



CITY OF
PORTLAND, OREGON

FIRE BUREAU

Bill
Dick Bogle, Commissioner of Public Safety
Kenneth L. Owens, Chief
Lynn Davis, Fire Marshal
OFFICE OF COMMUNITY RELATIONS
55 SW Ash Street
Portland, OR 97204
(503) 248-0203

Mr. Phillip Schaenman, President
TriData Corporation
1500 Wilson Boulevard
Arlington, VA 22209

Dear President Schaenman,

The recently published "Overcoming Barriers to Public Fire Education in the United States" is the most comprehensive and well thought-out publication in the fire service today. The thoughts and concerns expressed in the report reflect the bonafide need of citizens and fire departments across America. It's about time a report of this magnitude has been published.

Throughout the report the facts are presented in such a manner that I ask myself, "what is it that I'm contributing to the fire service that will indeed make a substantial change or affect citizens in my city?" To that I answer, "I have read the TriData report, and feel that is an important first step to Overcoming Barriers to Public Fire Education."

This report has had such an impact on me, that I'm sending TriData a list of other public fire educators that may not have received this report. Please send a report to each of the educators on the list, and if perhaps one of the names on the list has received the report, please ignore the name.

Thank you for one of the most deserving and influential reports to ever have been published on the traditionalism of the fire service. The implementation and changes recommended in the report would do more for fire service (safety education) credibility than the last fifty years of existence.

Thank you again,

Karl Findling

Karl J. Findling
Juvenile Firesetter Specialist
Portland, Oregon, Fire Bureau

enclosure

TI51970183

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12-8-87

Hi: Lisa

Phil ASKED ME to
SEND you THESE ARTICLES.

SARLENE

Mayor Koch Accepts Gift of Fire Equipment

At a ceremony in City Hall Plaza (New York) today, Mayor Edward I. Koch will accept the gift of a \$70,000 tractor truck designed to haul a hazardous waste decontamination unit to emergency scenes throughout the five boroughs. The truck was presented to the Fire Department by the New York Safety Foundation.

The Mack truck and the hazardous materials trailer together weigh 11 tons and stretch out to 57 feet, making it the largest piece of equipment in the Fire Department.

Fire Safety Foundation Chairman Dr. Gerald W. Lynch said the unit can process 48 people per hour at an emergency scene, providing showers and changes of clothing. The decontamination unit will be available for use by firefighters, civilians, police and other emergency service personnel. The equipment will be assigned to the Fire Department, but Emergency Medical Services personnel will operate the decontamination unit at emergency scenes.

The truck is a cab-over-engine tractor, painted fire-engine-red on the bottom and white on top. The entire unit will be quartered at South Street and Old Slip and delivered to emergency scenes by Ladder Company 15. The unit has the capability to generate hot water for showers en route to the scene. The Old Slip location is convenient to bridges, tunnels and the East River Drive, for easy access to the rest of the city.

The purchase of the truck was made possible by donations from the following organizations: Brooklyn Union Gas Company, Consolidated

Edison, Philip Morris Companies, Chase Manhattan Bank, John Jay College of Criminal Justice, Honor Emergency Fund and Sheriff's Fund. FN



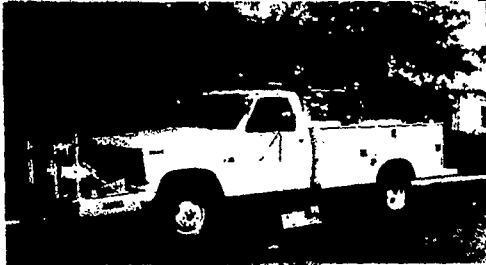
Cab anyone? City Fire Commissioner Joseph Spinnato takes the wheel of a new \$70,000 Mack truck cab, presented to the Fire Department to transport a decontamination unit. Joining Spinnato by the cab, a present from the New York Fire Safety Foundation, are, from left: Nicholas Mancuso, President of the Uniformed Firefighters Association; Dr. Gerald W. Lynch, President of John Jay College of Criminal Justice and Chairman of the Fire Safety Foundation; and Robert Butler, Chief of the Fire Department.

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Shown at right is the new Deluxe Pumper, custom-built by W. S. Darley & Co. for the Scio, New York, Fire Dept. This department selected the Darley Model SEC from the wide range of *Champion* midship pumps. It is a two-stage rated at 1000 GPM, known for its long performance life, ease of maintenance, and smooth engine-saving operation.



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At left is another example of how Darley can help specify and adapt *Champion* pumps to your type of apparatus and firefighting. This Mini Brush-Truck was custom-built for the Forest Lake, Penna., VFD.



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Just released is this 334-page compendium of the best and latest equipment and supplies widely used by many municipal departments, including Fire. With over 50 pages of the most popular gear for fire departments and firefighters, which will also appear in the new Darley FIRE CATALOG, due out this summer. Be sure your town will have both of these helpful buying references on hand.

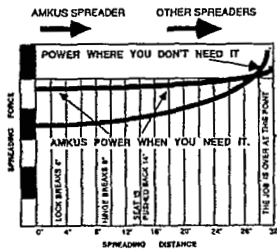
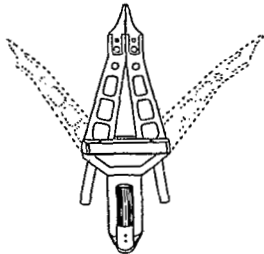


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NEWS & TRENDS

Fire deaths reach plateau

Results from the 1986 annual survey of U.S. fire departments indicates that the number of people dying in fires in the United States has reached a plateau over the past five years, with little or no significant change. According to a report by the National Fire Protection Association (NFPA) entitled "Fire Loss in the United States during 1986" a concerted effort is needed if the United States is to make significant progress to reduce fire deaths—as experienced prior to 1982.

The report states that in 1986, 5850 civilians (nonfirefighters) died as a result of fires reported to fire departments in the United States, down 5.4% from the previous year. The South led all regions with a rate of 33.1 civilian fire deaths per million population, 55% higher than the rest of the country.

In 1986, public fire departments responded to 2,271,500 fires, a de-

crease of 4.2% from 1985. For the fourth consecutive year, total fires attended were at virtually the same level. It is estimated that 73% of all structure fires occurred in residential properties, with 468,000 of those occurring in one- and two-family dwellings and 97,500 in apartments.

An estimated \$6,709,000,000 in property damage occurred as a result of fires reported to fire departments in 1986, a decrease of 8.4% from the year before.

According to the report's author, Senior Statistician Michael J. Karter, Jr., major opportunities still remain in the use of home smoke detectors, public fire safety education, product design initiatives aimed at the common causes of fatal home fires, and the wider use of residential sprinklers. Karter said the time is now for new strategies and a renewed energy to make significant reductions in these fire statistics.

dition, the kit contains material to assist with fundraising and recruiting.

To obtain a free copy of the kit, write to: New Tools Kit, Gus Welter, NVFC Secretary, 9944 Harriet Avenue, Bloomington, Minnesota 55420.

ICBO approves codes for residential sprinkler

Building officials of the International Congress of Building Officials (ICBO) overwhelmingly approved the first residential sprinkler requirement provision to be incorporated into any of the major building codes. Residential sprinklers will be used in apartments and residential or quick response sprinklers will be used in hotels.

The amendment provides automatic sprinklers in every apartment house three or more stories in height or containing more than 15 dwelling units and every hotel three or more stories in height or containing 20 or more guest rooms.

According to a report in *IAFC On Scene*, the International Association of Fire Chiefs spearheaded the fire community effort to win approval for the amendment. The IAFC Fire and Life Safety Codes and Standards Committee initially began the effort that resulted in success. Led by Chief Robert Ely, immediate past president

Union wants mandatory standards for furniture

John A. Gannon, president of the International Association of Fire Fighters, has announced that the union will campaign in four states for mandatory flame-resistance standards for furniture. Gannon said initially the union will focus on Maryland, Florida, Ohio, and Rhode Island. They are seeking the standards for furniture in hotels, motels, nursing homes, and other high-risk areas. New York recently approved toughened standards and according to Gannon, eventually the goal is federal action to prevent furniture-related fire deaths.

for radio and television spots. The material provides safety tips related to several topics, including home heating, home escape planning, and special precautions for children. In ad-

Prevention materials for volunteer departments

New media material kits are now available to help volunteer fire departments capitalize on the public awareness of fire safety generated by National Fire Prevention Week. The new material includes an updated edition of the National Volunteer Fire Council's resource kit, "New Tools for Volunteer Firefighters."

The material includes articles and camera-ready advertisements for newspapers, magazines, and scripts



The career and volunteer fire services of America were well represented in the September 17, 1987, "We the People" Constitution Day parade in Philadelphia, Pennsylvania. Sponsored by Volunteer Firemen's Insurance Services, Inc., the career fire service was represented by a 1907 horsedrawn American LaFrance steam pumper owned and manned by the Philadelphia Fire Department. The volunteer fire service of America was represented by a new 100-foot LTI ladder tower from the King of Prussia Fire Company, Upper Merion Township, Pennsylvania. The two units illustrated the change in apparatus technology from the turn of the century to today.—Contributed by William F. Jenaway.

WASHINGTON REPORT

training functions will be reorganized into an office of training in place of a training directorate.

Sen. Barbara Mikulski (D-MD) announced in early October that the compromise had been reached, freeing up 1987 year-end and 1988 (new year) funding for the agency. Several months ago, when Mikulski and other area Congressmembers became involved in the controversial actions, Mikulski has added an amendment to a supplemental funding bill freezing action on FEMA funding until the discrepancies were resolved.

As a result of the compromise, the U.S. Fire Administration will remain in Emmitsburg although it remains organizationally separate from the National Fire Academy. But the hiring freeze that had been imposed on the fire academy pending outcome of the USFA relocation is now lifted, and FEMA director Julius Becton has pledged to place a high agency priority on filling remaining vacancies. In addition, Becton has agreed to staff the new office of training, which will be located at downtown Washington FEMA headquarters, without reducing authorized positions at the National Emergency Training Center.

As reported earlier in this column, the USFA move was opposed by some employees as well as some outsiders who preferred to keep USFA and the fire academy in physical proximity. The effect of creating an office of training in place of a directorate may mean a reduction of status for the programs

under its purview, although this is not clear. Continued observation of the programs will tell.

The compromise will have the effect of freeing up action on budgets for the fire programs for the fiscal year which began October 1.

FEMA Hazmat funds distributed

The Federal Emergency Management Agency has announced two funding efforts to support hazardous materials safety and training efforts in states. In one action, FEMA has distributed \$20,000 to each of five states to pilot-test a series of technical assistance teams that will help local governments deal with hazardous materials problems. In addition, a total of \$5 million is being distributed to all 50 states as well as to certain regional response teams and U.S. territories.

The states receiving funds for technical assistance teams are Idaho, Kentucky, Louisiana, New Hampshire and New Jersey. Funds for the pilot test come from FEMA and the Environmental Protection Agency and support requirements of the Superfund Amendments and Reauthorization Act of 1986 (SARA). According to FEMA director Julius Becton, the purpose of the pilot test is to determine whether a peer approach to delivering technical assistance at the local level is feasible and effective. Results of the program could influence the future structure of financial and technical assistance activities.

The \$5 million in total awards to states is intended to support enhanced and expanded hazardous materials training efforts through state and local programs. This program, funded under SARA's Title II, is enhanced by a required 20-percent nonfederal contribution. The training will be delivered through existing delivery structures in the states and is to reach law enforcement, environmental, health and transportation communities in addition to the fire service with appropriate training.

Localities seeking training opportunities through this program should contact their state emergency management offices for information.

Survey examines NFA effectiveness

A survey conducted in late September by the Society of National Fire Academy Instructors paints a different picture of National Fire Academy effectiveness than was indicated by the recent Wingspread report of national fire service issues. The survey sought responses from state training officers in 50 states. Approximately two-thirds of those surveyed responded.

The survey asked respondents to assess fire academy course quality, duplication between NFA and state programs, whether NFA courses offer programs not available elsewhere, whether the state itself would have had the necessary resources to develop programs offered by NFA, and whether NFA programs offer a foundation on which state training is built. Separate questions applied to NFA field and resident programs.

In brief, responses to the survey show strong support of National Fire Academy courses. Some 91% said NFA courses provide training not available elsewhere. An average of 88% said the courses do not duplicate efforts in their state (91% said field programs do not duplicate; 85% said resident courses do not duplicate). By opposite proportions (85% relating to field courses; 91% to resident courses), the state training officers said they could not afford to develop the programs offered through the national academy.

In addition, in response to a series of questions concerning the degree to which state training officers believe NFA courses have enhanced fire protection effectiveness in their states; 79% said they believed NFA attendees

★ Making cigarettes firesafe

After testing thousands of commercial and experimental cigarettes, the National Bureau of Standards Center for Fire Research has identified changes in the features of cigarettes that could reduce the lives and property lost each year in cigarette-related fires.

Under the auspices of the Cigarette Safety Act, CFR conducted a series of studies that showed that thinner cigarettes with less tobacco and less porous paper—which cuts air circulation in the cigarette—can significantly reduce the chance of ignition when cigarettes are in contact with upholstery or mattresses. Filter-tipped cigarettes also are less likely to ignite furnishings.

The tests were conducted at the CFR laboratories in Maryland and

used small mock-ups of furniture. CFR's Richard Gann, head of fire measurement and research, says a standardized test method that relates to the real world and simple enough to be used as part of a quality assurance program is still needed.

NBS mathematicians also developed models for examining economic effects of the hypothetical changes on the cigarette and tobacco industries, using impact models covering supply and demand, fire loss, health and employment.

Cigarette ignition of soft furnishings is by far the leading cause of fire deaths and injuries in the United States. While more ignition-resistant furnishings are being manufactured, losses could be reduced if cigarettes also could be changed to cause fewer fires.



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12-8-87

LISA

Phil ASKED me to
SEND you the ATTACHED
ARTICLES

ARLENE

CHIEF HAWKINS PROPOSES SPRINKLERS FOR VIRGINIA

Chief Thomas Hawkins of Arlington, Virginia and President of the Virginia Fire Chiefs Association wants the Commonwealth of Virginia to begin a process to initiate installation of fire sprinkler systems in all newly constructed properties. Chief Hawkins stated that, " technology already exists to fully sprinkler multi and single-family dwellings and the adoption of the legislation requiring installation will be a step forward in providing future generations with the most effective fire protection".

LEARN NOT TO BURN "SAVES" REACH 238

The National Fire Protection Association Learn Not To Burn (LNTB) fire safety education program has now saved 238 lives in 112 documented cases.

The LNTB television public service announcements (PSAs) featuring Dick Van Dyke are credited with saving 161 lives in 73 documented incidents. The LNTB Curriculum for elementary school classrooms has saved the lives of another 77 people in 39 incidents.

SAFER CIGARETTES ARE POSSIBLE, SAYS GOVERNMENT

After testing thousands of cigarettes, the National Bureau of Standards (NBS) has issued a report indentifying changes in cigarette manufacture that could reduce loss of life and property in cigarette related fires.

According to NBS' Dr. Richard Gann, "We found that thinner cigarettes with less tobacco and less porous paper---which cuts air circulation in the cigarette---can significantly reduce the chance of igniting soft furnishings." Cigarettes with filters were somewhat less likely to ignite furniture, according to researchers.

IAFC AND APPLE COMPUTER INTRODUCE FIRE SERVICES MANAGEMENT PACKAGE

International Association of Fire Chiefs and Apple Computer announce a new software package designed specifically for the fire service. FireLink, an integrated program based on Microsoft Works, provides fire service officers with the tools to streamline their management operations.

FireLink runs on a Macintosh Plus or Macintosh SE computer, two 800K disk drives or a 20MB hard disk, an Apple LaserWriter Plus printer or Apple ImageWriter and a telephone modem for communications purposes. Together, this system provides the fire services with Desktop Publishing; Information Management; Calculations; Graphic; and Desktop Communications.

FireLink includes a manual to provide step-by step instructions on each program, and a video tape showcasing FireLink and other MacIntosh software packages in actual use by fire service professionals. Also included is a six month subscription to Online, a monthly newsletter designed for FireLink users. Total cost for the FireLink program is \$495. Programs are available now. For further information, contact Bill Kehoe at the IAFC, 1-800-248-IAFC.

WASHINGTON REPORT

The work of Kermit Smyth and J. Houston Miller may increase the ability of the fire service to deal effectively with soot, which impairs breathing, hinders vision and is a major cause of fire spread.

Cigarette safety group nears end of trail

Two September meetings, including a public hearing, will wrap up the work of the Technical Study Group of the Cigarette Safety Committee. After an August meeting to approve revised technical reports on subjects ranging from cigarette manufacturing techniques to economic impact, a public meeting will be held September 10 and 11 to hear public response to the group's work. Then, a final meeting of the study group in late September will aim to approve the final report to Congress on the group's work since its establishment in 1984.

At the group's June meeting drafts of several technical reports were reviewed and instructions given to their authors to respond to all comments and present revised reports in time for copies of the revised reports to be distributed to all group members before the August meeting.

Copies of the draft report are available by writing to Terri Buggs, Consumer Product Safety Commission, Room 420, Washington, DC 20207 or telephoning (202) 492-6554. Anyone wishing to make a presentation at the public meeting should contact Ms. Buggs immediately to make arrangements. Information about the locations and the time of the meeting is available from the same source for those wishing to attend.

Discrimination found in Bradenton, Florida fire department

The U.S. Department of Justice has obtained a consent decree requiring the fire department of Bradenton, Florida, to develop nondiscriminatory guidelines for recruiting and hiring firefighters, and requiring the department to give a black applicant \$20,000, top consideration for a job, and seniority ranking as though he had been hired September 15, 1983.

In its statement the Justice Department said the consent decree was filed to revolve an employment discrimination suit filed at the same time against the city and the fire department. The suit was an outgrowth of a charge first lodged with the Equal Employment Opportunity Commission by a black who applied for a firefighter position in 1983.

The suit charged that the fire department discriminated against the black applicant and other blacks on the basis of race in its recruitment and hiring. Although the city and fire department have entered into the consent decree, they deny discriminating against this or other black applicants. The city's labor force is 19% percent black; there are currently three blacks on the 69-member fire department.

As part of the consent decree, the city must among other requirements initiate a recruitment program to increase the number of qualified black firefighter applicants, advertise firefighter testing and application deadlines in the local media, and distribute information to area high schools and colleges. The Justice Department will now monitor Bradenton's employment activities for five years.

Of the many consent decrees of suits filed by the Justice Department in recent months, this case is the first one specifically involving a fire department. □

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11/17

Lisa -

See attached article on
'Fire Resistant Furnishings' from
Nov/Dec 1987 Fire Journal. (M-56-61)

Also, Jeff Shapiro heard that
modifications are being proposed to the
Uniform Building Code to require
furnishings to be more smolder-
resistant.

You might want to send a copy to
Larry Zoeller, too.

Phil

P.S. Also attached is Levin article

Fire-Resistant Furnishings

ROBERT L. JERVIS

OVER THE PAST 10 years, the United States has made substantial progress, through building codes, in installing fixed fire protection systems in public structures such as hotels, hospitals, and educational facilities. Chief among these are smoke detectors, which have saved numerous lives, and automatic sprinklers, which squelch fires shortly after they start, thus reducing deaths, injuries, and property damage.

Unfortunately, detectors, sprinklers, and all the other fire protection measures that we have taken have not yet made fires a thing of the past. Why? Because there are still too many variables that we have not brought under control.

One critical variable is the interior furnishings used in many buildings. It is no secret that most upholstered furniture manufactured today can be ignited easily by a small open flame and will quickly produce quite a bit of heat, smoke, and combustible gases. These gases and the accompanying smoke collect at the ceiling and, more rapidly than most people can anticipate, envelop occupants, limiting their ability to escape and trapping them in the resulting flashover.

Existing Requirements for Upholstered Furniture

SINCE 1972, THE federal government has imposed a cigarette ignition standard for mattresses. The problem of cigarette ignition was addressed first because

ROBERT L. JERVIS is Marketing Manager for Burlington Sandel Marketing of Burlington Industries in Greensboro, North Carolina.

smoking materials are the largest source of ignitions leading to fire deaths. But there is no federal open flame requirement and no federal regulation covering the fire performance of upholstered furniture.

However, there is a voluntary industry standard, developed in the late 1970s by furniture manufacturers represented by the Upholstered Furniture Action Council (UFAC) and supported by the US Consumer Product Safety Commission (CPSC), which is designed to reduce the likelihood of furniture fires from cigarettes. It appears to be working.

A CPSC staff report dated October 1984 said that testing of pre-UFAC and current UFAC upholstered furniture demonstrated that the program had "significantly improved the cigarette ignition resistance of upholstered furniture."¹ And the testing agency, Piedmont Research Laboratories, reported a 76.8 percent improvement of post-UFAC furniture over pre-UFAC furniture.²

Also in 1983, the NFPA adopted two standards addressing upholstered furniture: NFPA 260A, *Standard Methods of Tests and Classification System for Cigarette Ignition Resistance of Components of Upholstered Furniture*, and NFPA 260B, *Standard Method of Test for Determining Resistance of Mock-Up Upholstered Furniture Material Assemblies to Ignition by Smoldering Cigarettes*.

¹ Consumer Product Safety Commission Staff Memo, "Analysis of Pre-UFAC Test Results," September 18, 1984.

² Piedmont Research Laboratories, "Report to the Upholstered Furniture Action Council," August 24, 1984.

NFPA 260A draws heavily on the UFAC program and is recommended for residential-type use. NFPA 260B was developed from a proposed cigarette ignition resistance standard submitted to the CPSC by the National Bureau of Standards in 1976. It is recommended for upholstered furniture used in such facilities as hospitals, nursing homes, and residential custodial care and supervisory facilities, and in the public areas of educational properties, places of public assembly, and residential occupancies. This latter test method was adopted by the Business and Institutional Furniture Manufacturers Association, as well.

The NFPA Committee on Fire Tests has also been grappling with the problem of open flame ignition, and has expressed interest in the National Bureau of Standards' Cone Calorimeter test.

The only state to establish upholstered furniture standards is California. A California Bureau of Home Furnishings (CBHF) Technical Bulletin, Cal-116, which is similar to NFPA 260B, addresses cigarette ignition of upholstered furniture. Cal-117 tackles open flame and cigarette ignition of the resilient materials used in upholstered furniture. And Cal-133 deals with the ignition by open flame of seating for high-risk and public occupancies.

On a purely local level, such agencies as the City of Boston Fire Department and the Port Authority of New York and New Jersey have developed some other open flame requirements, but nothing that has been applied nationwide.



Testing Fire-Resistant Upholstery

IN THE MID-1970s, British researchers determined that treated cotton fabrics used as interlinings, or barrier materials, between combustible upholstery fabric and cushioning material could "reduce the rate of flame spread by a significant extent."³ If a treated organic fabric could do that, what could a treated inorganic fabric do?

An answer to that question came in 1985, when Burlington Industries contracted with Underwriters Laboratories (UL) to conduct a series of full-scale room burns to assess the effectiveness of Sandel™, their inorganic fabric interliner in inhibiting ignition and flame spread. UL did six room burns, four using 20-pound cribs of wood kindling and two using 5-pound cribs as ignition sources. Each room was furnished hotel style, with a bed, an upholstered chair, draperies, and wallcoverings.

Two of the burns, one with a 5-pound crib and one with a 20-pound crib, involved typical products constructed of combustible materials available in the market. Aside from the fact that the burn with the 5-pound crib took much longer to get going than the other, the rooms reached flashover from that point very quickly. Less than two minutes after the first furnishings were ignited by the large crib and less than three minutes after the smaller crib set them afire, the flames were "out the door." UL had to douse the fire in each case to protect the facility.

UL then duplicated those burn configurations, using an inorganic fabric as an interliner between the fabric and foam cushioning of the chair and as a replacement for the mattress ticking, pillow coverings, bed cover, draperies, and wallcoverings. The rest of the bedding system, including the box springs, spring-core mattress, cotton sheets, blanket, and pillows, all remained the same. In both of these tests, the only things that burned were the wood cribs themselves and the chair upholstery fabric on top of the inorganic interliner.

In the room furnished with combustible fabric constructions, temperatures reached 1,100°F in the 20-pound crib

fire and 990°F in the 5-pound crib before they were doused. In the room employing inorganic material, temperatures peaked at 419°F with the 20-pound crib and 90°F with the 5-pound crib. These temperatures included the heat contribution of the kindling.

Two more 20-pound crib burns of the room furnished with the inorganic fabric constructions were then conducted, with a couple of variations. In one, conventional foam was used in an upholstered chair in lieu of foam that met the requirements of California's Cal-117. In the other, the inorganic bedcover was replaced by a typical combustible bedcover. In each test, temperatures were somewhat higher than they were when the fire-resistant foam and fabric were used, but neither room got close to flashover and both fires burned themselves out.

These burns demonstrated that even when traditional combustible materials are used for bedcovers, upholstery fabric, and cushioning, the use of inorganic material for interliners, ticking, draperies, and wallcoverings can effectively stabilize and control fire growth, providing precious time for escape.

UL subjected the same chair and mattress assemblies individually to another series of tests in which the items were placed on a weighing platform and ignited and the results were monitored by instruments. A 1-pound wood crib was the ignition source. For the two chairs tested, the times recorded for ignition and peak temperature were essentially the same. But the severity of the ensuing fires was dramatically greater for the chair using typical combustible construction, even though each chair contained equal amounts of combustible material.

The NFPA Issues a Report on Contents and Furnishings

IN A DECEMBER 1982 report to the Standards Council, the NFPA Committee on the Toxicity of Products of Combustion noted the role that furnishings and similar contents play in loss of life from fire. Traditionally, furnishings and contents of buildings have not been strictly regulated. Yet these contents provide the bulk of the fire load in most buildings, and new materials are being introduced continually.

Since contents are usually the first things ignited in a fire and because they represent such an overwhelmingly high percentage of the combustibles in buildings, the Committee felt that they merited more attention. Effectively addressing the problems of the combustion hazards they present would be a major contribution to the reduction of loss of life from fire.

Based on the Toxicity Committee's recommendation, the Standards Council voted in 1983 to establish an ad hoc subcommittee on contents and furnishings. The subcommittee was asked to study the contribution of furnishings and contents to the fire problem and to recommend new approaches that the NFPA could take to meet the challenge of reducing that contribution.

After a thorough review of all the information available, the subcommittee concluded that a substantial part of the fire problem in the United States, as measured by fire deaths, arises from fires in residential occupancies. They also concluded that upholstered furniture, mattresses, and bedding play a dominant role in such fires.

The subcommittee felt that a further significant reduction in the number of fire deaths can be achieved primarily by preventing the ignition of contents and furnishings and by controlling contents and furnishings so as to be better able to manage a fire, should one occur.

The subcommittee's full report is currently being circulated for public review and comment by the Standards Council. Anyone interested can obtain a copy by sending a stamped, self-addressed, 8½-by-11 envelope to Arthur E. Cote, Secretary to the Ad Hoc Subcommittee on Contents and Furnishings, National Fire Protection Association, Batterymarch Park, Quincy, Massachusetts 02269.

³ Flexible Polyurethane Foam: The Facts. The British Rubber Manufacturers Association, Flexible Foam Group, London, N/D, p. 8.

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After the combustible chair was tested, an observer noted that "all the material was found to have been consumed or reduced to char and ash."⁴ In the chair with the inorganic interliner, "only the fabric covering the interliner was damaged."⁵ The foam cushioning darkened but did not become involved.

The mattresses tested were twin-sized, spring-core mattresses covered with layers of conventional polyurethane foam encased in an outer ticking and topped with two sheets. The only difference between the two was the fabric used for the ticking. After the test of the typical mattress, only the metal springs, char, and ash remained. In the other test, the lightweight cotton sheet covering the mattress was slowly consumed, but the mattress itself was protected from burning by the inorganic ticking.

Other Tests Confirm Conclusions

A PROJECT AT Southwest Research Institute (SWRI), sponsored by the Society of the Plastics Industry, augments the UL tests. SWRI tested individual chairs in a manner similar, but not identical to, UL's.

The chairs were upholstered with an unbacked polyolefin fabric that was chosen for its easy ignition and rapid burning characteristics. The foams they contained represented three levels of combustion performance: a foam to which no fire-retarding chemicals had been applied, a high-resiliency foam that had been chemically modified to pass Cal-117's definitions of fire-resistant foam, and a foam (CM 25FS) that had been modified with aluminum trihydrate and fire-suppressing chemicals so as to be rated as flame spread 25 in ASTM E-162, *Standard Method for Surface Flammability of Materials Using a Radiant Heat Energy Source*. Roughly half the chairs were constructed with an interliner of the same inorganic material used in the UL tests.

The ignition source was a 4 BTU/minute pilot flame, whose effect was negligible to the final data. In certain tests, a 2.0 W/cm² radiant flux was added to the seat areas to assess fuel contribution in a severe existing fire.

⁴ Personal communication in Underwriters Laboratories report to Burlington Industries.
⁵ Ibid.

Inorganic material used for interliners, draperies, and wallcoverings can stabilize and control fire growth

The conventional foam chair without the inorganic interliner ignited immediately, reached a stack temperature peak of 1,026°F within 4 minutes and another peak of 1,176°F in 10 minutes, then burned to ashes. With an interliner, the same chair took 43 minutes to reach a peak of 740°F. The covering fabric burned and the interliner darkened, and there was some melting of the foam beneath the interliner.

The chair with the Cal-117 foam and no interliner reached a peak of 1,320°F within eight minutes and burned to

ashes. The upholstery fabric on the Cal-117 chair with the interliner ignited and burned briefly before going out, probably because the foam beneath the interliner had melted, thus removing an energy source.

The chair with the most highly modified foam, CM 25FS, and no interliner reached a peak of 964°F in 40 minutes. About 60 percent of the chair, including half the foam, was destroyed. With the interliner, the chair took 82 minutes to reach a peak of 735°F and only fabric burned, although there was some darkening of the foam and the interliner.

The protective effect of the interliner was even more pronounced when radiant fluxes of 2.0 W/cm² were added. The chair with the CM 25FS foam and no interliner and the chair with the Cal-117 foam and an interliner performed almost identically, reaching peaks of 953°F and 1,008°F in 23 and 25 minutes, respectively.

However, the best performer was a

Four Designers Talk About Fire-Resistant Fabrics

Using firesafe fabrics is on the minds of virtually everyone who designs and decorates hotels, resorts, restaurants, and other commercial properties. Four prominent commercial designers give us their ideas on the subject.

Carolyn Halteman, President Class Act Design, Indianapolis

I not only think it's important and necessary to specify fire-resistant fabrics but actually irresponsible not to use them whenever and wherever possible. Statistics show that a large number of lodging industry fires and deaths are caused when furnishings ignite in a guest room, so we try to use fire-resistant fabrics in mattress ticking and as flame barriers between the outer upholstery and inner foam of soft furniture. These fabrics are always concealed under decorated materials, so they never conflict with a designer's scheme for a room.

All things considered, I think the day will come when these materials are made mandatory rather than optional for homes, offices, and public buildings, so we're getting our experience with them right now.

Jerry O'Hara, President Jerry O'Hara & Associates, Oakbrook, Illinois

Quite frankly, we specify flame-resistant materials whenever we can to protect both hotel guests and owners. I feel that guests appreciate these measures and will learn to give their patronage to hotels that practice them. Some guests are already sufficiently concerned to request rooms on lower floors or to ask about no-smoking sections.

Oddly enough, it is often the newer hotel which is more in need of enhanced fire protection. Not designed to keep construction costs at a minimum, older buildings may have thick masonry walls, operable windows, and self-con-

chair that had the CM 25FS foam and an inorganic interliner. Only the covering fabric burned, and temperatures never exceeded 322°F. Nor was the foam significantly damaged, although some of it did melt away from the interliner.

In 1985, still more tests were conducted according to CBHF Technical Bulletin 121 on mattress mockups constructed with two types of ticking and polyurethane foams developed by another foam manufacturer using "melamine" technology. The ignition source was a wastebasket fire. These tests convinced Gordon H. Damant, Director of the California Bureau of Home Furnishings, that the melamine foams "show outstanding . . . properties under severe fire conditions."⁶ Both mat-

tresses passed the tests, although there was a significant difference in their per-

Firefighters Urge Flammability Tests

On August 25, 1987, the International Association of Fire Fighters called on state legislatures to require flammability tests for furniture to be used in hotels, motels, and nursing homes. Union president John Gannon noted that burning upholstered furniture contributes to the deaths of 1,000 people, including firefighters, every year.

tained, closed-off areas that deter the spread of fire. Lacking atriums and multiple elevators, these older structures have fewer vertical shafts that can act as fire pathways. So designers for any type of new building should be especially alert to specifying materials and designs that take into account the fire hazards.

The extra cost of fire-resistant fabrics is minor, compared to the total cost of furnishing a complete guest room. Eventually, this will become less of a factor once these fabrics grow in usage and prices decline, and insurance companies take note of their effectiveness and reduce premiums.

Sue Wade, President Sue Wade & Associates, Dallas

We find that, increasingly, property operators already know about fire-resistant fabrics and are sensitive to choosing the safer materials. Obviously, they're ideal for facilities that can't be evacuated quickly in the event of a fire — hospitals, nursing homes, penal institutions, and high-rise hotels and apartment buildings.

Like other designers, I feel that we have to protect ourselves in today's litigation-crazy world. The fact that you comply with codes doesn't mean you have eliminated legal responsibility, especially if the codes are weak. Until fire-resistant fabrics become legally re-

quired at state levels or, even better, on the national level, it behooves designers to recommend them.

Caroline Crawford, Director of Design, The Management Group, Chicago

Virtually every fabric we use in our commercial work is inherently flame-resistant. The key word here is "inherently." Initial cost may be marginally lower for treated fabrics, but the structure and durability of inorganic fiber products make them a more cost-effective choice in the long run. Fabrics that are inherently fire-resistant never lose this characteristic, as treated fabrics do.

One way that designers can further the spread of fire-resistant fabrics is to specify them when renovation time rolls around. It's often easier to sell the idea at that time than when a new building has to be totally outfitted with furniture and furnishings. Revamping soft furniture with combustion-inhibiting foam is another possibility.

Another tip is not to get caught in the trap of thinking that one safety precaution, even fabrics, will do the whole job. A hotel or any other public building needs a total systems approach to fire-safety. This means detectors, alarms, sprinklers, extinguishers, emergency lighting, firesafe materials, and a building staff well-trained in their use.

formances.

The mattress used in the first test was covered with a conventional ticking and produced a ceiling temperature of 171°F after 3½ minutes. Ceiling smoke opacity was measured at 93, and the carbon dioxide concentration in parts per million (ppm) was 475. The weight loss 10 minutes into the test was eight percent; at the end of the test, it was nine percent. With an inorganic fabric ticking, ceiling temperatures reached a maximum of 90°F after 4½ minutes. Ceiling smoke opacity was 49, the carbon monoxide concentration was 179 ppm, and the weight loss was negligible.

What Can We Conclude?

THAT UPHOLSTERED FURNISHINGS often add a great deal of fuel to a fire is not news to the fire service or to code officials, who have a fair amount of control over the basic structure of a given building but little or none over the furnishings and other decorative materials that go into that building.

"It's a can of worms," says one building code official. "There is no way to monitor what goes into a building after it's built. We don't have the manpower or the authority."

Perhaps not. But fire tests have demonstrated that inorganic fabrics used as interliners, mattress ticking, drapery material, and wallcoverings inhibit ignition by open flame of materials beneath them and slow the subsequent growth and severity of the resulting fire. They also demonstrate that the use of inorganic interliners in conjunction with foams that have improved flame-resistant characteristics provide an extra degree of protection that is absent when they are not used.

While it may be unrealistic to expect the complete elimination of all fires in furnishings, the bottom-line conclusion to be drawn from these tests is that fire-resistant rooms can be designed using a systems approach. And if provisions for fire-hardened furnishings were built into the fire codes and/or building codes, penalties for violations, both civil and criminal, might have a substantial impact after the first few cases were adjudicated.

⁶ "The Flexible Foam Industry's Response to Tough Firesafety Regulations," address by Gordon H. Damant at UICFH of '86, The Hague

Myron Levin

MAKING A FIRE-SAFE CIGARETTE

Not long after saying good night to the last dinner guest, the Mitchell family was dead.

Billie Mitchell, 33, was a non-smoker; his wife Kathi, 27, smoked occasionally. A guest may have dropped the cigarette, or maybe it spilled from an ashtray into a crack of the sofa that night in August, 1985. Apparently it smoldered, undetected, as the household slept, finally starting the fire that killed the couple, their children Jennifer, 4, and Joshua, 1, and a visiting cousin.

Bob Calvin, Billie's friend and boss at a local trucking firm, was called next morning to the home in Taft, California, to help identify the bodies. "After the tears," Calvin said, "I got sick."

Calvin had been through this before. During his childhood in Oregon, Calvin recalled, two of his young cousins died, and a third was horribly disfigured by a furniture fire from a cigarette dropped at a party. "How he (the third cousin) lived is beyond everybody's comprehension," Calvin said.

Cigarette smoking has been called the nation's leading preventable cause of death, accounting for more than 300,000 premature deaths a year from cancer and other diseases, according to the U.S. Surgeon General. What's less known is that cigarettes start more fatal fires than any other ignition source, causing about 30% of all fire deaths in this country, according to government studies.

The toll from cigarette fires—about 1,500 to 2,000 deaths per year—seems paltry compared to that from smoking-related disease. But smokers presumably knew of the risk, while many victims of cigarette fires are children or innocent adults who were in the wrong place at the wrong time. Along with deaths, cigarette fires also cause at least 6,000 injuries per year and \$400 million in property loss, according to a study by the National Fire Protection Association.

Cigarette manufacturers deny the frequent charge that they use additives to keep cigarettes from going out. But in the manufacturing process, tobacco moisture, paper porosity and other variables are controlled to produce cigarettes that will keep on burning when not being puffed. A cigarette dropped

on a sofa or easy chair may smoulder at 700 degrees (C) for 30 to 60 minutes, according to fire experts, which is more than enough time to ignite many types of furnishings.

The call for a fire-safe cigarette dates at least to the late 1920s, when Massachusetts Congresswoman Edith Nourse Rogers pushed unsuccessfully for a cigarette that would go out a few minutes after put down. In fact, dozens of patents have been issued over the years for such self-extinguishing cigarettes. The cigarette makers contend, however, that these cigarettes would have an unacceptable taste or would require use of hazardous additives.

They see cigarette fires as strictly a problem of carelessness, and not of product design. Their claim that an acceptable fire-safe cigarette cannot be produced has met with considerable skepticism, in part because tests have shown that two commercial cigarettes—Carlton and More—already are slightly safer than rival brands.

Nonetheless, the industry's carefully guarded immunity from most health regulation extends to the arena of fire safety, where there are fire-resistance standards for many items that cigarettes burn, but none for cigarettes.

That could change after this fall, when a cigarette safety panel makes its final report to Congress. The advisory panel, set up by Congress three years ago, has found that certain physical changes—such as looser-packed tobacco—make for a cigarette that goes on burning with less chance of starting a fire. The findings are certain to renew the call for a fire-resistance standard for cigarettes.

Savvy Campaign

But the industry plans to be ready. During the last four years, it has been building a bridge—actually more of a superhighway—to the group with the most interest and influence on issues of fire safety.

In a unique and savvy lobbying campaign, the Tobacco Institute—the political arm of the cigarette firms—has lavished millions of dollars in grants and contracts on fire departments and state and national fire safety groups. The groups are to develop educational materials on fire safety and run community fire prevention programs. The campaign has been a success, according to the benchmark cited last year in an internal Tobacco Institute memo. By mid-1986, the memo said, the institute was "68 percent toward our goal of 200 working relationships within the fire community."

This interest in fire prevention was fueled by the momentum of cigarette safety legislation. In 1979, after a family of seven in his district died in a cigarette fire, Rep. Joe Moakley (D-MA.) introduced a bill to require cigarettes to go out within five minutes of being left unattended. The following year, Moakley and Sen. Alan Cranston (D-CA.) took a different tack, introducing bills directing a federal agency to set a fire resistance standard, or to report back to Congress if it found that a fire safe cigarette was technically unfeasible.

The agency was the Consumer Product Safety Commission, which has jurisdiction over some 15,000 products. In the area of fire safety, it has fire resistance standards for children's

Myron Levin, a reporter on leave from Los Angeles Times, is reporting on the tobacco industry.

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sleepwear, mattresses, carpeting and rugs, and applied pressure that led to a voluntary standard for upholstered furniture.

But the safety commission lacks jurisdiction over the product that is estimated to cause more injuries and deaths than any other. In 1972, when the commission was created—and then again in 1976—Congress specifically barred it from scrutinizing “tobacco or tobacco products,” even though no other agency had that authority.

Moakley complained in a speech of a “misguided policy of making the world safe for the cigarette . . . While hundreds of millions of dollars were being spent to make furniture, rugs and mattresses resistant to cigarettes,” he said, “nothing was being done to make the cigarette less likely to ignite.”

Tobacco executives were understandably reluctant to tinker with cigarettes, which are among the most profitable of all legal products. Americans spend \$30 billion a year on cigarettes, or about 1% of consumer disposable income. Naturally, the cigarette companies are wary of any change in cigarette appearance or taste that might affect sales.

Although leery of saying so publicly, the cigarette makers also are nervous about product liability claims from cigarette fires. A few lawsuits have been filed over cigarette fires, and none has been successful. But some legal experts and others believe that a sympathetic plaintiff—such as a burned child—will eventually prevail against the maker of the brand that lit the fire.

The industry would be all the more vulnerable if it were shown “that there is a technology for a fire-safe cigarette,” said a former staff member of the Tobacco Institute who would not speak for attribution. “To them, that’s a very, very scary issue.”

Andrew McGuire, a San Francisco health activist and member of the cigarette safety panel, said a lawyer for R.J. Reynolds Tobacco Co., the number two U.S. cigarette maker, once acknowledged the industry’s fear of liability suits.

Over lunch about five years ago, McGuire said, he was asked by the lawyer, Max Crohn: “What would be your opinion if we were to ever so slowly change the way we make our cigarettes so that they became fire-safe?”

McGuire said Crohn went on to explain:

“We are between a rock and a hard spot with products liability. If we come out with a fire-safe cigarette tomorrow, it may . . . show that we could have done it . . . If we do it gradually, then there’s a chance that it won’t be an issue.”

Crohn has a different memory of this conversation. He said he believes it was McGuire who raised the question of product liability. Crohn also said he knew of no way to make a fire-safe cigarette, and so had no basis to ask such a hypothetical question. Crohn added: “There is no way that Reynolds was not investigating the issue because of a fear that if it solved the problem it would bring about lawsuits.”

Whatever its private legal worries, the industry publicly has focused on the problem of technical feasibility, contending that a fire-safe cigarette would be unappealing to smokers or hard to mass produce. As they usually do when threatened by regulation, industry officials portray themselves as defenders of science against political meddling.

“Congress cannot legislate science into existence,” was a phrase heard with regularity during debate on the bills.

Industry officials further argued that a fire-safe cigarette, if one could be made, would not burn as thoroughly as current brands—and thus would deliver more tar, nicotine, and carbon monoxide in the smoke.

As there was no point in saving hundreds of people from fires so thousands more could die of disease, this seemed a potent argument. Also a novel one, coming from an industry that denies smoking causes disease. Industry officials explained that health authorities and their customers worry about nicotine and tar, even if they do not.

But after several years of successful resistance, the industry was forced to reassess its position. By 1984, cigarette safety bills were pending in several states, including New York, California, Massachusetts, and Illinois. Federal involvement did not seem so dreary, compared with the nightmare of different rules from state to state. So the industry cut a deal that bought it time and held the states at bay.

With tobacco industry support, Congress passed the Cigarette Safety Act of 1984—which called for a study of the technical and commercial feasibility of making cigarettes with “a reduced propensity to ignite upholstered furniture and mattresses.” State legislators informally agreed to put their bills on hold pending completion of the federal study.

The act created a 15-member Technical Study Group—with members from government agencies, health and fire prevention groups, and the cigarette and furniture industries—to oversee a battery of technical and economic studies. The most significant research involved tests on experimental cigarettes with varying physical characteristics. The study concluded that thin cigarettes with less densely packed tobacco (those with less tobacco “fuel”), that were wrapped in less porous paper, were considerably more fire-safe than the best commercial brands.

Vulnerable Industry

Moreover, the study said, “some of the best performing experimental cigarettes had per puff tar, nicotine and CO [carbon monoxide] yields comparable to typical commercial cigarettes,” apparently knocking down a key industry argument.

In a draft of its final report to Congress—due October 30—the study group said “it is technically feasible and may be commercially feasible to develop cigarettes that will have a significantly reduced propensity to ignite upholstered furniture and mattresses.” An Interagency Committee—made up of top officials with the CPSC, U.S. Fire Administration, and Department of Health and Human Services—is to follow with policy recommendations by December 30.

Spokesmen for the Tobacco Institute have declined comment until of the report is final.

Dr. Richard Gann, chief fire scientist with the National Bureau of Standards and study group chairman, said the industry would be vulnerable to lawsuits and state legislation if it ignores the study findings.



Researchers placed a lit cigarette on an upholstered chair to show how dangerously long a cigarette can smoulder before igniting a smoky fire.

The cigarette men on the panel "are perceptive both about their product and the prevailing climate," Gann said. "I'm fully confident that they'll take advantage of the technology that's being developed by us."

Yet the industry members contend there are practical barriers to producing the types of cigarettes that tested fire-safe. Smoking a cigarette as thin and loose-packed as the best experimental one would be like sucking a thick milk shake through a straw. Dr. Alexander Spears, executive vice president with Lorillard, Inc., manufacturer of Kent, Newport, True, Old Gold and other brands, recently told the advisory panel.

"I don't think you could give them (the experimental cigarettes) away," remarked Dr. Preston Leake of American Tobacco Co., which makes Pall Mall, Carlton and Lucky Strike.

In the political realm, meanwhile, the Tobacco Institute has been trying to win friends, or at least neutralize opponents in preparation for renewed debate in Congress. Fire prevention grants and contracts have been issued to individual fire officials, state and county fire agencies, and virtually every significant national group, including the National Fire Protection Association, the International Society of Fire Service Instructors, and the National Volunteer Fire Council. The grants have paid for fire prevention conferences and for development of

fire safety educational materials for high school students, senior citizens and the handicapped.

More than 100 municipal fire departments, including those in the biggest U.S. cities, have also received grants, principally of audio-visual equipment and curriculum materials to run community fire prevention workshops. The Milwaukee fire department got money to buy smoke alarms for the poor, and the San Francisco fire department got a Chinese language TV spot promoting smoke detector use.

The Tobacco Institute also has developed and distributed to over 4,000 volunteer fire departments a sophisticated fundraising and membership recruitment kit, including camera-ready print ads and taped public service announcements.

The institute has further endeared itself by lobbying to preserve the U.S. Fire Administration—a perennial target of the Reagan administration budget knife. "Our efforts in cooperation with fire groups to save the U.S. Fire Administration continue to be welcomed by the fire community," according to an internal memorandum. Meanwhile, the institute appears to have replaced the federal agency as the biggest financial supporter of fire safety education.

The investment has been "in the millions of dollars," said institute vice president Peter Sparber, who declined to give a specific figure.

This is not "a black bag operation," Sparber said. "We've

tended to support almost every good fire prevention idea we've found, and have taken very little credit for it."

But some of the workshop material developed for the program is reticent about the toll from cigarette fires, and blames these fires solely on carelessness. For example, according to the instructor's manual for the "Fire Care" program for senior citizens, "cooking-related fires" kill 500 people each year and cause 8,000 to 12,000 injuries.

Such statistics are lacking, however, in the discussion of "careless smoking," which is described as "one of the leading causes of fire deaths in the United States." Being the leading cause, it does qualify as "one of the leading causes."

A key architect of the program has been Phil Schaenman, a former associate administrator of the U.S. Fire Administration who has a consulting firm specializing in fire statistics.

In recent years, Schaenman's firm, Tri-Data Corp., has received hundreds of thousands of dollars from the Tobacco Institute to conduct fire prevention studies and advise where grants should go. In one of its contract proposals, Tri-Data described itself as "the matchmaker between fire officials and organizations and the tobacco industry."

At the same time it has served the Tobacco Institute, Tri-Data also has worked extensively for government agencies that have endorsed a fire-safe cigarette—although Tri-Data's work

and Tri-Data) so far."

However, one federal study by Tri-Data touched off a low-grade flap. In 1984, the firm had a contract with the Federal Emergency Management Agency to analyze fire data from 10 states. One of the states was New York, where the legislature was debating a fire-safe cigarette bill. According to Tri-Data's analysis, arson and heating equipment fires killed more New Yorkers than cigarettes fires in 1982. In a letter to state lawmakers, the Tobacco Institute promptly spread the news that cigarettes were no longer the leading cause of fire deaths in the state.

The trouble was, Tri-Data had relied on partial data that excluded New York City. Looking at the entire state, New York officials later said, cigarettes were still the undisputed leader in causing death by fire.

In a letter responding to the institute claim, the state Office of Fire Prevention and Control wrote: "As best as OFPC can determine on a statewide basis, misuse of smoking materials remained in 1982, as it was in 1981, the leading single cause of fires involving civilian deaths."

But despite its obvious political agenda, the institute has won considerable gratitude within the fire service. Fire safety education, traditionally a neglected area, may reduce fire losses—and it certainly makes fire officials look good.

Cigarette manufacturers deny the frequent charge that they use additives to keep cigarettes from going out. But in the manufacturing process, tobacco moisture, paper porosity and other variables are controlled to produce cigarettes that will keep on burning when not puffed.

for them did not directly concern that issue.

In 1985, Tri-Data had a contract with the Consumer Product Safety Commission to analyze fires involving wearing apparel. And Tri-Data currently has a \$131,000 contract with Schaenman's old employer, the U.S. Fire Administration, to investigate major fires.

Tri-Data and another tobacco industry contractor—the advertising and public relations giant, Ogilvy & Mather—have teamed up on a two year contract with the Fire Administration to boost fire safety awareness. Ogilvy & Mather got the \$1.4 million contract and subcontracted \$266,000 of the work to Tri-Data, according to federal officials. Ogilvy & Mather also has worked with Tri-Data on the Tobacco Institute's fire prevention program. Ogilvy & Mather has a huge account with Brown & Williamson Tobacco Corp. to promote several brands, including Barclay and Capri, and has accounts with the General Foods subsidiary of Philip Morris Cos.

Schaenman said he is "extremely sensitive" to potential conflicts, but that there is none here. Officials with the Fire Administration agree. Jim Coyle, assistant administrator for fire prevention and arson control, said the agency knew of the cigarette ties before letting the contract. Coyle added: "I think we've gotten an excellent job out of them (Ogilvy & Mather

Tobacco Institute support has "been tremendous for us," and Jim Monihan, chairman of the National Volunteer Fire Council. "We appreciate it, but we also appreciate the fact that there's no strings attached to it."

The institute has even won grudging praise from some of its staunchest critics. "Up front, they (the Tobacco Institute) were told you can give us money or grants, but that doesn't stop us from going after you on the fire-safe cigarette," said Tom Nyhan, a captain with the San Francisco Fire Department. Although the department was "close to insulting," said Nyhan, the institute gave it a grant.

Whether this will help the cigarette makers defeat regulation—or tailor it to their needs—remains to be seen. But the program has enabled the industry to spotlight fire hazards other than cigarettes, while rehabilitating its image with an influential group.

"Between you and me, five years ago, I wouldn't even sit in the same room with people from the Tobacco Institute," said a former official of a leading fire safety group.

Said the institute's Pete Sparber: "Doing reasonable things with reasonable people is good politics . . . We are acting in good faith. If that counts for anything, . . . we should benefit." ■