

Nonetheless, Wharton and Coleman felt that this action was essential to get the certification system started. There were several key issues. In the first place, there needed to be a place to receive and deposit funds from those who wished to participate in the certification process. Secondly, there needed to be a means of acquiring capital equipment to implement the record-keeping system and to provide staff services. Neither the State Fire Marshal's Office nor the California Fire Chiefs' Association was in a position to accomplish either with their resources.

Jim Meidl was contacted for his input and he concurred with Wharton and Coleman. In a meeting held in Sacramento, the decision was made to create a private corporation. Attending that meeting were Wharton, Coleman, and Ed Seits.

The incorporation was accomplished quickly. The organization, named the California Fire Service Training and Education System (CFSTES) was incorporated under California law on June 17, 1982. An agreement was made with the State Fire Marshal to rent facilities at his office. The certification system was born.

The charter encompassed some simple premises (Articles of Incorporation). The new organization was incorporated utilizing the signatures of Richard Wharton, James Meidl, Edward Seits, and Ron Coleman. The nonprofit corporation was prohibited from paying any salaries or funds to any of the original incorporators. Further, it existed solely for the purpose of delivering the certification under the umbrella of the California Fire Marshal's Office. Phil Favro, recognizing that Governor Brown's tenure as Governor was soon to be brought to a close, took a political gamble. Favro's support of the training program to that point had caused considerable strain on his own operation in the Fire Marshal's Office. The decision to support the implementation of certification through a private, nonprofit corporation was a courageous act that has gone unnoticed by many.

There were some serious consequences from this decision. The California Fire Chief's Association, because they had withdrawn from the tri-party agreement at that time, were not privy to the decision of the State Fire Marshal's Office. Further, continued controversy over the administration of the Fire Academy had resulted in conflict and friction between the Board of Directors of the California Fire Chiefs' Association and the State Fire Marshal's Office staff.

From the outset, however, the certification system received instant support from the users in the field. In the first year of doing business, CFSTES received enrollment checks from approximately ten thousand members of the fire service. This infusion in funds caused considerable concern on the part of the California Fire Chiefs' Association. Unfortunately, there was no opportunity to explain to their Board the rationale for this decision.

Operations were started in the Fire Marshal's office by leasing office space and by advertising the existence of the Firefighter I program. By providing a mechanism to receive funds, many of the problems associated with implementing the certification system moved forward rapidly. Capitalization occurred for the acquisition of computer hardware, addressing equipment, and the mechanical aspects of operating the certification.

This decision was not without controversy. Several members of the State Fire Marshal's staff were disturbed by the possibility that a private, nonprofit corporation would be able to implement such a program without direction from either a government agency or a professional organization. Ignoring the fact that Governor Brown removed the funding mechanism for certification and that the professional organization had not been in a financial position to create start-up funds, various individuals focused attention upon the fact that there was possibility of fraud or misappropriation of funds through this type of system.

The original intent of creating the nonprofit corporation was to follow through on Governor Brown's "advice" to the fire service. It was anticipated from the very beginning that this would be found undesirable at some point. However, the secondary intent was also to get the State government to accept that responsibility. That opportunity soon arose. Governor Deukmejian was elected to replace Governor Brown and, soon after, he began the process of replacing Phil Favro.

Ron Bogardus Becomes the State Fire Marshal

Ron Bogardus became the Fire Marshal and because of the problems with the California Fire Training and Education System and the political implications with the California Fire Chiefs' Association, literally nothing occurred for approximately eighteen months. In the transition period there were several organizations that raised the question of the propriety of a nonprofit corporation working in cooperation with the Governor's Office. A series of newspaper articles were published in the Sacramento Bee questioning this practice (Lewis, 1983).

The Board of Directors of the California Fire Chiefs' Association immediately requested a meeting with Bogardus to recommend that action be taken to limit the nonprofit corporation. This was a legitimate concern on their part due to the large sums of money that were entering the certification system. The CFCA Board of Directors were not aware that they and the CFSTES Board of Directors had the same primary motive--force the State government system to accept the mechanism of CFSTES for implementation of voluntary certification so the dedicated funds would not go into the "General Fund" of the State treasury.

By this time, the private, nonprofit corporation had accumulated in excess of one quarter million dollars in resources, which were being used almost exclusively for delivery of services to students. The cost-effectiveness of this system was quite high because it was not required to pay the General Services Administration overhead costs, which had grown to equal almost 33-1/3% of any funds administered under State jurisdiction.

A request was made by Fire Marshal Bogardus to the CFSTES Board to dissolve as a corporation. The Board of Directors placed a criteria on State government that they would not return the Articles of Incorporation until a financial audit had been completed to establish that all funds were properly accounted for and that they had been utilized for the purposes for which they had been collected (California Fire Service Training and Education System, 1982).

AB 223 (Vasconcellos)

The State auditor reported to the Governor's office that there were no improprieties in the system. A spot Bill, AB 223 (Vasconcellos) was drafted by the California Legislature requiring that the CFSTES nonprofit corporation be turned back over to the State Fire Marshal's Office, including all assets that had accumulated. Essentially, this is what the fire service had requested Governor Brown to do two years previously. Governor Brown's veto had clearly stated that he thought the private sector could do it better.

Dan Allen, the General Manager of the CFCA, recommended that the CFCA support the concept of combining the CFSTES system with the JAC. In a memorandum to the Board of Directors of the California Fire Chiefs' Association, he suggested that the joint venture should be a tri-party relationship of the State Fire Marshal's Office, the CFCA, and the Federated JAC program (D. Allen, personal communication, April, 1983). The proposal was not adopted by the CFCA Board. The arrangement was not found to be politically desirable.

Governor Deukmejian's administration essentially was supporting the concept that it was a function of State government to provide the service. The Board of Directors of CFSTES was more than pleased to return the financial resources to the State. A statement of dissolution of the corporation was developed and CFSTES became a part of the State Fire Marshal's Office on a permanent basis effective September, 1983.

The legislation formulated to authorize the Fire Marshal to conduct such an activity, AB 223 (Vasconcellos), accomplished several goals. It accepted the assets of the private foundation back into the State government and it created the authority to enter into the labor-management relationship to create the JAC program.

AB 2818 (Johnston)

AB 2818 (Johnston), which was labeled the Arson Funding Bill, did two things. First, it severed the relationship between the California Fire Chiefs' Association and the California Fire Academy. This legislation automatically placed the entire California Fire Academy system directly under the jurisdiction of the State Fire Marshal's Office. And, second, it established the California Fire Arson Training Fund (CFAT).

The California Fire Chiefs' Association, upon learning of the legislation, requested that a special task force be established to effect a liaison between the Fire Marshal's Office and the fire service associations. This committee was labeled State Training and Education Advisory Committee (STEAC). A letter of intent between the California Fire Chiefs' Association and the State Fire Marshal's Office was signed by the California Fire Chiefs' Association members and forwarded. Unfortunately, this document was never signed by the Fire Marshal's Office and the actual mission and/or function of this committee was never fully consummated.

For approximately one year after the return of the CFSTES to State control, the delivery system continued to expand. At the end of 1984, the California Fire Service Training and Education System had registered approximately twenty-two thousand individuals in one or more of the certification tracts that were available. Dick Wharton, still serving as a Division Chief of the Education Services Division, identified the fact that the program was experiencing financial difficulties again due to the General Services Administration taking 33% of every dollar being collected.

Concurrent with that problem, the Advisory Committees that had been created back in the beginning of the program were having difficulty in continuing to work on the development programs. Systematically, the documentation that was developed to support the various levels of classes being taught at Asilomar was expanding, but it was costly.

One of the most significant events occurring during this transition period was the concept of developing multiple campuses to support the CFA system. During Ron Bogardus' tenure as Fire Marshal, the CFA system was expanded to include classrooms at Sacramento, San Leandro, and West Covina. These classrooms were incomplete prior to Bogardus' resignation as Fire Marshal, but the concept got its origin during this era.

Bogardus Retires: McMullen Appointed

In 1985, Bogardus tendered his resignation as Fire Marshal and was replaced by Chief James McMullen from the Campbell Fire Department. Chief McMullen, long regarded as a strong supporter of fire prevention programs, came out strongly in support of training and education.

The State Board of Fire Services, which essentially had become inactive since 1982, was reactivated under Chief McMullen's direction. The State Training Education Advisory Committee (STEAC), which essentially had not met to deal with the issues of the CFA, was reconstituted. Fire Chief Richard Bosted, President of the California Fire Chiefs' Association, contacted McMullen's office and requested that the Committee move forward with the issues facing the training and education delivery system. McMullen, after researching the legalities of the STEAC Committee, discovered that the Committee could be legally constituted under the provisions established under the California Government Code.

A review of the historical development of the STEAC Committee indicated that its primary function was to provide input regarding the California Fire Academy. Inasmuch as the California Fire Academy was clearly under the direction of the State Fire Marshal, McMullen took the point of view that STEAC was a needed function and took appropriate measures to have it constituted as a sub-committee of the State Board of Fire Services.

This decision was most important to the long-term relationship between the State Fire Marshal and the California Fire Chiefs' Association. If STEAC would have been disallowed, there is a distinct possibility that there would have been renewed conflict between the organizations. Fire Marshal McMullen's actions to restore the Committee defused much of the pending hostility. The Committee was empanelled and charged with the responsibility to review input on training and education prior to its going to the entire State Board of Fire Services.

Initially, Fire Chief Ron Coleman was assigned by Chief Bosted to chair the State Committee as a representative of the California Fire Chiefs' Association. McMullen's discovery that the Committee was illegally constituted resulted in a reorganization of the Committee under his direction. Dave Walizer was appointed to the staff the chair of the Committee, and Chief Ron Coleman was named as co-chair.

Among the very first projects attacked by the STEAC Committee was the issue of documenting minimum qualifications for all ranks in the certification system. While the program had gotten off the ground using the Career Development Guide (CDG) concept, the packages to support the CDG were far from complete. A matrix was developed by members of the State Fire Training staff that outlined the various requirements to make a valid document.

These not only included task inventory, the performance goals, the Career Development Guide, but also the lesson plans to support the delivery of that material. While numerous fire departments had been delivering Firefighter I training programs, there were no statewide lesson plans to support this document, and it was decided that this was among the first priorities to structure the program.

Curriculum Development Workshops

A concept was proposed at a State committee meeting conducted in Sacramento that, instead of asking the State Fire Training staff to produce this voluminous document, that the Training Officers' Association work in cooperation with the Fire Marshal's Office. The motion was made by Bill Patchell, representing the Training and Education Committee of the California Fire Chiefs' Association, to develop a workshop atmosphere to complete that information packet. The motion was passed unanimously. The result of that was the "Redding Workshop." The Redding Workshop was the first attempt to provide structure to the program since the closure of the three Lake Arrowhead workshops in 1975.

A group of training officers representing both the Northern and Southern California Training Officers' Sections went to the United States Forestry Service facility located in Redding. There, utilizing the Career Development Guide, an incident command system model was developed designed to produce the lesson plans to support the CDG. In less than thirty-six hours, the training officers present at the workshop generated eighteen hundred pages of lesson plans.

The volume of information contained in this project paled in comparison to the cooperative aspects of its own development. While the fire service had experienced similar projects in the days of the Training Officers' Workshop conducted in Fresno in the mid-1960s, the Firefighter I Lesson Plan Project was, by far, the most ambitious and comprehensive.

Since then, there has been an additional workshop conducted in San Luis Obispo for the development of a driver training curriculum and another one planned for the completion of Firefighter II curriculum. All of the time and labor for the completion of these projects has been donated by the agencies sending their personnel to the sessions.

Wharton Leaves the System

The later part of 1985, Roscoe Hamby left the JAC program and Brian Hatch of the California Professional Firefighters suggested to Dan Terry, the President of the Association, that Mr. Richard Wharton might be a logical person to make the Joint Apprenticeship Committee actually work. Dick Wharton, in January of 1985, resigned from the California State Fire Marshal's Office to work for the Joint Apprenticeship Committee in the role of General Manager. He was replaced by Ken Wagner, a Deputy Chief within the Fire Marshal's Office. Prior to his departure, Wharton was granted a ninety-day leave of absence as a result of a verbal agreement between Dan Terry, President of the CPF, and State Fire Marshal Jim McMullen to find ways of expanding the JAC Program and to improve the over-all instruction at the same time.

Expansion of the JAC Program

Once Richard Wharton had joined the JAC staff, there was a concentrated effort to examine closely the allocation of funds available through Regional Occupational Programs (ROPs), as well as other apprenticeship training funds. As a direct result of locating these funds,

the JAC Program was able to provide funding reimbursement to larger numbers of fire departments. The Joint Apprenticeship Program was specifically aimed at targeted groups and had developed programs in conjunction with three large fire service agencies, including the Contra Costa County Fire Department, the Berkeley Fire Department, and the California Department of Forestry in Sacramento.

There were basically two programs developed. The first of these was funded by the ROP programs; the second was a full apprenticeship program. Both of these agreements required that a local entity sign an agreement with their labor organization and establish a subject committee for purposes of evaluating the training program, the hiring goals, and the manner and method in which funds were utilized.

The California State Fire Marshal's Office in 1981 had already agreed that its stated goals of the program were (a) to help to increase women and minority representation in the fire service, and (b) to specify valid job-related selection criteria and uniform standards of training and performance. Chief McMullen expanded upon these goals.

McMullen was authorized to enter into this agreement as a result of Assembly Bill 223 (Vasconcellos), which had amended the Health and Safety Code Section 13142.4. This 1983 law required the State Fire Marshal's Office to work jointly with the CPF in the creation of the JAC Program.

The basis for the implementation program was actually at the local level. The Joint Apprenticeship Committee did not have any statewide mandate. Instead it was dependent upon the working relationship between the fire chief and the labor organization at the community level. Therefore, the primary emphasis from 1981 until 1988 has been the development of that working relationship. Increased visibility of the Joint Apprenticeship Program has resulted in an expansion of the original three contractors to now exceed forty full-time paid fire departments.

It has been estimated by Richard Wharton, who served as the Director of the JAC Program, that the total number of paid fire departments with firefighters included under the JAC equals approximately 60 to 70% of full-time paid professional firefighters in the State of California (R. C. Wharton, personal communication, June, 1983).

This success certainly did not go unnoticed. Members of the JAC Program were approached by the US Forest Service, the Bureau of Land Management, and the Bureau of Indian Affairs to see if it would be possible to utilize this same concept to develop training programs for these federal agencies. Because California money could not be used for this type of delivery system, it was considered a good idea to create a National Joint Apprenticeship Committee.

In 1989, an agreement was signed between the newly formed State Fire Marshal's Association and the International Association of Firefighters to create a National JAC Program. This should result in a rapid expansion again inasmuch as it opens the door for federal firefighters who protect military bases and other federal wildland agencies to become participants in the JAC Program.

Viewed in the context of the State of California, training has always had two fundamental problems. The first of these has been the standards and the second has been the funding. The Joint Apprenticeship Committee has provided a mechanism to access funds that has resulted in that program being able to help create new standards. Fire Marshal James McMullen has approached the Professional Qualifications Board with the JAC Program from California. As noted in other sections of this study, the National Professional Qualifications Board ("Pro Board"), which created many of the original standards, has gone through several stages of iteration. Currently, the "Pro Board" has been totally reorganized and incorporated. This may open doors for trade reciprocity and lateral transfer, and recognition of programs under JAC at the national level.

Unfortunately, the mechanisms and the operations of the Joint Apprenticeship Program are not truly known to the vast majority of fire training officers. Many of them have viewed the Joint Apprenticeship Program as being in competition with both regional fire academies and the State fire system. In actuality, the Joint Apprenticeship Program is nothing more than an extension of the vocational education philosophy that started in California as early as 1928.

The primary difference is in the relationship between the firefighters' union and the management groups. The California Federated Firefighters Joint Apprenticeship Committee Program is composed of fourteen members. They are equally divided between labor and management appointees. The California State Fire Marshal appoints the management seats and the Federated Firefighters appoint the labor seats (Favro & McLaughlin, 1990).

It is anticipated that the Joint Apprenticeship Committee will continue to expand and that the National Joint Apprenticeship Committee will become an even more significant participant in the development of standards in the fire service.

Symposium I

McMullen's continued thrust to support training and education highlighted the fact that an adequate, long-term funding mechanism was still not being provided. McMullen suggested that another need was to put the role players together and discuss mutual areas of concern. A symposium was planned and proposed to the State Board of Fire Services. The program for the symposium was structured around the work of Bob Burns, who was helping the Fire Marshal prepare a master plan for his office. The symposium was conducted on June 12-13, 1986 in Sacramento (Office, 1986).

A nominal group process was used to develop statements that addressed the status of fire training in California. The outcome of this symposium was to rein-force the need for three distinct activities to occur. The first was to see the training and educational system consolidated under one organization. The second desire of the group was to see that a continuous, well-structured funding program be developed to support adequately the delivery of programs. The third desire was to see an improved use of conventional educational delivery systems to inform the public regarding fire prevention behaviors.

Despite the passage of over fifty years of concern for a coordinated fire training program, it still did not exist up to the date of this symposium. The same concerns expressed in Sacramento could just as easily been stated by the Peninsula Fire Chiefs' Club, the Education and Advisory Committee of the 1950s, or the team that met in Lake Arrowhead. The one possible outcome of Symposium I was an agreement from almost everyone who attended that it was time to act together.

Several of the fire service organizations agreed to joint together to support legislation for the funding area. Further, a decision was made to conduct another symposium on the subject of public fire education. This was conducted in 1986.

Development of an Alternate State Academy Site

Contemplation of the expanding training needs of the fire services also raised another question. While Asilomar had served admirable in providing classroom space, and the addition of classrooms in Sacramento and West Covina had helped to slow the impact of a growing student population, there was a gap in adequate manipulative skills facilities. Courses of instruction, such as hazardous materials technician and heavy rescue classes needed to be conducted in areas where the urban interface would not create problems.

A study was contracted to evaluate this situation. Several sites were examined throughout the State. While none of this was exactly what the system was looking for, there were two sites that could have some application. They were Camp San Luis Obispo and Agnew State Hospital. Each of the proposals was reviewed, and the State Board of Fire Services chose the San Luis Obispo site. There was an immediate problem. The community college that would best serve as the host college was up against its Average Daily Attendance (ADA) cap. The ADA system is used to fund community college courses. A cap had been placed on the amount of growth that any specific college could grow within a given year. San Luis Obispo was at that cap and could not accept the program. Once again, the fire service was stymied in seeing its objectives accomplished because of funding limitations.

Senate Bill 1977

Bill Teie was elected President of the California Fire Chiefs' Association and announced that among his leading priorities was the establishment of legislation that would provide that long term funding mechanism. The fire service perennial legislator, Senator Bill Campbell, was approached and SB 1977 was presented. This landmark legislation was based upon the same concepts utilized by law enforcement's POST reimbursement program. SB 1977 contained an identification of 10% of the fines collected for the violation of the Uniform Fire Code. These funds would be placed in a special fund and utilized for fire service training on a statewide basis.

A unified front in support of SB 1977 was created. The California Fire Chiefs' Association Training and Education Committee worked extensively on the drafting of supportive documentation. Chief Ron Coleman prepared a position paper for the California Fire Chiefs' Association, which was subsequently submitted to the League of Cities, Fire Chiefs' Division, and the California State Firemen's Association. A series of resolutions were proposed by these

organizations and adopted by them. Senate Bill 1977 moved its way through the legislative process with a showing of support that had been unequalled in recent years.

Governor Deukmejian signed SB 1977 into law in 1986. However, it was a hollow victory, for the first year of the bill's existence the sums of money raised were less than \$10,000.

The actions of a few individuals, coupled with the use of the legislative process, had resulted in the Fire Training Program moving from a fragmented and basically manipulative skills area to a very complex delivery system by 1986. The intervening twenty years had seen continued fragmentation but, at the same time, there had been major strides made in standardization and establishing criteria.

CHAPTER 5

RETROSPECT AND PROSPECT FOR THE FUTURE

In the forty years since Chief Morris suggested the existence of a California Statewide fire training academy, the system has grown in complexity and sophistication. The only item that it has failed to accomplish is the consolidation of training and education into a single, cohesive system. Then, too, the California fire service still does not have a physical facility called a "fire academy."

Other states have copied California's master plans and have adopted its systems analysis. Several, such as New York State, have built and are utilizing fire training facilities based on California concepts. As the fire service in the State approaches the end of the century, it faces many of the same dilemmas of the fire service at the turn of the last century. What fire service leaders do to cope with that transition may have much to do with the quality of life in the next one hundred years.

The more things have changed, the more they seem to have stayed the same. One-hundred years ago, fire service leaders were lamenting the fact that it was essential for the protection of life and property that firefighters be adequately trained. Today, the concern for adequate training is unrequited as the scope of life safety technology and emergency management continues to expand.

In 1969, according to author Paul Dietzel, there were over 1,200,000 firefighters in the United States (Dietzel, 1969). He stated: "Theirs is the most dangerous job in the world. One firefighter is killed on the average about every three days, and about half of the nation's firefighters are injured in the line of duty each year" (p. 9)

That was over twenty years ago. The system has grown since then in two ways. The first is in the absolute numbers of those involved in fire protection. The second is in the complexity of the community fire problem.

In the State of California, there is an estimated one thousand fire departments. There is an estimated staffing pool of over forty-five thousand firefighters. They protect one of the most populated and complex States in the union. California's fire problems range from wildland fires to hazardous materials situations. The scope of the emergencies ranges from simple medical aid to wide-spread disasters created by earthquakes. A firefighter in this State can be expected to face everything from an aircraft crash to being exposed to a communicable disease on a medical aid. Fire service personnel need a comprehensive and sophisticated training system to protect them so they can protect others. The fact that there is a great deal of room for improvement is reflected in the firefighter injury statistics.

Over the last ten years, approximately 19,381 California firefighters have been injured in the line of duty. There have been seventy-one who have paid the ultimate price with their lives.

During that same time frame, California has experienced over 2,160,000 fires with a property loss of over \$3 billion and a content loss of over \$1 billion (California, 1993).

Prather's Testimony

The statistics, in themselves, did not show the correlation between the changes in the State and the changes in the system. Chief Charles Prather, another of the individuals who was instrumental in advocating a comprehensive training and education system, was quoted in 1976 as stating:

In 1951, 25 years ago, the program consisted of nine personnel; one supervisor in Sacramento and eight men in the field, one in each of eight districts. At that time, the population in California was 11 million and it was estimated that there were approximately 25,000 firefighters in the state. The point is, to provide the same level of service today as was being provided 25 years ago would require that there be 18 to 20 men in the State Fire Training Program. (California Fire Chiefs' Association, 1983, p. 18)

If Chief Prather was to draw a similar contrast with the delivery system today, he would have to increase the numbers to thirty-five to forty personnel. In fact, the State Fire Marshal's Office current staffing levels do not include a single field-oriented fire training person.

Trends and Patterns from the Past

As fire service leaders look back over the history of training and education in the State of California, there are several trends and patterns that have emerged. They can be summarized as follows:

1. California fire professionals have almost always been in the vanguard of developing the body of knowledge for the national fire service.
2. There has been a consistent desire of the fire service to see a focused, statewide system to provide delivery of needed training.
3. Funding has almost always been inadequate or improperly distributed among service agencies to assure a comprehensive program.
4. Innovation, improvisation, and personal commitments of specific individuals have caused the system to evolve over the years in spite of the limitations of funding and inter-organizational conflicts.
5. As the fire profession has become increasingly complex, the solutions to providing adequate training are becoming more complex also.

The apparent price that Californians pay for fire protection is measured in the billions of dollars expended on fire departments and their resource requirements. The hidden costs are reflected by the statistics that match the fire service's injury profile over that ten year period. In the same time frame mentioned earlier, over 27,000 civilians were injured and over 3,700 died. These fire losses and costs are a significant economical, political, and social impact on the fabric and quality of life in the State (California, 1993).

To continued to impact these losses and for fire-fighters to be better able to serve their communities, the development of the training and education system has to continue to improve. Those charged with planning and managing fire protection services have to focus on the future status of fire capabilities. The past has already proven that the status quo is an impossible posture to maintain.

Dennis Smith, author, firefighter, and publisher of Fire House magazine, addressed the issue in one of his editorials:

As the fire service becomes more complex, training and education have become more important and more ingrained into many fire departments daily routines. At one point, training was solely synonymous with drilling and practicing the hands-on hose and ladder evolutions that we use on the fire ground. Today, training has taken on another dimension--that of educating ourselves about the hazards of the world around us and how we can safely deal with those conditions. As we strive to clarify our multifaceted emergency service roles, we must work to expand our body of knowledge through education. (Smith, 1984, p. 6)

The nation's fire service has come a long way from the work of Ben Franklin, Braidwood, Shaw, Kenlon, Scott, Ward, Bent, Picard, and others, but it cannot rest on the laurels of the past. Legislation starting with the original Senate Bill 235 has encompassed several generations of fire service leaders trying to establish a statewide education and training system. Some have moved the system along. Some have not been successful. Senate Bills 223, 1805, 456, and 1977 have each contributed in their time towards sustaining a comprehensive training and educational program. But, they have all fallen short of an adequate and long term solution for keeping the fire service's training program adequately funded.

The fragmentation that has occurred in the system has not gone unnoticed in other quarters. In retrospect, the defunding of the State program in the Department of Education was actually predicted by Ed McCormack of the International Society of Fire Service Instructors (ISFSI). McCormack's report concluded that:

While the fire service training program in California is also operated within the State's Division of Vocational Education, it is not mandated by law, and has no separate budget. . . . In addition, whenever budget cuts are necessary, the fire programs are seen as, and thus become, expendable. There is a Fire Service Board in

California, but it has no authority over the Department of Education. (McCormack, 1974, p. 21)

When the budget cuts were finally made in the Department of Education, the program came over to the State Fire Marshal, but with no funds.

Law enforcement faced this same problem during its developmental stages too. In the case of the law enforcement community, both local and State, its leaders recognized that public safety, as policy issue, supersedes local boundaries. The legislature, in cooperation with the law enforcement community, created the Peace Officers Standards and Training (POST). POST became a reality over twenty-five years ago and has made major contributions to the development of statewide law enforcement professional-ism. Currently, POST has over three million dollars in reserves and returns significant revenues to be used by local police and sheriff departments.

The fire service has yet to achieve this level of accomplishment. Perhaps Senate Bill 2079 will be the solution. If it is passed, it will be the first piece of legislation that has a systems approach to its implementation. Senate Bill 1570 was proposed to remove the ADA cap from any college campus that provides California Fire Academy courses on a statewide basis. If the Bill had been passed, this would have given recognition to the fact that fire training is a statewide issue, not a local one. It was pulled by the author because of opposition by the Community College Chancellor's Office.

It must be recognized that fire protection is an activity that supersedes municipal boundaries. A brief survey of the major fires over the last ten years will quickly reveal that these emergencies have required the participation of firefighters from the smallest of volunteer fire departments to the staffs of some of the largest metropolitan departments in the United States. The competencies and qualifications required to protect the citizenry from major disasters does not correlate with size of the community, nor does fire recognize the inability of a community to fund its own training program. It strikes randomly and without regard to social or economic structure. There is little difference between a conflagration in Pebble Beach, San Bernardino, or one in Oakland.

The Future of the Fire Training Program

There are many futures that the fire service can experience. The system, having evolved over the last one hundred years, still has many opportunities to become a lot better or a lot worse. The direction that the fire service training and education system takes will still depend upon the actions and support of both the fire service and the community. It can be reasonably anticipated that fire service leaders will continue to focus on improving the system. There are numerous unfulfilled needs for the fire service.

The California fire service needs an adequate training academy that includes both classroom and manipulative skills facilities. It needs a permanent, ongoing funding source. It needs to update periodically the Master Plan, the Career Development Guides, the course curricula and the text materials. None of these issues can be left to atrophy in the 1990s.

Some of the rich heritage of the fire service training and educational system has been documented in this study. Not unlike the torch carried by an Olympic athlete, the concepts and goals and objectives described in this text must be passed from generation to generation if the race is to ever be won. To forget the trials and obstacles of the past forces each generation to go over the same ground, doomed to repeat the same mistakes. Hope-fully, this report will serve as a foundation for future leaders to build a more coordinated education and training system for the California fire service to follow.

APPENDICES

APPENDIX A

THESIS PROPOSAL

THESIS PROPOSAL

The concept of an American fire training program began in the early 1920s as an effort of one person, Chief Engineer Ralph Scott of the Los Angeles City Fire Department (Hawkins, Prosser, & Wright, 1951). Chief Scott based his work on the precedents that had been set in the development of training programs from both metropolitan and suburban fire departments in this country, which in turn had been based to some degree on fire protection practices started by the European fire services.

In effect, those humble beginnings were little more than on-the-job training. Initially, an experienced firefighter taught another less experienced firefighter. This delivery system was patterned in great part after the master-apprenticeship model found in vocational education. Today, however, courses are taught that require extensive instructor credentialing. There are several different types of post-secondary academic programs available in or related to fire protection that range from basic certification courses to associate, bachelor's and graduate degrees. There is a certification process for the individual members of the fire service for various ranks and technical specializations. The master-apprentice model is still part of the system, including the existence of a joint apprenticeship program involving formal agreements between fire service labor and management. This complicated array of various delivery components to train and educate members of the fire service and its allied fields is continually evolving along both academic and vocational lines.

In many cases, the course offerings and programs are not well coordinated. Students are sometimes unable to matriculate easily from one program to another. This array of program offerings shares a common student population, with common career needs, but is not a vertically integrated delivery system. There are some serious problems of reciprocity between programs, and there are some difficulties in funding and the coordination of resources in order for them to be maintained.

The evolution of the various curriculum approaches has been the result of the efforts of many dedicated and responsible individuals. Government agencies, professional fire service organizations, and institutions have been involved in the development of the public policy process that has created or changed the existence of the various programs. The evolution of the various programs has created a difficult and often confused career development pathway for fire service members.

A list of the legislative actions, policies, procedures, events, individual and organizational activities, expenditures, and contributions required to achieve the current level of training and education to cope with contemporary fire issues is lengthy. The list includes, but is not limited to: obtaining recognition as a vocation; conducting an occupational task analysis; creating a curriculum (including texts and references); devising different curriculum delivery approaches; generating funding sources; obtaining organizational, institutional, and individual commitments; identifying and defining career development tracks; providing physical facilities; dividing up responsibilities among the various delivery approaches; and maintaining an active, involved instructional cadre.

Each of these activities has resulted in events and contributions that have moved the fire service closer to achieving a clearer pattern for planning career development. Yet, at the same time these same individuals, organizations, and governmental entities have often quarreled and dissented regarding how to achieve the over-all goal of an integrated system design.

From the inception of the concept of a fire training and education system, various role players have had a focus on the tasks needed to cope with the physical aspect of fire combat, as well as the cognitive aspects of preventing fire and educating the public. However, the curriculum specifics have had to expand constantly as the problems created by society have expanded and changed. The course offerings and the development of curricula within the various delivery systems have had to respond accordingly. This response has resulted in a proliferation of redundant course materials and alternative delivery approaches.

The positive aspect of this response has been a significant increase in the knowledge, skills, and abilities of fire service personnel. The negative aspects of this growth have been the fragmentation and counter-productive quest for funding, resources, and system control. Training and education programs exist for the California fire service. However, an overall integrated system that has been sought for over sixty years has yet to emerge.

The Problem

When the Federal Board for Vocational Education recognized the fire service as vocation in 1929, there were few firefighters in the State of California (Gowell et al., 1932). The formation of the program created high expectations among those who supported its creation. It was Chief Engineer Scott's hope that the occupational analysis developed by the Los Angeles Fire Department was the beginning of standardized training for firefighters across the United States.

The evolution of different programs since that time has ranged from being closely coordinated to periods where the components have been in direct conflict. The fire service has never quite achieved the level of coordination to meet the original expectations of a standardized program for all firefighters.

The delivery components have evolved as a result of the actions of individuals who have caused certain events to materialize. The evolution has included the development of relationships between organizations, institutions, and governmental agencies that have reflected philosophical, political, and economic reversals. However, until this time there has never been a comprehensive written record detailing how these individuals, organizations, and activities have interacted to create today's delivery components. This study addresses that need.

This investigation includes a description of the individuals, organizations, events, activities, and legislative and regulatory processes that have interacted to create today's programs. It is an accounting of how the delivery components have progressed from a simple description of how to fight a fire, conducted in a fire station by the on-duty fire officer, to the provision of complex, highly diversified training and education components that deal with

courses providing information ranging from hazardous materials chemistry to emergency medical services. At the same time, this study identifies the fact that the fire service in California has never quite achieved the desired state of a single focused, standardized training and education program.

Objectives of the Study

The objective of this study is to describe the development of the California fire training and education delivery programs. Specifically, answers will be sought to the following research questions:

1. What factors influenced the early development of the programs needed to train and educate fire service personnel?
2. What impact did the 1928 occupational analysis have on the establishment and evolution of the methods used to develop the various curricula?
3. What have been the impacts of specific individuals, organizations, institutions, and governmental agencies during the development of delivery to deal with program expansion?
4. What factors have been involved in preventing the creation of a singular vertically integrated fire training and education system?

Statement of Need

According to Daniel Coffman, Director of the California State Firefighters Association and Dennis Frazier, Deputy Director:

As the fire service is transformed by the world around it, it continually seems to be falling behind. New technologies, increasing demands for services, budget and other constraints require that we look for ways to operate more efficiently. Fire service training and education is one area that can be improved.
(Coffman & Frazier, 1991, p. 33)

This study is needed to provide focus for the various elements involved in continuing with the task of creating the changes for the future. While this study is historical in perspective, it has implications for the future. It should be especially useful to the following groups:

1. Managers of fire service agencies and organizations that use the various training and education pro-grams, or are the employers of the graduating students from such programs;
2. Leaders of service organizations and institutions involved in legislative or regulatory efforts to develop consensus to unify or coordinate fire training and educational efforts;
3. Faculty and administrators of fire service training and educational delivery components who must provide commitment of resources to deliver the needed instructional services;

4. Fire service instructors, curriculum development specialists, and fire science coordinators who prepare course materials and provide the perceptive base for the instructional cadre and student population of the fire profession; and
5. Legislators, their staffs, and regulatory agency administrators who may be asked to support efforts to pass laws and regulations to expedite the creation of ways and means to stabilize the overall program.

Limitations

Certain limitations are necessary to conduct this study. They include:

1. The study is limited to documents, interviews, and related written data sources published or available from official files of fire service organizations and professional publications up to October 15, 1991.
2. The study is confined to the field of fire protection, fully realizing that the educational delivery approaches being used were not exclusively a fire protection system, e.g., a community college or state university system.
3. The study is limited to the availability of verifiable sources. In some cases there are actions, events, and decisions that cannot be confirmed and are not included in this study.

Basic Assumptions

The following assumptions are observed as fundamental in pursuing this study:

1. That sufficient data can be identified, assembled, and analyzed to describe accurately the evolution of the fire training and education delivery approaches in California;
2. That the sources of information identified in the development of this study are originals or verifiable copies valid for the study's purpose;
3. That certain activities and events cannot be evaluated without obtaining first person interviews;
4. That the individuals interviewed will respond factually and to the best of their recollections and abilities; and
5. That information containing bias can be detected and appropriate clarifications made.

Method and Procedures

This study used the documentary research method. Hillway (1969) described this type of research as follows: "Documentary research receives its name from the scholarly activities involved in learning new facts and principles through the study of documents and records" (p. 129). He further stated that ". . . it has been particularly important to the study of history" (p. 129).

Carr (1961) emphasized the value of this perspective when he stated:

What is history? Our answer, consciously or unconsciously, reflects our own position in time and forms part of our answer to

the broader question, what view we take of our society in which we live. (p. 5)

Carr acknowledged the fact that history is constantly evolving by repeating the perspective of Acton, who in his 1896 report to the Syndics of the University of Cambridge Press stated:

Ultimate history we cannot have in this generation; but we can dispose of conventional history, and show the point we have reached on the road from one to another, now that all information is within reach, and every problem has become capable of solution. (Carr, 1961, p. 10)

Carr went on to emphasize that the use of documents and records are not infallible in determining the course of action they describe.

No document can tell us more than what the author of the document thought, what he thought had happened, what he thought should have happened or would happen, or perhaps only what he wanted others to think he thought, or even only what he himself thought he thought. None of this means anything until the historian has gone to work on it and deciphered it. (Carr, 1961, p. 16)

What Carr suggested is that writing history is processing the outcomes of what actually did occur.

To an important degree, this study is a history of fire training and education for the firefighters and their allied professions in California, based upon documents and records from individuals and organizations that have been trying to create a more unified and standardized training and education program. However, the outcomes in many cases are different than some of the stated records. The method used in this study has been to examine the document and describe the outcomes as they emerged later.

This history, not found anywhere in the current literature, is being written in a contemporary context, and therefore, represents a position in time. It is a reflection of the past and is not an ultimate history; therefore, it represents a point along the road from origins to ultimate conclusion.

The data sources in this form of study include, but are not limited to: (a) official records; (b) minutes of meetings; (c) newspapers, newsletters, and official publications; (d) correspondence; and (e) eye-witness accounts.

This study will be conducted in the following manner:

1. Available literature will be reviewed to determine if a similar study had ever been conducted.

2. A document search will be conducted among the records and reports of the fire service organizations, institutions, and governmental agencies to determine the availability of sole source data and first editions of specific documents.
3. An initial list of interviewees will be developed from information available from the files of the California State Department of Education; California State Fire Marshal's Office in Sacramento; National Fire Academy in Emmitsburg, Maryland; International Fire Service Instructors Society in Ashland, Massachusetts; National Fire Protection Association in Quincy, Massachusetts; Inter-national Fire Service Training Association in Stillwater, Oklahoma; and the Library of Phenix Technology, San Clemente, California. Current and previous employees of these offices will be interviewed to identify the location of additional documents to complete data relating to missing times, dates, and events.
4. From a review of the initial documents, additional documents will be identified in libraries and personal collections outside of the State of California. Additional interviewees identified from these same sources will be added to the list identified in step 3. The fire services "network" will be accessed to determine who has information or who has access to documents not found during the initial search.
5. Whenever possible, written documentation will be cross-referenced with individuals who have been involved in their development. Statements from interviews will be typed and returned to the original interviewees for confirmation. Data will be checked and reviewed for accuracy to the degree possible.
6. The information will be collected, categorized, collated, and labeled in a library for subsequent use by later researchers.
7. Descriptions of activities, events, and decisions will be organized in a chronological sequence to address the objectives and research questions of the study.
8. Conclusions will be made for further research and action for the continued evolution of fire service training and education programs.

Organization of the Study

The study is divided into five chapters. Chapter 1 is a description of how the fire service first became established and then became recognized in the United States as an occupation. This chapter includes a description of the creation of initial European approaches to fire protection, early American fire fighting and prevention practices, and the initial stages of fire service activities in the State of California. It is a review of the evolution of fire science from antiquity to the development of fire service personnel in the early phases of the Industrial Age in the United States. Chapter 2 is a description of the fundamental changes in fire training and education that started after the creation of the first occupational analysis for the fire service in 1928. It further includes the various methods and delivery systems that evolved from changes made in the occupational analysis. Chapter 3 continues with a description of the influences and activities of various individuals, organizations, institutions, and governmental agencies in creating programs, instructional materials and approaches in response to increased demand for the training and education of fire personnel. Chapter 4 consists of a description of the conflicts among various role players in competing for funds, or legislative authority, the alliances, relationships, and other factors that have prevented the development of a vertically integrated fire service training and education system. Chapter 5 is a retrospective and prospective chapter that describes existing problems in the delivery system. The chapter also contains recommendations and a description of

action items that require further study. The appendices provide back-up and descriptive material and the bibliography provides a review of the data and documents collected to create this study.

APPENDIX B

STATE FIRE TRAINING INSTRUCTORS, 1940 TO 1968

STATE FIRE TRAINING INSTRUCTORS, 1940 TO 1968

John Baker
David G. Glines
John Steinhauer
Cecil Lochard
Thomas Ward
Carl Kistle
Ward Cockerton
Bill Reed
Bob Lewis
Bob Shaw
Clyde Pope
Ed Elliott
Fritz Becker
Ward Ensley
Edward Bent
Dick Nevins
Cedric Rowntree
Carlton Williams
James Meidl
Gordon McLaughlin

Jerry Jones
Glen Hill
Art Stevens
Morrell Fitch
Ray Russell
Mike Cahill
Richard Wharton
William Vandervort
Les Johnson
Phil Davis
Paul Beckstrom
Ken Wagner

FIRE ACADEMY COORDINATORS

Cedric Rowntree
Lyle Goodrich
Dick Starr
James Meidl
Dick Wharton

APPENDIX C

RESUME OF RONNY J. COLEMAN

RESUME
RONNY J. COLEMAN

Residence: 8866 Saint Anthony Street, Elk Grove, CA 95624
Office: 7171 Bowling Drive, Suite 600, Sacramento, CA 95823
(916) 262-1883 FAX (916) 262-1877

EDUCATION

- o Candidate for Master of Arts Degree, Vocational Education, California State University, Long Beach
- o B.A. Degree, Political Science, California State University, Fullerton
- o A.A. Degree, Fire Science, Rancho Santiago College, Santa Ana

EMPLOYMENT HISTORY

- o State Fire Marshal, State of California 1992 - Present
- o Fire Chief, City of Fullerton, California 1985 - 1992
- o Director of Fire Protection, San Clemente Fire Department 1973 - 1984
- o Operations Chief, Costa Mesa Fire Department 1963 - 1973
- o Supervisor of Fire Control, U.S. Park Service, Yosemite 1962 - 1963
- o Tanker Foreman, U.S. Forest Service, Cleveland National Forest 1960 - 1962
- o 1st Recon. B., 1st Marine Division, U.S. Marine Corps 1957 - 1960

MEMBERSHIPS AND ASSOCIATIONS (Partial Listing)

- o National Fire Protection Association, 1968 - Present
- o California Fire Chiefs Association, 1968 - Present
- o California League of Cities, President 1988
- o International Association of Fire Chiefs, President 1988-1989
- o International Fire Service Training Association, 1976 - Present
- o International Society of Fire Service Instructors, 1973 - Present
- o International Technical Committee for the Prevention & Extinction of Fire, Vice President 1990

TEACHING EXPERIENCE (Partial Listing)

- o National Fire Academy: Executive Development III Course
- o California Specialized Training Institute: Hazardous Material Contingency Planning
- o California State University, San Diego: Disaster Planning; Fire Defense Master Planning
- o California Fire Academy, Ashomar: Fire Command 1A and 1B; Fire Instructor II; Fire Management V; Hazardous Materials Identification; Pesticide Fire and Spill Control; Volunteer Fire Management; Fire Prevention 1A and 1B; Fire Management III; etc.

HONORS AND AWARDS (Partial Listing)

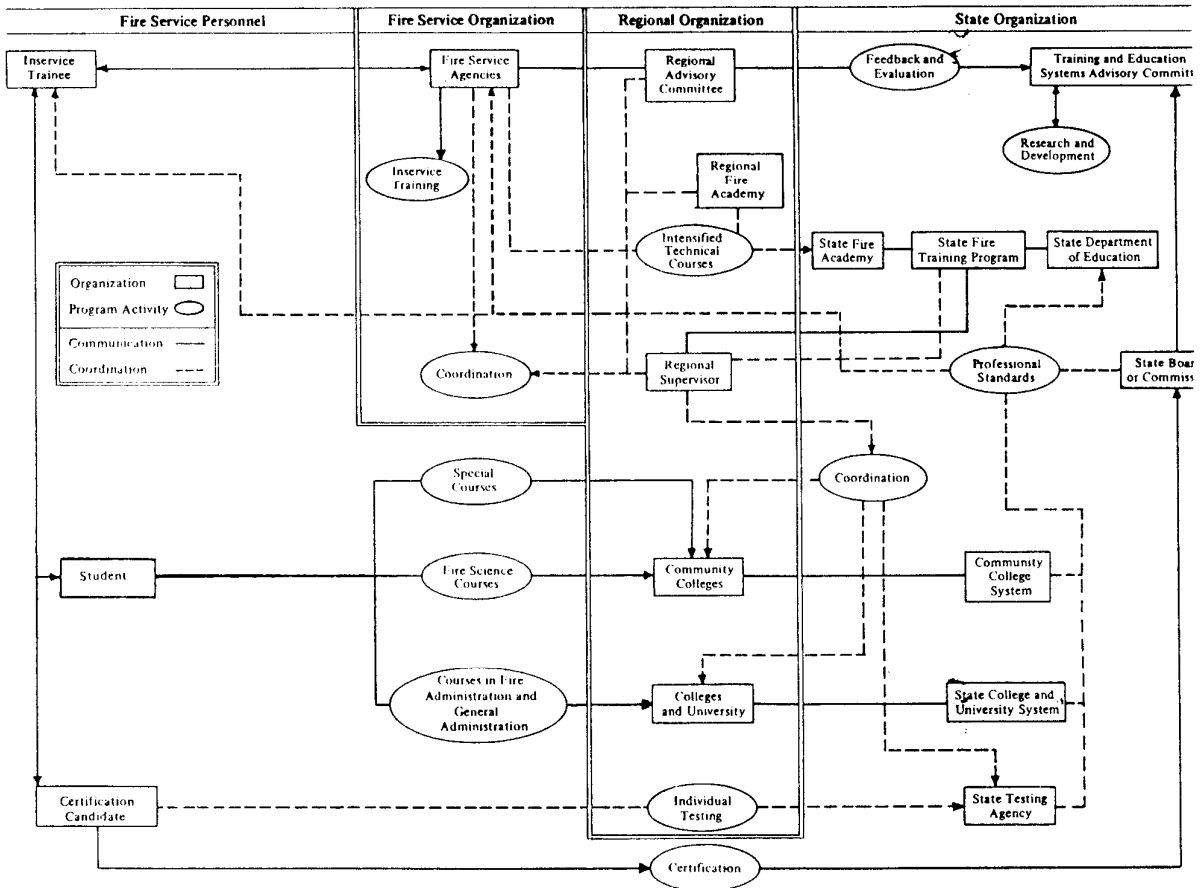
- o "Fire Chief of the Year" by WeTIP Organization, 1991
- o "Outstanding Public Administrator Award", American Society of Public Administrators, Orange County Chapter, 1990
- o Henry S. Parmalee Award, 1989
- o Rancho Santiago College Alumni of the Year Award, 1988

PUBLISHED TEXTBOOKS (Partial Listing)

- o Residential Fire Safety Systems, NFPA, Quincy, MA, 1991
- o Managing Fire Services, Editor, Second Edition, ICMA, 1988
- o Managing of Fire Service Operations, Duxbury Press, North Scituate, MA, 1978
- o Company Officer Development Text, Contributing Author, ISFSI, Ashland, MA

APPENDIX D
THE MASTER PLAN CHART

Organization and Program Activities of the California Fire Training and Education System



APPENDIX E
NATIONAL FIRE ACADEMY SUPERINTENDENTS

NATIONAL FIRE ACADEMY SUPERINTENDENTS

David McCormack
New York
Jan 1976 – Feb 1979

Edward Rollins
Acting Superintendent
Feb 1979 – June 1979

Ray Perry
Acting Superintendent
June 1979 (less than one month)

Joseph A. Moreland
Acting Superintendent
June 1979 – August 1979

William Siefried
Acting Superintendent
Aug 1979 – Dec 1979

Dr. B. J. Thompson
California
Jan 1980 – July 1981

Edward M. Wall
Acting Superintendent
July 1981 – Jan 1982

Joseph Donovan
Massachusetts
Jan 1982 – July 1986

Michael R. Mitchell
Acting Superintendent
July 1986 – Dec 1986

William M. Neville
California
Dec 1986 – July 1988

Charles H. Boehne
Interim Superintendent
July 1988 – April 1990

J. Faherty Casey
William D. Lewis
Steven W. Hill
Acting Superintendents
April 1990 – June 1991

Albert G. Kirchner, Jr.
New York
June 1991 – Jan 1993

Steve W. Hill
Acting Superintendent
Jan 1993 – Oct 1993

James F. Coyle
Acting Superintendent
Nov 1, 1993 – Present

APPENDIX F

**LETTERS FROM CHIEF ENGINEER JOHN C. GERARD
ENCOURAGING LOS ANGELES FIRE
DEPARTMENT PERSONNEL TO SEEK
ADVANCED EDUCATION**

From the Office of
the Chief Engineer

January 26, 1978

TO ALL MEMBERS

SUBJECT: FORMAL EDUCATION FOR THE FIRE SERVICE

Formal education is rapidly becoming an important factor in the development of career firefighters. It is important to the extent that it may soon be necessary to have significant formal education to be competitive in the promotional examination process.

I am supportive of the trend toward formal education for the fire service for a variety of reasons:

1. Educational achievement is necessary to accomplish professionalization of the fire service.
2. The application of knowledge gained through education will increase our ability to be effective in many more areas of our responsibility.
3. Educational achievement will enhance our public image and increase our influence with the community.
4. Increased education is necessary in order for the fire service to stay abreast of new technologies that affect our profession.
5. The ability to address the various segments of society and their problems will be increased by having a better educational foundation.

I encourage all members to prepare themselves for increased responsibility and promotional opportunity by taking advantage of the many educational programs in this area.

Many colleges are registering students for classes which will be starting on or about February 1, 1978. Some of these colleges are as follows:

To All Members:

-2-

January 26, 1978

West Los Angeles Community College	Culver City
Valley Community College	Van Nuys
Harbor Community College	Harbor City
East Los Angeles Community College	East Los Angeles
Compton Community College	Compton
Pasadena City College	Pasadena
Santa Monica City College	Santa Monica
Mount San Antonio College	Walnut
Long Beach City College	Long Beach
College of the Canyons	Valencia
Moorpark College	Moorpark
California State University, Los Angeles	El Sereno

Further information may be obtained by calling the Training Section, Extension 6087.

JOHN C. GERARD (Signed)
Chief Engineer and General Manager

JCG:RLE:cp

(This memo has been retyped because of the poor quality of the original.)

February 2, 1978

Dear

Recently, I forwarded a letter to "all members" which emphasized the need for members desiring promotion to increase their formal education. This advice is especially applicable to younger members of the Department who should be planning their career goals now.

You should be assessing your skills and making plans to qualify yourself for increased responsibility and subsequent promotion.

I strongly encourage you to begin developing your educational credentials now by entering Fire Science classes at one of the following colleges:

West Los Angeles	Culver City
Valley Community College	Van Nuys
Harbor Community College	Harbor City
East Los Angeles Community College	East Los Angeles
Compton Community College	Compton
Pasadena City College	Pasadena
Santa Monica City College	Santa Monica
Mt. San Antonio College	Walnut
Long Beach College	Long Beach
College of the Canyons	Valencia
Moorpark College	Moorpark
California State University, L.A.	El Sereno

Further information may be obtained by calling the Training Section, telephone number 485-6087.

Very truly yours,



JOHN C. GERARD
Chief Engineer and General Manager

JCG:RLE:cd



From the office of
the Chief Engineer....

February 7, 1978

TO: ALL OFFICERS

SUBJECT: INSTRUCTORS FOR FIRE SCIENCE CLASSES

As you are aware, I have recently advised "all members" of the importance of acquiring advanced formal education in order to professionalize the fire service and to improve this Department's ability to serve our City.

I anticipate a significant number of members from our Department, as well as other departments in our area, becoming involved in Fire Science and Administration education.

In order to accommodate the anticipated increase in student enrollment, the local community colleges and universities need instructors.

As the only large Class I Department in the area, we have an obligation to supply a great many of these instructors. We have the capacity to accomplish that goal because most of our officers have completed the Captain's Instructors Training (C.I.T.), which is the major factor in the requirements for the "Designated Subjects Teaching Credential".

I am asking each of you to assess your personal involvement in the total fire service and determine what contribution you can make for the improvement of the profession. Teaching off-duty is truly a significant contribution to the fire service and will serve as an enrichment toward your own career goals.

Interested officers are encouraged to contact Robert L. Ewert, Commander, Training Section, or Roy Niebuhr, Training Technician, extension 6087, for advance information on job openings.

JOHN C. GERARD
Chief Engineer and General Manager

JCG:RLE:RCN:bt


LOS ANGELES FIRE DEPARTMENT

JOHN C. GERARD
 CHIEF ENGINEER AND GENERAL MANAGER

January 22, 1979

TO:

FROM: Chief Engineer and General Manager

SUBJECT: INSTRUCTOR TRAINING

A review of your Training Data Card reveals that you have not completed the class in "Techniques in Teaching" which was previously offered by this Department under the title of "Captains Instructor Training (CIT)".

Your attention is directed to the attached flyer which gives the specific locations where this course is being offered on alternate nights to accommodate your work schedule.

You are encouraged to complete this course at one of these locations as reductions in our budget have placed an added responsibility for our officers to upgrade their skills by taking classes off-duty.

We are confident that the skills acquired in this class will be very useful to you in your command position as well as preparing you for increased responsibility.

JOHN C. GERARD
 Chief Engineer and General Manager

JCG:ia

Attachment

COMPANY/STATION OR UNIT COMMANDER	ASSIGN	DIVISION COMMANDER	ASSIGN
BATTALION OR SECTION COMMANDER	ASSIGN	BUREAU COMMANDER	OPERATIONS

January 22, 2979

TO ALL MEMBERS

SUBJECT: CAREER DEVELOPMENT

In order for this Department to maintain its excellent level of service to the public and its position of leadership in the fire service, it is essential that our members be able to utilize the knowledge and prestige that is offered by the acquisition of formal education.

Demands of the future indicate that academic achievement by members seeking personal development for promotional purposes is going to evolve from a status of "nice to have" to "essential."

The Plan

The Department has developed a Career Development Plan that outlines the academic achievements needed for each rank from Firefighter level up to and including Battalion Chief. The plan was developed within the framework of recognized N.F.P.A. standards of promotional requirements and reviewed by the Test Validation Unit of the City Personnel Department. It consists of over 140 separate subjects, approximately half of which are currently being offered by local community colleges. Approximately 25 of the required subjects fall in the category that will best be taught at off-campus locations, such as Drill Towers 59 and 89, under the auspices of the community college system.

A small number of the required subjects fall into the self-instructed category for which a future "certification" program is being developed.

The Department does not intend to exercise the mandatory aspect of the Career Development Program until such time as participating members have an opportunity to earn the appropriate educational credits. We anticipate that to be approximately five years.

A great many courses, in various community colleges, have been announced recently in the Weekly Bulletin. All of these courses are included in the Career Development Plan of the Department. It is highly recommended that members take advantage of these courses.

The Training Section is presently working with Los Angeles Valley College to develop classes for those subjects not currently being offered by the community college system. Included in these classes will be the Company Officers' Management and Operations course, Captains' Instructor Training, and the Emergency Medical Technician I course that the Department was forced to cancel due to budgetary constraints.

In the very near future, the Department will distribute copies of the Career Development Program to all stations.

In the implementation stage, the plan calls for the establishment of a "core" curriculum at Los Angeles Valley College, with a future goal of including all Los Angeles community colleges and California State University at Los Angeles in a Career Development curriculum that can be utilized by members of all fire departments in the Greater Los Angeles area.

Aside from the benefits for the Department as a whole, such as the enhancement of our public image and increased influence within the community, the Career Development curriculum will provide individual members seeking promotion with a well-defined course to follow, thus eliminating much of the guesswork that has traditionally plagued those individually developed study programs.

I sincerely hope that all members will devote themselves to this effort to improve the effectiveness of our Department.

John C. Gerard (signed)
Chief Engineer and General Manager

JCG:bt

Note! This letter was retyped, because the original copy was unreadable.

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