

WINGSPREAD CONFERENCE

ON FIRE SERVICE ADMINISTRATION,
EDUCATION AND RESEARCH

*Statements of National Significance to
the Fire Problem in the United States*

THE JOHNSON FOUNDATION • FEBRUARY, 1966 • RACINE, WISCONSIN

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THE RESPONSIBILITY FOR WINGSPREAD CONFERENCE
STATEMENTS OF NATIONAL SIGNIFICANCE
TO THE FIRE PROBLEM

This statement has been approved for publication as a statement of the Ad Hoc Committee which gathered at Wingspread and its drafting subcommittee. The individuals who are responsible for this statement are listed on the opposite page. Institutions and associations are included for identification only; the institutions and associations do not share in the responsibility borne by the individuals.

It was mutually agreed by all conference participants that discussions be thoroughly objective in character and that the approach in each subject area be from the standpoint of the general welfare and not from that of any special political association or economic group. The integrity and dedication to a common purpose that prevailed throughout is a gratifying testament to the ability of the fire chief and the educator to enhance their contributions to society.

The statements, discussions and suggestions presented herein are not necessarily endorsed by the Johnson Foundation, their staff or advisers who were most helpful in handling all the conference requirements both efficiently and graciously.

This Ad Hoc Committee offers these statements of national significance as an aid to clearer understanding of the fire problems and of the steps to be taken in achieving the objectives of bringing the national fire problem into sharp focus. The committee is not attempting to pass on any specific pending legislative proposals, programs or methods. Its purpose is to urge careful consideration of the objectives set forth in the statements and of the best means of accomplishing those objectives through administration, education and research.

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SERVICE ADMINISTRATION, EDUCATION AND RESEARCH

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FOREWORD

The direct material fire losses in the United States have continued to rise each year. Available records indicate that in 1965 this loss exceeded 1.8 billion dollars.

The life loss from fire has annually exceeded 12,000 men, women and children for the past several years.

Losses of this magnitude would indicate, then, that unfriendly fire is a major social and economic problem.

Basically, the suppression effort is organized and financed as a local government function. The guarding of local government prerogatives makes it extremely difficult to bring into being any organized method for general improvement in any large segment of the fire service. The fire service as a whole lacks uniform standards of performance, educational achievement of skill. Many individual fire departments have made progress in technology, tactics and strategy, administration and organization; however, this progress have been largely dependent on the caliber of leadership of individual fire chiefs, and there is no assurance that this progress will continue or the standards be maintained when there is a change of leadership in a given fire department.

Often this struggle for progress is made under adverse conditions. The economic base of the community may place such heavy demands on the service dollars available for all local government functions that the financing of the fire function simply cannot be afforded at local level.

Management systems enhancing the coordination of the fire function above local level must be considered. Without this coordination at a national or state level, it is difficult to maintain open lines of communication within the service itself so that improved methods, techniques, and the systematic exchange of information and ideas can be facilitated.

This deficiency in the service as a whole has been pointed out in the study made by the Office of Civil Defense titled "National Fire Coordination Study, Phase I Report, 1965."

Hence, we seem to have in the fire service thousands of individual fire department organizations, each trying to cope with the fire problem, uncertain of its responsibility, its jurisdiction and its level of competency to cope with the day-to-day problems that are related to the total fire picture.

This has been recognized by many individuals and many educational institutions and service associations. Some of the individuals who recognized the need for a comprehensive study in the area of fire service administration, education and research formed this Ad Hoc Committee as a first hopeful step in trying to isolate and define some of the major problems, so that additional research and study could be given to problems with a high priority. This committee is especially grateful to the Johnson Foundation for its interest in supporting this study of the fire problem and its relationship to the socioeconomic-political community. It is hoped that once these problems are more clearly defined and understood, foundations, government agencies and educational institutions will bring their resources to bear on the issue.

1. UNPRECEDENTED DEMANDS ARE BEING IMPOSED ON THE FIRE SERVICE BY RAPID SOCIAL AND TECHNOLOGICAL CHANGE.

The scale of business and government operations today, the complexity of modern technology and organization, and the swift increase in new knowledge, the population explosion, rapid growth of urban communities, need for efficiency and economy on the part of the commercial and industrial community to compete in our private enterprise system, particularly under the pressure of imports of our foreign trade commitments, require that fire executives and administrators be better educated than their predecessors and better prepared to understand and facilitate change.

The mobility of individuals and whole segments of our society brings about societal change and behavioral patterns which pose tremendous problems for the fire service.

The erection of high-rise structures, large undivided commercial and industrial buildings and solid-wall structures in outlying areas, brings to many small, undermanned and ill-equipped fire departments problems of a magnitude never before faced.

The deterioration of central business sections and the transition of older residential areas help to create slums. Certain ethnic groups are affected by environmental change in a way which compounds the fire problems.

Technological changes in manufacturing processes, science, use of chemistry, nuclear energy, etc., are confronting fire departments with problems far greater than they can handle.

This societal and technological change should be thoroughly researched to determine causes and possible relationship to fire service planning needs.

2. THE PUBLIC IS COMPLACENT TOWARD THE RISING TREND OF LIFE AND PROPERTY LOSS BY FIRE.

What are acceptable limits? Certainly we have reached the limit insofar as crime is concerned, and it would appear that we are rapidly approaching the limit for traffic deaths.

Society in general in the United States seems to establish tolerable fire loss limits which we are willing to accept. Many fire officials felt that a one billion dollar loss was the maximum. Now we are approaching two billion dollars with apparent apathy. The United States leads the world in number of fires, fire deaths and property loss.

Acceptable loss limits are attributable in part to public attitude. For example, the person who has a fire in the United States is approximately described by Wainwright:¹

In the next two days, numb with shock and relief, protected by the fast sympathy and affection of friends and neighbors, we did not think too much about the loss. A friend's sweater fit almost as well as my own, and my younger daughter's bicycle and menagerie of stuffed animals were magically replaced. The fact of insurance coverage insulated us still further.

This is in contrast to the attitude in other parts of the world toward the individual who has a fire. For example, in some European countries it is against the law to have a fire. In some countries when a person has a fire, he is placed in jail and is guilty until proven innocent.

Industrial concerns have found, many times, that when a new process is developed, it is more economical to build a new building to house the new process than to modify an existing

¹ Wainwright, L. *The View From Here*, Life Magazine, Vol. 60, No. 6, Feb. 11, 1966.

building to accommodate the new process for production efficiency. Therefore, this gives rise to a situation in which buildings are built for a single use and for a single generation rather than for long-term use.

Our system of fire protection and our insurance coverage are definite factors in this complacent attitude. The attitudes of "Why worry, I'm insured" or "The fire department will take care of it" are quite common.

The impact of these attitudes should be studied to determine cause and effect on the total fire loss problem.

3. THERE IS A SERIOUS LACK OF COMMUNICATION BETWEEN THE PUBLIC AND THE FIRE SERVICE

The individual citizen's understanding of what constitutes fire protection seems to be very limited. This lack of understanding is also shared by those persons primarily responsible for protecting the public welfare, the elected and appointed governmental administrators.

When changing geographic locations, the average person, business or industry researches the availability of community services such as education, recreation, health and welfare, but seldom evaluates the fire protection function, assuming "it is there"!

The fire service itself seems to be hesitant to go much farther in explaining its function than to indicate "We save life and property." A thorough analysis of the men, money and material which go into the achievement of such a noble goal needs to be carefully analyzed by the fire service, and ways and means devised to communicate the objectives of the service for the protection of life and property in the community.

Most citizens judge the fire service by one or two contacts they have had with individual members of the service. If this contact has been positive, the image of the service is positive to that individual. If the contact has been negative, the picture of the entire service is negative.

A continuing public relations program designed to project the desired image needs to be devised and implemented to improve the picture of the fire service.

4. BEHAVIOR PATTERNS OF THE PUBLIC HAVE A DIRECT INFLUENCE ON THE FIRE PROBLEM.

Fire frequency has been directly related to human activity. This is reflected in timetables as to when the highest frequency rate occurs during each 24-hour period.

There are many striking examples throughout the United States of times when people knew that protection was not available to them for reasons such as isolation by flood, snowstorm, ice conditions, etc., and the frequency rate has been practically nil. This seems to be related to the fact that if the public is aware that a service does exist, there are psychological reasons why they become careless in relation to fire problems because they seem to feel that they have the backstop of the service to fall back on.

This is also related to the social problem when segments of our society are moved out of their environment and moved into another environment much more susceptible to problems related to fire.

Frequency rate does not seem to be related to type of construction used in this country. Tokyo, which as long been referred to as a paper city, does not have the frequency rate we have. Other examples: In Cairo, Egypt, the incidence of fire was 3,200 in 1965 and in Chicago, 85,000. The population of the two is approximately the same.

Possibly some research is indicated to determine if the loss in groups which have small material possessions, but have no insurance, is very different from the groups which are financially secure and protected by insurance.

5. THE INSURANCE INTEREST HAS EXERTED A STRONG INFLUENCE ON THE ORGANIZATION OF THE FIRE SERVICE. THIS DOMINANCE SEEMS TO BE WANING. THE FIRE SERVICE MUST PROVIDE THE LEADERSHIP IN ESTABLISHING REALISTIC CRITERIA FOR DETERMINING PROPER LEVELS OF FIRE PROTECTION.

The original concept of organizing public fire protection in this country was to minimize the conflagration hazard. This was originally initiated by the Mutual Assistance concept where all would share in any individual's loss. As a result of this, the criteria for determining the required levels of fire protection have seemed to be in the direction of establishing fire protection levels to meet insurance requirements.

As a result of many factors such as municipal planning, building construction codes, advanced technology, etc., the same type of conflagration hazard does not exist in cities of the United States today that existed, for example, at the turn of the century.

It can be stated that insurance industry interests have, in fact, solicited the assistance and cooperation of fire officials in the establishment of criteria and standards through the process of committees, associations, etc. However, due to the limitations placed on fire officials by local fiscal problems, the fire official, many times, has not been a member of a committee which formulates these criteria and standards for determining the level for fire protection.

Municipal officials look to their fire officials for this type of technical guidance. The fire official then often finds himself in the peculiar position of trying to apply standards and criteria which he may not understand and which have been virtually handed to him by insurance and industry-oriented interests. This has led many fire officials to use as justification for their request at local level, the statement "This is what the Rating Bureau or the National Board of Fire Underwriters (American Insurance Association) requires."

This has led municipal administrators and governing bodies who are hard pressed to spread the available service dollars over the entire area of municipal services to seriously question the fire official for further justification of his requests for large expenditures of tax dollars.

There is no medium existing in the United States today through which fire officials can take a realistic look at the problems related to determining adequate fire protection requirements.

Since fire protection in this country has been limited to local government jurisdiction, this also inhibits uniformity of fire protection levels as far as equipment and manpower are concerned, as well as forming blocks on determining knowledge and skill levels of individual members of the fire service.

Many times the efficiency level of an individual fire department is entirely dependent upon the leadership and the progressive abilities of the individual fire chief, and there is no assurance that this level of efficiency will be continued by his successor when he retires or leaves the position of fire chief.

If the fire problem is a social problem, then there is a need for new channels of communication opened from the national level to the state level, to the county level, and to the local level. This vehicle or channel of communication does not now exist in the fire service in the United States. Therefore, the efficiency level of personnel, the equipment, codes and all

items related to control and suppression activities are left pretty much in the hands of the local community.

There has been considerable evidence in recent years of a gradual withdrawal of ancillary services by the fire insurance industry; so much so, that the operational fire service would do well to prepare now for complete cessation of these activities.

The insurance companies are businesses. Their primary obligation is to conduct their business in a manner that is satisfactory to their policyholders and profitable to their stockholders. They are not obligated to improve municipal fire protection. This is a public responsibility, through government. Public officials must recognize that adequate protection of lives and property is their obligation.

The operational fire service must have the maturity, professional approach and capability to establish its own standards and to keep them current. Public officials must become willing to accept criteria that are realistic and based on life and property protection without depending upon insurance rates as the primary guide.

This whole area of evaluating today's fire protection requirements needs to be studied in light of the many changes that are taking place in our whole way of life in the United States.

*6. PROFESSIONAL STATUS BEGINS WITH EDUCATION. THE GORDON-HOWELL REPORT SUGGESTS FOUR CRITERIA FOR DEFINING A "PROFESSION"*².

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.

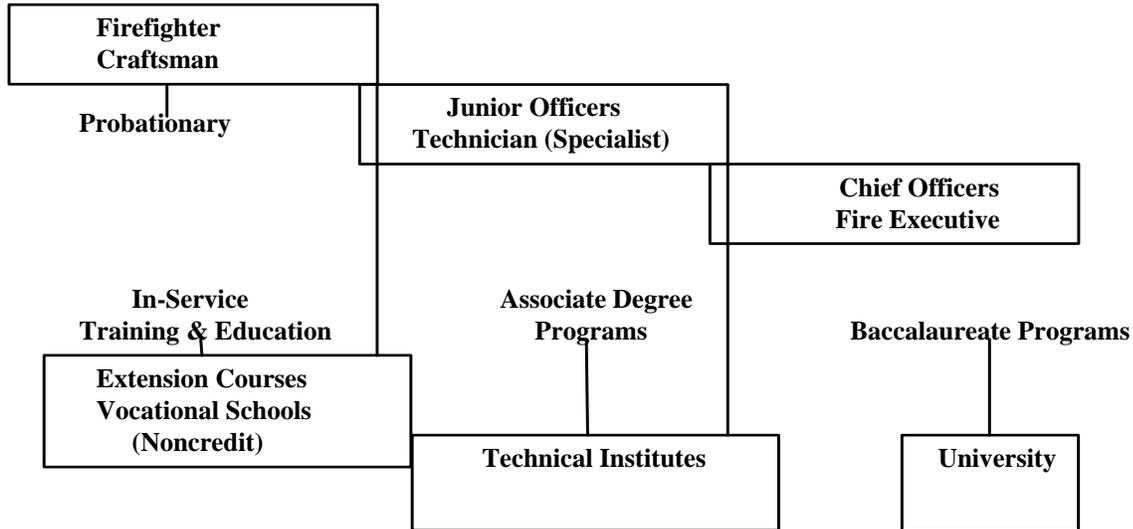
It is unrealistic to assume that every member of a fire department has a formal education (college degree).

Therefore, levels need to be established within the profession.

The following charts suggest a method of determining what these levels might be and the source of education and training to meet the desired need.

² SILK, Leonard S., *The Education of Businessmen*, Committee for Economic Development No. 11, p. 9, New York, 1960.

A MEANS OF ACHIEVING PROFESSIONAL EDUCATION



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.³

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 organizational 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 needs 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 of the service. Traditionally, in the fire service in this country, we have promoted men into higher 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

³ SILK, Leonard S. *The Education of Businessmen*, Committee for Economic Development, No. 11, p. 9, New York. 1960.

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 wide frame of reference.

10. GOVERNING BODIES AND MUNICIPAL ADMINISTRATORS GENERALLY DO NOT RECOGNIZE THE NEED FOR EXECUTIVE DEVELOPMENT OF THE FIRE OFFICER.

The fiscally hard-pressed governing bodies and municipal administrators find it difficult to justify sending their fire executive to educational courses for long periods of time. This, it is felt, is partly due to recognition of the fact that there are no specific achievement levels established in many of these courses and activities. It is felt that if various achievement levels or acceptable ends could be shown to governing bodies and municipal administrators, these groups would be more receptive to allowing fire executives to participate.

The full scope and extent of the fire problem often is not understood by governing bodies and municipal administrators because membership in governing bodies is generally transitory. The office holder generally is not in the same office for a long enough period of time for him to understand the full depth and scope of fire service organization, operation, etc. Therefore, he must rely primarily upon his fire executives to justify their participation in educational and improvement activities. The fire executive then finds himself in a position without standards, without specific acceptable development programs, hard pressed to justify to governing bodies and municipal administrators why his fire service people need to participate in extended educational activities.

Executive development programs will not be possible until the people responsible for policy and decisions recognize, pay for and support the development process. Increasing economic and sociological problems justify the immediate need for more competent executive fire service officers.

Lawrence A. Appley, president of the American Management Association, made the following statement during an interview for the New York Times:

“We are entering the worst leadership crisis this country has ever seen in all spheres.

“The fantastic growth of our economy and the needs of our rapidly expanding population, mean that in 25 years management jobs will have quadrupled.

“The depression years deprived many executives now in their 50’s from getting proper training and the heavy casualties of World War II drastically cut off a large pool of potential manager.

“If you want someone to perform a task for you, you must place into his mind a clear image of what you want him to do. We must develop people so they will use their potential in full, whether in character, personality or productivity.

“An organization should be run as a football team where everybody knows what he is supposed to do. As for the coach, leadership requires followship but you cannot order it; you must win it.”⁴

⁴ New York Times, Sunday, Feb. 27, 1966.

11. FIRE SERVICE LABOR AND MANAGEMENT, MUNICIPAL OFFICERS AND ADMINISTRATORS MUST JOIN TOGETHER IF PROFESSIONALISM IS TO BECOME A REALITY.

If professionalism within the fire service is to be achieved, then professionalization must be made a common goal toward which all fire service organizations, municipal officers associations and professional management associations can work.

All must recognize that professional status begins with education. There is growing evidence of the emergence of a systematic body of a knowledge which can be applied to fire science and administration.

Without this close cooperation and coordination in the development of such a body of knowledge, acceptance of the fire service as a profession will be slow and difficult.

If professionalization is to be achieved, studies need to be made as to ways and means for coordination, and communication channels need to be devised and kept open, so that all organizations which have an interest in the fire problem can work toward a common goal of professionalization of the fire service.

12. THE TRADITIONAL CONCEPT THAT FIRE PROTECTION IS STRICTLY A RESPONSIBILITY OF LOCAL GOVERNMENT MUST BE RE-EXAMINED.

A principle of fire protection which many fire departments and governmental jurisdictions have had to learn the hard way is stated as follows:

“It is economically unfeasible for any single governmental jurisdiction to equip and man itself with sufficient forces to cope with the maximum situation with which it may be faced.” The lack of understanding of this principle has caused many communities to be caught short of fire suppression resources. As a result, catastrophes have not been minimized as fully as possible.

Many local governmental jurisdictions find themselves, in too many cases, too small to be large and too large to be small. As a result, individual communities cannot do some of the things which can be done if the economic base for the service involved is enlarged.

In many governmental service areas, we have seen the expansion of or consolidation of jurisdictions. Good examples of this are school consolidations, sanitary sewer consolidations, water distribution over intra-jurisdictional areas, central purchasing, police protection and, in some instances, fire protection.

Examples of this type of broadening of the economic base to provide adequate fire protection services are found in England. Prior to World War II, there were approximately 15,000 independent fire jurisdictions. During World War II, because of conditions which made it necessary, the fire service was nationalized and became a fourth arm of national defense upon which survival was greatly dependent.

In the denationalization of the British Fire Service in the late 40's, they did not return to 15,000 independent fire jurisdictions, but rather went back to approximately 150 fire jurisdictions. It has been commonly agreed by many fire officials that this method has improved the services and efficiency of the fire service in this situation.

Taking one state as a typical example, the state of Iowa has 940 organized fire jurisdictions. There are 99 counties in the state, with a total area of 52,290 square miles and a total population of 2,822,000.

By contrast, England has 50,874 square miles with a population of 42,000,000 and now has approximately 150 fire jurisdictions.

Many of these individual fire jurisdictions find themselves unable to cope with the financial burden of providing fire protection as a service. The economic stresses and strains become very pronounced as increased demands for other governmental services occur.

We have seen the trend in certain sections of the country, of the metropolitan concept of merging a city with several of its satellite communities.

A thorough cost analysis study needs to be made to determine if fire protection, as a responsibility of local government, is economically feasible.