

# MIS

## Management Information Service

International City Managers' Association / May 1969, Vol. 1 No. L-5



### FIRE DEPARTMENT OPERATIONS DURING CIVIL DISORDERS

#### THE REPORT AT A GLANCE

Civil disorders accompanied by fire destruction are not new in this country. Nor are fire problems created by riots significantly different from those possible under nonriot conditions.

Yet fire fighting during civil disorders is obviously more difficult than under normal circumstances. The violent reaction of spectators, the duration of a riot, and the intense news coverage given serious disturbances add new dimensions of complexity.

Experience in dealing with fire problems caused by rioters suggests the need for establishing a task force system, under which a coordinated group of fire companies travels and operates as a self-sufficient unit throughout the emergency. Confinement of fires, rather than prevention of fire losses, and rotation of manpower to prevent fatigue are other key factors in effective fire fighting during riots. In addition, adequate communications and command posts are essential to keep tab on fire developments.

City administrators should recognize that the typical fire department is inadequately manned and equipped to deal effectively with fire problems caused by riots. Among major elements in an emergency operations plan should be steps for police protection of fire fighters, provision of adequate fire alarm systems, plans for purchase of apparatus suited to riot conditions, and arrangements for calling fire-fighting assistance as needed.







# Fire Department Operations During Civil Disorders

*This report was prepared for MIS by Boyd A. Hartley, Associate Professor, Department of Fire Protection Engineering, Illinois Institute of Technology.*

*Location:* A community of about 20,000 people on the East Coast. *Background:* There had been trouble in town and soldiers were on duty in the event of further trouble. Fire protection consisted of a volunteer fire department with outside sounding devices to indicate an alarm of fire. *Situation:* About 9:15 P.M. the alarm bells rang. The people of the community turned out to fight the fire and to watch the firemen. But it was a false alarm; there was no fire. Instead of going home, the crowd began to jeer at the soldiers, calling them names and throwing things. The soldiers eventually lost their composure and fired into the crowd, killing five people of whom three were volunteer firemen.

Sound familiar? Read on.

A tide of people swarming into the big cities were causing labor and welfare problems. "These people" were looked down upon, persecuted, and exploited in the labor market. Most were penniless, seeking out a bare existence in the slums. It was impossible for one of "these people" to succeed in business or politics; fire and police departments would not consider them for membership.

As "these people" became more numerous, they were shut off more and more from the social life of the community, keeping to themselves in their own slums and ghetto areas. In one large community, after several weeks of sensational rumors of immoral conditions and strange behavior among "these people," particularly in their churches, a mob formed and marched on the area in which they lived. The mob eventually destroyed the principal church, a four-story 80-foot-long building, by burning it to the ground while preventing firemen from fighting the fire.

On another occasion in the same city, a riot eventually resulted in ransacking of every house in the ghetto area, with windows broken, furniture thrown into the street, and shops smashed and destroyed.

In another city, some shots were fired at a political rally and the resulting riots lasted four days, with a school, three large churches, and blocks of buildings destroyed by fire.

The emotional response generated against the constant increase of "these people" was such that a national political party was formed and received considerable support from citizens, many of them well known, who had previously supported the existing two-party system. A nationally known political figure ran for president of the United States under the auspices of this party but, fortunately, was defeated.

Sound familiar again? Maybe, but I doubt you have recognized any of these situations.

The first was a riot in Boston on March 5, 1770, commonly known as the Boston Massacre. The incident was considered to be of particular influence in solidifying the inhabitants of the British colonies behind those advocating a rebellion, now better known as the revolutionary war.



The second series of incidents occurred as a result of Irish immigration into the United States in the middle of the nineteenth century. The riots described occurred in Boston in 1834 and 1837 and in Philadelphia in 1844; "these people" were Irish Catholic immigrants. There were a number of riots in those cities most affected by the immigration, and many of the riots resulted in destruction by fire and direct conflict between the firemen and gangs of Irish toughs as well as other normally peace-loving Irishmen defending their slum residences.

The political party founded on an antifoignier bias, especially anti-Irish and anti-Catholic, was the Native American party, commonly known as the Know-Nothings. Former President Millard Fillmore ran for another term on the Know-Nothing ticket and, fortunately, was unsuccessful.

## A History of Riots

By now it is obvious that public riots are nothing new in this country. In fact, we have a long history of riots accompanied by fire destruction of property, beginning with our earliest history.

There was a wave of incendiarism in many cities in 1676, and a large fire occurred in Boston with some feeling that sermons by Reverend Increase Mather, better known for his later connection with the witchcraft trials, encouraged the arsonists. In 1715, before New York or Philadelphia had even one fire engine in service, Boston had a board of "fire wards" with responsibility not only for extinguishing fires but also for suppressing all disorders.

A series of fires in New York City in 1741 appeared to be caused by a conspiracy of Negro slaves and resulted in trials and executions with eventually 154 Negroes sent to jail, 13 burned at the stake, 18 hanged, and 70 transported. Twenty whites were jailed, 4 hanged, and 8 transported.

The Committee of Vigilance was founded in San Francisco in 1851 during the gold rush boom as a result of fires started by the criminal element known as Hounds, who robbed shops, stores, and homes in the path of the fires. The vigilante system spread through the gold rush area until eventually superseded by law and order.

Some of the worst riots in the history of this country occurred in 1863 as a result of opposition to the draft during the Civil War, with riots, fires, and demonstrations in cities and towns of New York, New Jersey, Wisconsin, Massachusetts, Pennsylvania, Ohio, Missouri, and Kentucky. Confederate saboteurs took advantage of the riots to destroy food and ammunition supplies and arms factories while encouraging the Northerners to fight among themselves. In New York City there were three days of draft riots during which 1,200 people lost their lives and many buildings in all parts of the city were destroyed by fire.

## MANAGEMENT INFORMATION SERVICE

May 1969 - Vol. 1 No. L-5

Editor: Walter L. Webb

Management Information Service reports are published monthly by the International City Managers' Association, 1140 Connecticut Avenue, N.W., Washington, D.C. 20036. Copyright © 1969 by the International City Managers' Association. No part of this report may be reproduced without permission of the copyright owner.

Subscription rates (including inquiry-answering and additional services) are based on population of subscribing jurisdiction and will be furnished on request.

This report is intended primarily for subscribing jurisdictions above 25,000 population. Concurrent monthly reports, prepared primarily for jurisdictions below 25,000 population, are available from Management Information Service.

## The Fire Problem

The fire problem created by a riot or civil disturbance is not much different from the problem that has been present in most cities all along but has been ignored under the philosophy that "it can't happen here." This statement is better understood by analysis of the fire problem normally present in every community.

### TYPES OF FIRES

Most fires are small fires. The National Fire Protection Association defines a large-loss fire as one involving a loss of \$250,000 or more. The NFPA reports that about 10 percent of all fires in the United States and Canada account for 90 percent of all property-damage loss; conversely stated, 90 percent of the fires account for only 10 percent of the loss. Fires causing individual losses of \$250,000 or more represent less than 0.02 percent of the total number of fires but account for 20 percent to 25 percent of the total fire loss in any one year.

NFPA statistics for the calendar year 1967, the latest available at the time of this writing, bear out these general statements. In 1967, there were 471 fires in the United States and Canada that caused \$250,000 or more property damage each; the total number of fires that year was 960,900. Thus, the



large-loss fires were only 0.049 percent of the total, or about one-half of one-tenth of 1 percent. The total damage from these fires was estimated at \$443,471,000 out of a total fire loss of \$1,623,000,000. It is particularly noteworthy that only three of the large-loss fires contributed \$148 million of the total damage caused by large-loss fires during 1967.

**Typical Small Fire.** From these data and by analysis of the fire statistics of any given community it becomes clear that most fires within a city are extremely small, easily extinguished by a relatively small force of men and a few pieces of fire apparatus. If we add to the statistics of actual fires and fire losses the large number of fire department responses to false alarms, it is quite likely that nearly all actual-fire responses in any given community are to fires well below that classified as a large loss.

Unfortunately, many cities have restricted their fire departments to a size and efficiency that can easily handle this type of fire but would be poorly equipped or prepared to handle larger fires.

**One-Building Fire.** The next most serious fire situation in a community is the single large fire involving one occupancy or one building; this may or may not be a large-loss fire. Any city with one or more large buildings — whether an industrial property, an apartment house, a hotel, or a school — has the potential for this type of fire.

When such a large single-building fire occurs, the fire department will characteristically attempt to extinguish the fire as quickly as possible while at the same time minimizing the fire damage. To accomplish this, every effort is made to advance into the building and fight the fire from inside. If manpower permits, salvage operations are carried on during the extinguishment phase as well as during subsequent phases.

After extinguishment, the fire-damaged area will be overhauled to be certain of complete extinguishment and to eliminate the possibility of a rekindled fire. Even after overhaul, it is quite probable a few men will be left as a fire watch, with hose lines connected directly to hydrants. During every phase of the fire-fighting operation, passive spectators will be controlled without difficulty by a usually ample supply of policemen.

**Multibuilding Fire.** The next most serious fire situation is a single large fire involving several multistory or multioccupancy buildings. Again, essentially the same procedure must be followed as described above; only the magnitude of the fire problem has changed.

**Several Large Fires.** The most serious fire condition encountered, usually in only the largest communities, is several large fires at the same time, widely separated or at least not adjacent to one another.

## Fires During Civil Disorders

The fire problem encountered during a riot or civil disorder is essentially one of those described above or a combination of them. However, additional factors complicate the problem.

- *First, the spectators are not passive bystanders and may be violently hostile.* As the police have a law enforcement problem of their own in attempting to quell the riot, they can devote only a limited force to protect the firemen.

- *Second, whereas the normal fire situation in a community can be expected to last only a matter of hours as the period during which maximum manpower is brought to bear, a riot and its accompanying fires may last for several days.* The duration of a disorder intensifies any problems caused by basic inadequacies of manpower, apparatus, and equipment.

- *Third, a riot is more spectacular than a large fire and, being a police problem as well as a fire problem, receives more publicity in the national news and communications media.* For example, the typical citizen is aware of the riots in Detroit in 1967, lasting for eight days and resulting in a fire loss estimated up to \$12 million, but hardly anyone outside the immediate area concerned is aware that a fire in a refinery in Lake Charles, La., burned for two weeks in 1967 and resulted in property damage of \$20.5 million!

## OPERATIONAL PROBLEMS

Operational problems caused by riots and possible solutions have been recognized and discussed by the International Association of Fire Chiefs. A valuable pamphlet for every fire department official having command responsibilities is *Fire Fighting During Civil Disorders*, published by the IAFC in 1968.<sup>1</sup> This report goes into detail concerning operational problems that may be expected to occur in any given situation. Although written for the fire chief, it will be of value to other city administrators by making them more aware of fire department problems. The appendix to this MIS report, which is excerpted from the IAFC pamphlet, includes a checklist of recommended fire-fighting procedures during civil disorders.

Several operational features are noteworthy:

1. Experience indicates the best approach is establishment of a task force system under which a coordinated group of companies travels and operates as a single unit for the duration of the emergency.

<sup>1</sup>Copies of this pamphlet are available at \$5 each from the IACF Headquarters Office, 232 Madison Avenue, New York, N.Y. 10016.



2. Because of the probable limited capability of the department, each task force must be self-sufficient; the task force must handle its assigned problem without recourse to any assistance.

3. The operations in many situations must be directed toward confinement of the fire to the building of origin, with extinguishment at less than a total loss of the building being improbable.

4. Communications must be maintained and command posts established to determine what is happening and what must be done next.

5. The possible duration of the riot or civil disorder forces establishment of a system for rotation of manpower to avoid undue fatigue and for continuous use of fire apparatus.

## What Can the City Administration Do?

Many fire chiefs have recognized the necessity for a more adequate and better trained and equipped fire force than is presently available in the community. All too often, fire chiefs' requests for increased fire protection have been ignored because of costs or the size of fire normally encountered.

The city administrator must recognize that a small fire department (in relation to the needs and fire hazards of the community) can extinguish only small fires and will be overwhelmed when a large fire occurs, whether caused by a civil disorder or not.

The American Insurance Association in its Special Interest Bulletin No. 319 published in January 1969, states that "except for the fire departments in a few of the larger cities, none are adequately manned, with the result that in many instances the on-duty fire force may not be able to control a serious fire without the assistance of off-duty members or outside aid."

Ask yourself or your fire chief this question: If the two largest buildings in our community were burning down at the same time, would our fire department be able to extinguish both fires? If the answer is yes, you *may* be able to overcome the fire problems encountered during a riot, if it does not last too long.

## OPERATIONS PLAN

Possibly the most important function of the city administrator is to see that complete and detailed plans are drawn up for every predictable situation that may occur during, or result from, a civil disorder. Obviously not every situation can be covered in this short report, but the following comments give some indication of the scope of and necessity for planning civil disturbance operations.

**Police-Fire Cooperation.** First and foremost, there must be cooperation among all city departments and particularly between the fire department and the police department. Fire fighters should not be expected to provide their own protection against injury while fighting fires and should not be permitted to bear arms of any description. Protection is a police function. If the police or other enforcement agencies cannot provide the necessary protection, fire-fighting personnel should leave the riot area and allow the individual buildings to burn, directing their efforts to preventing the fire from extending beyond the riot area.

**Fire Apparatus.** Apparatus purchased in the future must be selected with riot situations in mind, for even though a riot or civil disorder may not have occurred, many cities report an increasing number of incidents of harassment of firemen. All equipment carried on fire vehicles should be in closed compartments. Every vehicle must have protection for firemen, such as closed cabs of possibly six-man size with shatterproof glass all around, or protective screens of wire netting, plastic, wood, metal, or other satisfactory material. As fires will probably be fought from outside of buildings and with minimum manpower, every pumper should have a vehicle-mounted turret nozzle.

The list of design features could be continued at some length. In addition, spare parts must be stockpiled in order to be immediately available. For example, a good supply of tires must be on hand, as a carpet of broken glass will probably lie between the fire station and the building on fire.

**Fire Alarms.** It is predictable that all methods of receiving alarms from the general public will be swamped and overwhelmed at an early stage of a riot. A community of any size having only a few fire alarm operators on duty can fully expect to lose control of the fire situation and never regain it. The limited number of trunks usually available on the switchboard of fire departments will prove to be totally inadequate for the purpose, and many citizens will be unable to call the fire department to report fires.

The public telephone system also will likely be overwhelmed by the number of phone calls placed during a riot. In addition, it is quite possible that the telephone system will be destroyed either by sabotage or fire in the riot area, causing exposed wires on buildings, in alleys, or on streets. Thus, underground construction of circuits is not only aesthetically pleasing but also highly practical as a protection against damage.

A municipal fire alarm system is an asset, particularly as a means of receiving alarms of fire from locations outside the riot area. It should be noted that a telegraph-type fire alarm box works on a clockwork mechanism having an operating spring that will run



down if the box is operated repeatedly without being rewound.

All fire alarm calls received must be investigated in some way. Once a riot starts, the police should investigate all calls from the riot area; the fire department should respond only after it is certain there is a fire to be fought.

**Fire-Fighting Assistance.** It is vital that written arrangements be made in advance for whatever aid may be available from nearby communities. This has been an important factor in the ability to provide fire protection during riots. However, it must also be kept in mind that riots may occur in more than one city, and outside aid may be busy with problems of their own. Therefore, assistance from other communities should be depended upon for only a minimum amount of help.

Arrangements for assistance need not be limited to other communities or government installations such as naval bases. It is possible that many cities could get assistance from the citizens of the community and, in

some cases, from the inhabitants of the riot area. There have been many occasions when the nonmilitant residents of an area have helped firemen by hauling hose and preventing theft of equipment.

In New York City, Engine Company 28 on the lower East Side responds to alarms accompanied by a fire department patrol car carrying four Puerto Ricans and a Negro, aged 16 to 21, who guard the truck and other equipment to prevent theft, try to see that firemen are not attacked, help in directing traffic and giving first aid, and act as interpreters.

The city administrator should also see that the fire chief and his staff attend conferences and meetings, both national and regional, where they may listen to speakers and talk with personnel from other cities to learn what can be done to fight fires during riots.

Again it should be emphasized that the fire situation caused by a civil disorder is probably no worse than could be encountered during times of civil order. The fact that it occurs during a civil disorder merely complicates and intensifies the hazards.

## APPENDIX

---

### Fire-Fighting Procedures During Civil Disorders\*

The following important points should be considered in developing plans for civil disturbance operations.

#### Fire Problems

1. Police problems should be watched closely for possible development into fire problems.
2. Time interval between police and fire problems may be a matter of an hour or days.
3. Helicopters or small planes are effective in evaluating the dimension and direction of the fire problem. Activate plans for their use.

#### Command Posts

1. Number required based on local fire problem(s).
2. Define probable areas in advance.

3. Site selection based on:
  - a. Ample parking space
  - b. Wide roads for maneuvering
  - c. Accessibility
  - d. Communications capabilities
  - e. Living accommodations
  - f. Cooking facilities
  - g. Toilet facilities
  - h. Medical facilities
  - i. Command operations rooms
  - j. Secure area
  - k. Near trouble areas
  - l. Fuel dispensing facilities
  - m. Mechanical repair facilities

#### Communications

1. Prepare communications plan and determine where supplementary communications are available. Civil Defense may be helpful.
2. Obtain extra portable radio units. These are at a premium at such times.
3. Inform all personnel of any special signals to be employed to designate civil disturbance.

---

\*Extracted from *Fire Fighting During Civil Disorders* (pp. 58-59), published in 1968 by the International Association of Fire Chiefs.



4. Keep one radio channel clear for operational command purposes. If supplementary channels are not now available, start a program to obtain them.
5. Messages must be screened and those of extreme importance should be transmitted by telephone, not radio, for security reasons.
6. A system of hand signals should be used by department officers to direct fire fighters.

### Personnel

#### Relief and Feeding

1. Plan for relief of crews on a regular basis so that men do not become exhausted.
2. Do not overlook planning for feeding crews. Civil Defense authorities can probably be of great assistance.

#### Recall

1. Plan for speedy recall of off-duty men and a manning schedule for splitting two-piece companies and activating reserve apparatus.
2. Plan for reassignment of men in salvage companies, etc., that may be necessary during such times.

#### Protection

1. Identify protective measures and procedures for implementation during times of tension.
2. Notify police to obtain armed guards for active units.
3. Order all men to wear full protective equipment, including face shields, if available.
4. Warn all men not to operate alone in the event of trouble; officers to pay particular attention to pump operators and hydrant men.
5. Order all men and officers to wear same colored protective clothing and helmets when disorder signal is received. This includes chief officers.
6. Prepare an evacuation plan for stations in critical areas.
7. Assign a fire fighter with good first aid knowledge to each apparatus.

#### Mutual Aid

1. Do not call mutual aid until after your own men are recalled.
2. Advise all mutual aid companies that may be called of your plans and their place in them.
  - a. Type of equipment which may be needed.
  - b. Double manning for units to provide for relief.
  - c. Location to respond to for convoy directions.
3. Advise mutual aid companies as to where to assemble in convoys for later response to predetermined assembly areas.

#### Operations

1. Set forth on-site operational activities to be implemented if a civil disturbance emergency occurs.

2. Provide written documentation of authorities and responsibilities of key participants in the plan.
3. Provide basic guidance for gathering intelligence and for activating communications necessary to make timely and effective decisions.
4. Provide maps and inventories necessary to make effective decisions and take effective action.
5. Identify priorities to be considered in local fire defense.
6. Fire service and law enforcement agencies must work together to solve the problems.
7. Frequent briefings must be held with Federal, State, County, and local law enforcement agencies to keep aware of any possible condition that might arise.
8. Coordinate all plans with local police, sheriff, and National Guard and jointly plan police protection for all task force units.
9. Plan a basic task force of two pumpers, one ladder, and one chief officer for operations. A third pumper may be substituted if ladder company shortage exists.
10. All task force companies should immediately remove axes, bars, nozzles, and other equipment from exterior of apparatus and place them in compartments or otherwise under cover.
11. All open-cab apparatus should immediately be protected by means of shields previously prepared and in readiness.
12. Provide mutual aid and command arrangements necessary for effective fire defense.
13. Don't commit your forces until certain of need. Make certain armed guards are on hand.
14. Decide whether or not to respond to obvious false alarms.
15. Warn all officers not to respond with red lights or sirens where mobs are gathered.
16. Order fire station doors closed and maintain only a minimum of illumination.
17. Chief officers may have to move from one location to another due to the numbers of fires.
18. When an area is considered unsafe, fire alarms should not be answered in that area.
19. Units attacked upon responding to an alarm should leave at once.
20. Task forces should respond to and return from all calls as a group.
21. Use hit and run tactics.
  - a. Task forces should attempt to knock down and black out fires as quickly as possible with heavy streams. Small fires should be attacked with preconnected lines to maintain mobility.
  - b. Keep men together and operate as closely as possible to apparatus.
  - c. Keep hose lines to minimum length.
  - d. Use straight streams for best reach.
  - e. Make maximum use of wagon pipes, turrets, etc. If mutual aid is required, make your call immediately.
  - f. Do not overhaul or even think of salvage.
  - g. Never let men operate alone - at least two men should always be with the apparatus.
  - h. When fire is blacked out, pick up and get out of the area as quickly as possible.
22. Provide policies for training personnel as necessary to cope with potential local fire threat.