

FIREWORD

A BULLETIN FROM
THE NATIONAL FIRE
PREVENTION AND CONTROL
ADMINISTRATION, U.S.
DEPARTMENT OF COMMERCE
WASHINGTON, D.C. 20230

NFPCA Designs Preliminary Concept on State Fire Safety Services

WHAT NEEDS to be done to better respond to the current and future fire prevention and control needs at the State level? This question is being repeated in queries to the National Fire Prevention and Control Administration. The question is coming from State officials across the nation, interested in improving the planning, development and delivery of their fire safety services.

The NFPCA is looking at the situation. The agency has been observing State programs and talking with State officials from both executive and legislative branches. Based on its research, it has developed a preliminary concept, a possible approach to a State fire

safety organization. These *beginning thoughts* point to the need for a single State focus to have the primary responsibility for matters affecting the fire safety of its citizens and for that State fire entity to receive meaningful input from the organizations and interest groups involved in or affected by the State fire prevention and control effort.

In exploring the present state-of-the-art of fire prevention and control activities in various States, it is evident that conceptually the State role relates to coordinating services; standardizing and establishing minimum levels of safety in the interest of public safety and welfare; and supplementing local and regional fire prevention and control efforts.

States perform their *coordinative roles* in many areas such as health care, criminal justice, transportation, public education and agriculture. Coordinative roles include a comprehensive identification of problems and needs, State and local program coordination, and processing and/or distribution of Federal assistance. Similar functions are performed in fire prevention and control.

State governments also *standardize* and establish legal *minimums* of safety and sanitation on a state-wide basis. State building codes typically establish standard minimums of safety and sanitation. Similar approaches are taken in highway safety, health care and occupational safety. Additionally, minimum standards are set for a variety of occupational skills, including fire fighting, police services, engineering, nursing, architecture and others. Finally, States are involved in standardizing information on various parameters including health statistics, fire statistics and economic indicators.

Often these standards and minimums are coordinated with Federal programs.

To help meet local and regional citizen needs, States also provide direct *supplemental services*. These services are of particular importance in rural communities, counties, townships and the smaller municipalities. Examples of these supplemental services include agricultural assistance, public health services, social services, planning and community development. Supplemental fire prevention and control services often include enforce-

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EDITOR'S NOTE: State-level activities aimed at improving the planning, development and delivery of fire safety services are definitely on the increase. The National Fire Prevention and Control Administration is seeing evidence of this as more and more State officials are calling or writing, asking for the NFPCA views on what needs to be done to better respond to contemporary and future problems.

To respond to these requests, our agency has begun to develop preliminary thoughts on State fire program functions, and how they logically could be coordinated. These thoughts are a *beginning*. They are the formulation of a response to your requests for our views. This issue of *Fireword* presents these thoughts to you, our readers, so that you can respond to them with your views, comments and suggestions. We need your input and ask that you send your comments to: David A. Lucht, Deputy Administrator, National Fire Prevention and Control Administration, U.S. Department of Commerce, Washington, D.C., 20230.

ment of fire safety standards, fire and arson investigation, forensic laboratory services, fire services training and public fire education.

Typically, States provide a variety of specific services which have impact on fire losses. These services often include:

- Collection and analysis of fire data
- Adoption of minimum fire safety standards for new buildings
- Adoption of minimum fire safety standards for existing buildings and premises
- Adoption of minimum fire safety standards for storage, handling and use of flammable and explosive materials
- Enforcement of fire safety standards
- Investigation of fire and fire-related crime
- Plan and deliver public fire education programs
- Adoption of personnel performance standards for fire safety personnel
- Delivery of fire training and education to fire service personnel and others.

These activities are all good. But more needs to be done. For instance, it is not uncommon for State-level fire prevention and control programs to be developed and executed by a variety of loosely coordinated agencies—and in varying degrees of quality. It is not infrequent that several State agencies find themselves in competition with each other in pursuit of the same goals. Often State agencies have overlapping authority and responsibility, and some needed services are not provided at all.

The Congress, in passing the Federal Fire Prevention and Control Act of 1974, declared that "fire is an undue burden affecting all Americans" and that "such losses of life and property are unacceptable." It also recognized that "fire prevention and control is and should remain a State and local responsibility," and that the "Federal Government must help if a significant reduction in fire losses is to be achieved."

The National Fire Prevention and Control Administration was created to give this help—to support and reinforce the fire prevention and control activities of State and local governments.

What is the NFPCA relationship with State governments? Several major issues have been identified: What are State responsibilities? How should they be carried out? How can NFPCA be most helpful? With whom in State government does NFPCA communicate concerning overall State programs?

After considering these and other related issues, the NFPCA has developed two *preliminary* findings:

- **FIRST**, The NFPCA believes that each State should designate a single State entity as having primary responsibility for the fire safety of its citizens. Just as the NFPCA was created as the "federal focus," each State should provide a "State fire focus." The primary purpose of such a focal point would be to encourage coordination, reduce duplication of effort, and fill voids in service, while reducing the State's fire loss.
- **SECOND**, the State fire entity should receive meaningful input from organizations and interest groups which are involved in or affected by the State fire prevention and control effort.

The concept outlined in this issue of *Fireword* might serve as a vehicle for accomplishing these two objectives. ■

EDITOR'S NOTE: *Fireword* is a monthly NFPCA publication. In each issue we'll present information on NFPCA activities. We'd also like to share stories of interest about fire prevention and control from around the U.S. with our readers. If you are involved in or know of an effective program, send the information and any pictures to: **Fireword**, Peg Maloy and Cheri Steffek, Editors, NFPCA, U.S. Department of Commerce, Washington, D.C. 20230.

NFPCA Outlines Model State Organization

THIS MODEL State concept for a State fire safety system establishes one possible method by which a State can provide a "State fire focus."

The focal point for State fire programs will be referred to as the "State Fire Commission." However, it must be emphasized that the references here to organizational names are of secondary importance. The important issue is the function: what must be done?

The State Fire Commission would be the single State entity responsible for coordination and balance within the overall State fire prevention and control program. The Commission would be constituted to assure meaningful participation by the paid, part-paid and volunteer fire services, including chief officers, rank and file personnel and code administration and enforcement personnel typical of fire marshals' offices. It should also include representation from local government administration, insurance industry, construction industry, consumer interests and State agencies such as the department of education, the State forester and the State fire marshal. This Commission would provide an opportunity for participation by the various interest groups and offer a mechanism for the balancing of various views. Functionally, the Commission would be a coordinating force—overseeing the actual implementation of State fire programs.

Obviously, the actual program activities of the State must be developed and implemented by professional full-time State employees rather than a "commission." Again, the titles of the employees or officials are of secondary importance to the actual identification of responsibility and function. Obvious too is the fact that all States are different in many respects with

regard to organizational framework, statutes and job titles. However, we have observed two types of State officials who "typically" have responsibility for functions which are primarily fire safety mission oriented:

- Director of Fire Training and Education
- State Fire Marshal

This program concept will focus on these two officials as the most probable candidates for carrying out statewide efforts. We will now examine programmatic functions and how, under this model, responsibility might be assigned to these officials. Subsequently, we will consider the role of the Commission itself.

Director of Training & Education

In some States, training and education responsibilities may be assigned to the fire marshal or some other official. In other States, training and education responsibilities are shared by several agencies. Whatever the title of the agency or agencies, the important consideration is that these specific functional responsibilities be clearly identified and assigned. For purposes of this outline, that agency is headed by an official called the Director of Fire Training and Education who would be assigned the following activities:

- A. Preparation of Personnel Performance Standards
 1. Personnel Performance Standards for firefighters.
 2. Personnel Performance Standards for code enforcement officers.
 3. Personnel Performance Standards for fire/arson investigators.
 4. Personnel Performance Standards for fire instructors.
 5. Personnel Performance Standards for public fire education specialists.
 6. Personnel Performance Standards for fire officers.
- B. Preparation of State Plan for Fire Education and Training
 1. Identify statewide training and education needs for the "public" (primary and secondary school ages and adults), as well as the needs of local personnel who

deliver community based public education programs.

2. Identify statewide training and education needs for fire services (fire-fighting, leadership, management, planning; code enforcement officers, fire/arson investigators, instructors; data collection, public education).
3. Identify statewide training and education needs for fire-related disciplines (design professions, industrial community, construction industry, etc.).
4. Formulate a training and education delivery system which
 - Provides equal opportunity to receive quality programs which respond to needs
 - Integrates the delivery capabilities of State instructional programs with those of local fire academies, primary and secondary schools, colleges and universities
 - Measures the effectiveness of training and education efforts
 - Adjusts readily to changing needs or indications of ineffectiveness

- Provides career incentives in fire prevention and control disciplines
- Tests and certifies students who have successfully completed courses of instruction

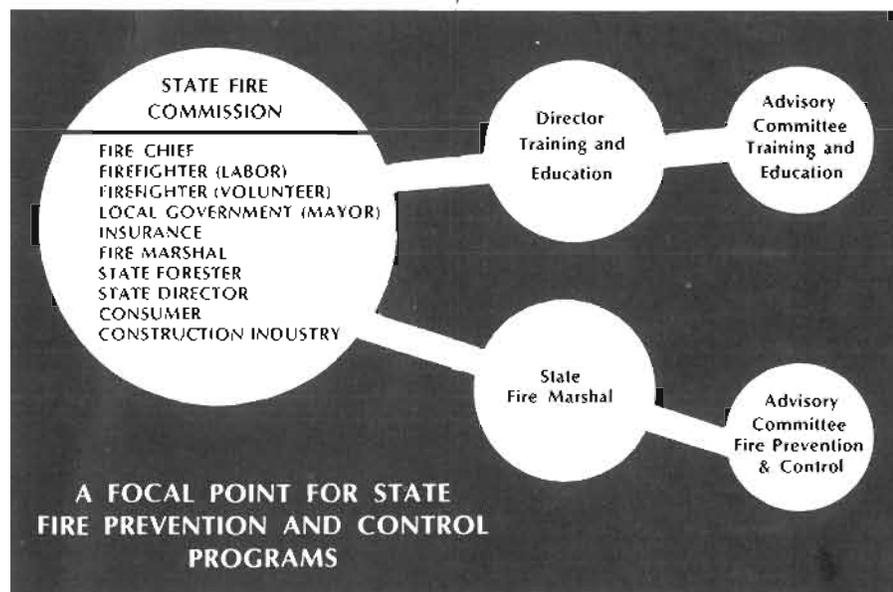
- C. Provision of Supplemental Services to Regional and Local Levels
 1. Provide fire training and education by professionally qualified personnel.
 2. Assist local communities in the planning, development and delivery of local training and education programs for the public as well as for fire safety specialists.

State Fire Marshal

In some states, the responsibilities here associated with the fire marshal's office are handled by the State Police or another executive unit. In other States, some of these duties may be as efficiently performed by the Director of Fire Training and Education, or his equivalent. For the purposes of this article, these functions are assigned to the State Fire Marshal's Office. Note that the critical factor is not the name of the State unit, but rather that the following responsibilities be well defined and assigned for implementation:

- A. Preparation of Standards
 1. Standards for collecting

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and reporting fire data.

2. Minimum standards for fire safety in buildings and premises and for storage, handling and use of dangerous materials.
3. Standards, rules and regulations for fire safety effectiveness statements.

B. Data Collection and Analysis

1. Collect data from local and regional fire services, fire insurance industry, hospitals and coroners/medical examiners.
2. Pre-process data and supply to National Fire Data Center.
3. Execute quality assurance programs.
4. Analyze data and define statewide fire picture.
5. Relay feedback data to local and regional fire services and others.

C. Preparation of State Master Plan for Fire Prevention and Control

Public Law 93-498 provides that "The establishment of master plans for fire prevention and control are the responsibility of the States and the political subdivisions thereof." The Public Law definition of "master plan" includes the following elements:

1. Survey the resources and personnel of existing fire services and analyze the effectiveness of fire and building codes;
2. Analyze short and long term fire prevention and control needs;
3. Develop a plan of action to meet the fire prevention and control needs;
4. Estimate cost and develop realistic plans for financing the implementation of the plan and operation on a continuing basis, and summarize problems that are anticipated in implementing the master plan.

Preparation of the State Master Plan would have to be done in close liaison with the State Director, and the Master Plan would closely interface with the State Plan for Fire Education and Training.

It is also recognized that in part the missions of other State agencies have impact on citizen fire safety (examples: building code regulation, occupational safety and health, disaster services, insurance regulations, wildland protection). The Master Plan would also have to take these services into account and contrast them against overall needs.

D. Provision of Supplemental Services to Regional and Local Levels

1. Code enforcement by professionally qualified personnel
2. Fire and arson investigation by professionally qualified personnel
3. Public fire education by professionally qualified personnel

State Fire Commission

To achieve interest group input, balance and coordination, the role of the Commission would then be:

- A. Formal adoption of standards prepared by the State Director and the Fire Marshal.
- B. Formal approval of the Statewide Fire Education and Training Plan prepared by the State Director.
- C. Advise the Fire Marshal as to the data collection and analysis activities, including adequacy of feedback reports.
- D. Formal approval of the State Master Plan for Fire Prevention and Control prepared by the Fire Marshal.
- E. Advise the State Director and the Fire Marshal as to the responsiveness of supplemental services.

If the Commission "workload" were considered to be excessive in accomplishing these responsibilities, the activities could be divided among special advisory committees. A functional advisory committee could be established for the State Director and the Fire Marshal. Each committee would be oriented to the specific responsibilities of each of these officials. The committee memberships might be separate from the Commission or they might be "subcommittees"

of the Commission itself. However, they would only be advisory in nature and ultimate coordination and balance would be achieved by the single State entity—the Fire Commission.

It does not appear necessary for the "Commission" to represent a high-cost activity. Members would possibly receive travel expenses and/or per diem to attend official functions. "Committees" might be strictly voluntary in nature. As stated previously, the actual planning, development and delivery of programs would be performed by the State officials. In some States it may be desirable to establish a full-time "Fire Administrator" to serve the Commission and to exercise administrative authority over both the Fire Marshal and the State Director. In other States, administrative coordination may be executed by the Governor with the Marshal and the State Director reporting to him through their respective Cabinet officers.

Appeals

Certain of the functions enumerated here involve legal controls and mandatory requirements (e.g., code regulations). In these cases, appeals mechanisms must be provided for persons aggrieved by the action of an agency or official. This can be handled in a number of ways, depending upon the administrative procedures statutes in the particular States. Among the options are the following:

- *Fire Commission hears appeals.*

In this case, the appellee might be a member of the Commission. For example: the State Fire Marshal may have written the order of code compliance which is the subject of the appeal. He may also be a member of the Commission. In such an instance, the Marshal might have to excuse himself from the proceedings because of conflict of interest. (Or, perhaps the State statute would not allow him to be a member in the first place.)

- *Create an "appeals board" solely for this purpose.*

- Use an "attorney examiner" to hear the appeal case.
- Provide for appeals directly to county or municipal court.

As a matter of public policy, the State may wish to consider handling appeals on human safety issues only in court. Part of the cause of "public indifference" about fire safety is due to the casual attitude government sometimes exhibits toward those responsible for dangerous situations. The public is probably much more conscious about traffic regulations than fire regulations. In a large part, this is due to the fact that few people are ever issued a "ticket" for willfully causing a fire danger to exist.

Statutory Requirements

The accomplishment of a State fire program as described will require a statutory foundation. While many of the statutory necessities are evident, the following will summarize some of the highlights. The State statute should:

1. Establish and appropriate funds for support of the State Director and Fire Marshal. Fire Commission members would probably serve without pay but may receive travel and per diem expenses.
2. Establish legal authorities, responsibilities and qualifications for the State Director,

NBS Studies Mobile Home Fire Safety

MOBILE HOMES now provide shelter for roughly one of every 27 Americans. Increasing concern over the potential fire hazards posed by mobile homes has prompted a comprehensive study by the National Bureau of Standards' Center for Fire Research.

Estimates indicate between

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3. Establish penalties for violation of mandatory regulations.
4. Establish criminal prohibitions for serious fire hazards, arson and careless fire conduct.
5. Allow for creation and administration of regional fire services.
6. Assure fire service statutes allow freedom of entry, promotion and protection of personnel in all possible disciplines (firefighting, inspection, investigation, public education, emergency medical), paid, part-paid and volunteer.
7. Establish mandatory reporting of fire data by fire service, fire insurance industry, hospitals and coroners/medical examiners.
8. Assure delegation of enforcement authority to local and regional fire officials.

Summary

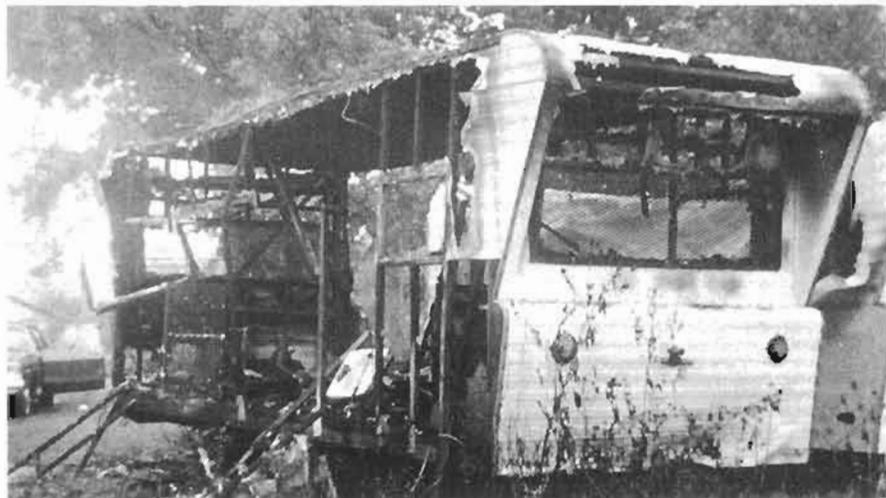
We have said that State programs should develop with meaningful input from those groups which are involved in or affected by the State fire prevention and

control effort. Likewise, the NFPCA is anxious to receive input to its programs. This preliminary concept is published in *Fireword* for that purpose.

This does not represent a requirement of the Federal Government. It is, rather, an attempt to share some of the NFPCA thinking with you. The concept should be looked at as *one possible method* which might be used to achieve a comprehensive, well-balanced State fire program—with meaningful input from interest groups in the State. It also represents the type of State organization with which the NFPCA would like to communicate in its efforts to support and reinforce the fire prevention and control activities of State government.

It is difficult to support and assist a State activity if there is no State fire focus and no definable comprehensive State program.

Your comments and suggestions are welcomed. ■



Mobile home fires too often end in total destruction. A program to assess the fire safety of modern mobile homes is now in progress at NBS.

Photo courtesy of the Prince Georges County Fire Department, Bureau of Fire Prevention

National Fire Prevention and
Control Administration
Announces
the First National Conference on
"The Dynamics of Fire Prevention"
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NBS STUDIES *continued*

2½-3 million mobile homes are currently in use in the United States. From 1960 to 1972, their production increased almost six times, from 103,700 in 1960 to 600,000 units in 1972.

Apparently, the fire incidence rate in mobile homes is no greater than for conventional housing; but the danger to life and property is reportedly three to five times greater in mobile homes.

Until recently, no systematic research studies had been done to determine the reasons for this apparent hazard. For the past year, however, the Center has conducted a project to develop a testing program to assess the fire safety of modern mobile home designs.

The studies are being carried out over a two-year period, during which a series of tests will be conducted to obtain experimental research data on the potential growth and spread of fire in a mobile home as affected by interior finish, layout, location of ignition and other special features. ■



Firefighters in turnout coats battle heavy smoke at this two alarm fire. Several studies are underway to improve a

firefighter's "protective envelope." Photo courtesy of the Boston Fire Department, Fire Prevention Bureau

NFPCA Initiates Studies

THE SPECIAL needs of firefighters are being studied in technology programs initiated by the NFPCA National Fire Safety and Research Office. A major program with the National Aeronautics and Space Administration for improving a firefighter's "protective envelope" has begun and is being supported through research underway in several other studies.

The cooperative program with NASA covers the design, development, prototype fabrication, test and evaluation of improved clothing and equipment for use by firefighters. Technology and materials

developed for the Apollo and Skylab projects are being used in the development, and representatives from the firefighting community are assisting researchers in identifying priorities.

The project objectives include: improving firefighter safety by providing protection against heat, flame, smoke, toxic fumes, moisture, impact, penetration and electrical hazards; improving firefighter performance through better protection, reduced weight, increased maneuverability and reduced physiological stress; and, meeting price levels acceptable to the fire service and local communities. NASA recently completed a project to improve the breathing system for firefighters, and will incorporate those findings into the current study.

The Harvard University School of Public Health, in cooperation with the Boston Fire Department, is conducting studies to measure the actual structural fire environment faced by firefighters. This will help determine at what temperatures his protective equipment must function.

With the University of Maryland, the NFPCA is sponsoring studies to measure the physical abilities and requirements of firefighters. This program covers cardio-vascular strength, flexibility, agility and coordination. Tests are beginning with a sample of 100 firefighters chosen from the 3,000 active members of the six fire departments of the metropolitan Washington, D.C., area.

Data from these studies will be incorporated with information gathered by the International Association of Fire Fighters (AFL/CIO), under a grant from the NFPCA. The IAFF has conducted an investigation into causes of deaths of fire department personnel. One of the most surprising results of the study was the high incidence of fatal heart attacks. Of 101 on-duty deaths investigated, 45% of the firefighters died from heart attacks, 62% of those attacks occurring at the fire scene. The IAFF will soon publish a report of these findings. ■

Site Selection Board Announces Spring Plans

THE SITE Selection Board of the National Academy for Fire Prevention and Control has held its first hearings.

The 3-member Board held hearings March 22-23 in Washington, D.C., and March 25-26 in San Francisco. Oral proposals and comments on possible Academy sites were heard.

The deadline for filing proposals was April 25, and now the Board will evaluate those it received. In selecting a site for recommendation to the Secretary of Commerce, the Board can also consider sites identified through its own initiative.

The schedule of activities for the Board includes, from May 10-21, visits to those sites the Board feels are most suitable. By June 30, the Board will make its recommendations to the Secretary of Commerce through the NFPCA Administrator Howard D. Tipton. The Secretary will make his final decision by October 29, 1976. ■

New Library Seeks Old Books

THE NFPCA's National Fire Reference Service is forming a library collection of books, audio-visual materials, literature and documents to serve the needs of the fire community and the Administration's staff. The library is being designed to operate as a national clearinghouse for fire-related information, and initially will make materials available through inter-library loan. Eventually, the Reference Service hopes to prepare and disseminate information products which will be of benefit to the fire community.

The new library is having problems obtaining copies of older, out-of-print books and materials. In addition to technical and fire-service management books, other volumes that can provide historical continuity and flavor of the

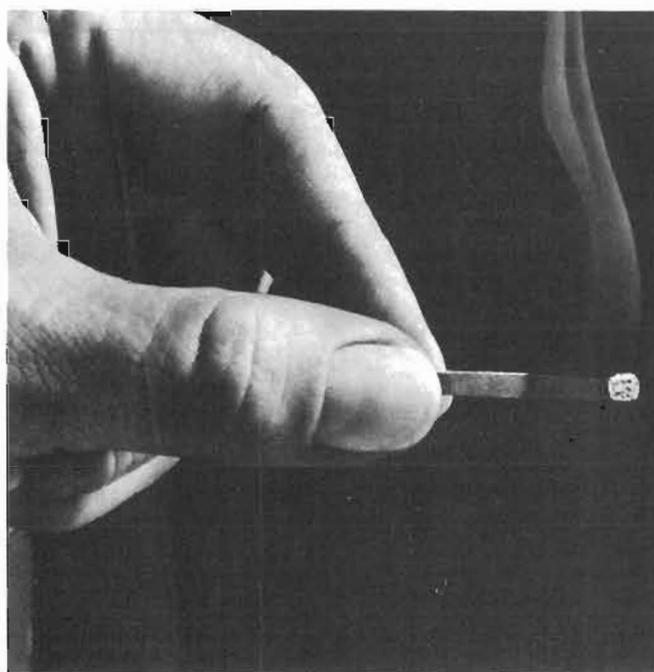
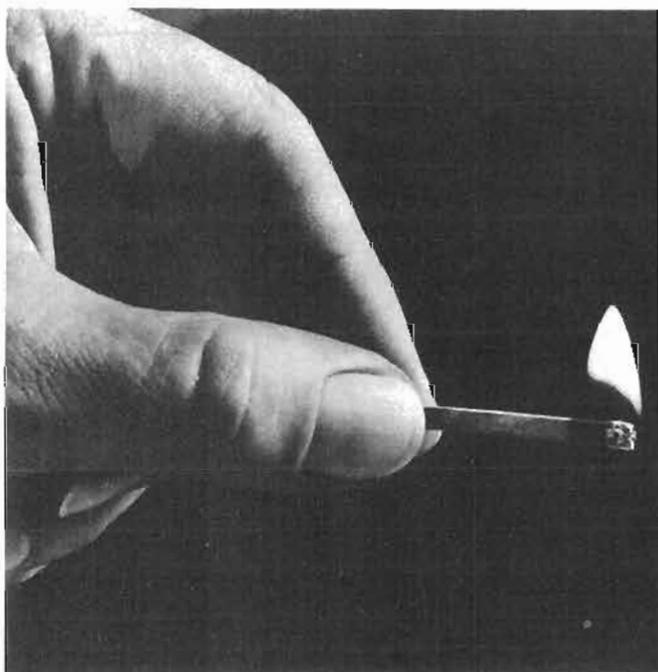
fire service are needed: books such as "Fire and Firefighters" by John V. Morris (1953), "The American Firemen" by H. L. Champlin (1875), "The Third Alarm" by James L. Ford (1893), "Fire Alarm—The Story of Fire Fighting" by J. J. Floherty (1949), and the pictorial history "The Romance of Firefighting" by Robert S. Holzman (1956).

If you have old volumes or other materials you think the Reference Service would find useful, and you would like to donate them, please contact the Reference Service for mailing labels. Write: National Fire Prevention and Control Administration, Attn: Richard G. Katz, Reference Service, P. O. Box 19518, Washington, D.C., 20036. ■

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An accidentally dropped match can do a lot of damage, but now one company is doing something to reduce this danger. The Diamond Match Division of Diamond International Corporation,

New York, has introduced "Stoplite," a bookmatch which is treated so that it burns with about half the heat output of the standard bookmatch, and which goes out by itself half-way down the

match stem. Diamond is changing its entire bookmatch production to incorporate the Stoplite treatment process.