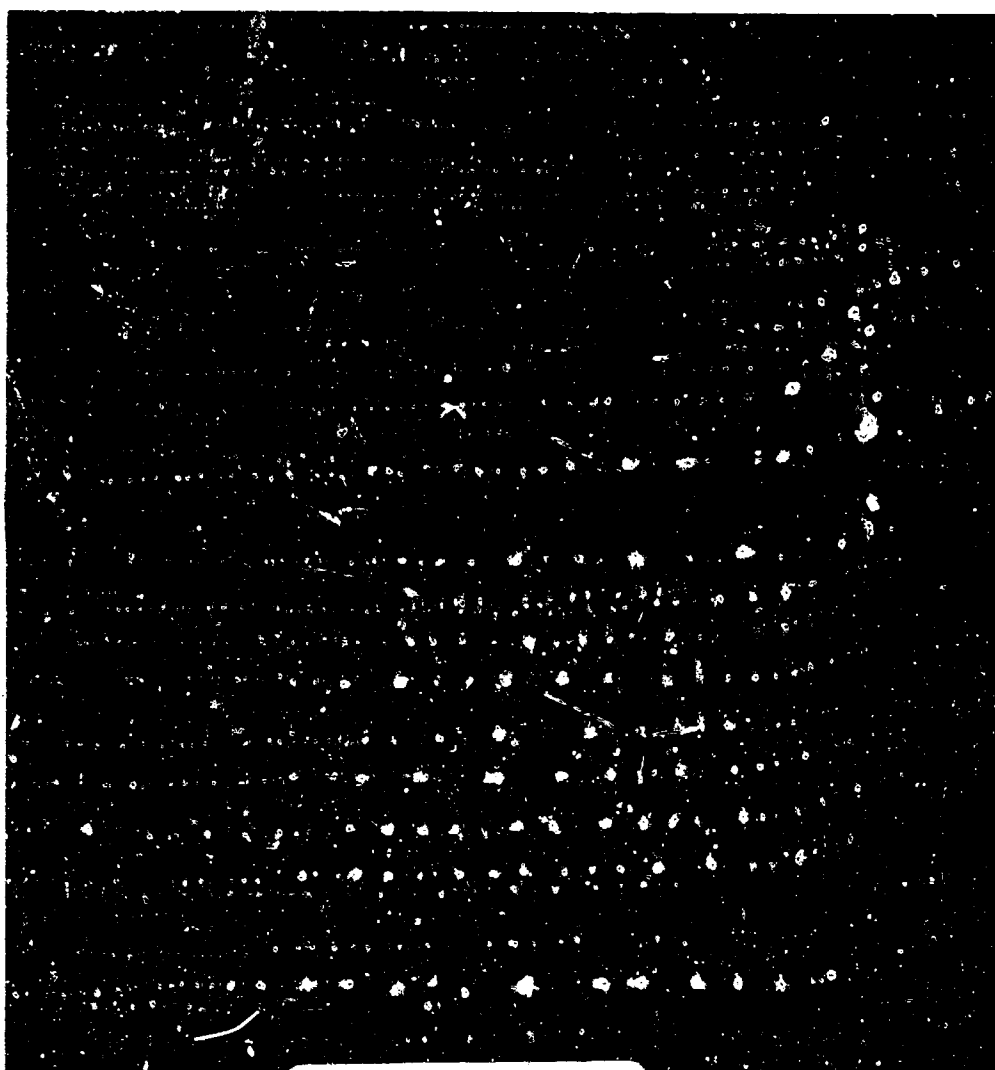


DISASTER RESEARCH CENTER SERIES

AN ANALYSIS OF LOS ANGELES FIRE DEPARTMENT OPERATIONS DURING WATTS

GEORGE WARHEIT and E. L. QUARANTELLI

AD 702769



Reproduced by the
CLEARINGHOUSE
for Federal Scientific & Technical
Information Springfield Va. 22151

DC
REPRODUCED
31 1970
RECEIVED

DISASTER RESEARCH CENTER

• THE OHIO STATE UNIVERSITY

89

Disaster Research Center Monograph Series
No. 7

AN ANALYSIS OF THE LOS ANGELES
FIRE DEPARTMENT OPERATIONS DURING WATTS

by

George Warheit
University of Florida

and

E. L. Quarantelli
The Ohio State University

for

Office of Civil Defense
Office of the Secretary of the Army
Washington, D.C. 20310

December 1969

OCD REVIEW NOTICE

This report has been reviewed in the Office of Civil Defense and approved for publication. Approval does not signify that the contents necessarily reflect the views and policies of the Office of Civil Defense.

CONTRACT OCD-PS-64-46
WORK UNIT 2651-A

THIS DOCUMENT HAS BEEN APPROVED FOR PUBLIC
RELEASE AND SALE; ITS DISTRIBUTION IS UNLIMITED

AN ANALYSIS OF THE LOS ANGELES
FIRE DEPARTMENT OPERATIONS DURING WATTS

George Warheit
and
E. L. Quarantelli

Abstract

This monograph examines in a sociological framework the operations of the Los Angeles Fire Department during the civil disturbance -- the so-called Watts riot -- in August 1965. The focus of the monograph is on one major type of collective response, that manifested by complex or formal organizations with bureaucratic structures. Three major components of the Los Angeles Fire Department are examined and it is shown how the structure and functioning of the organization was altered during the disturbance. Attention is given to modifications in administrative decision-making procedures, the handling of tasks, and the patterns of communication within the organization. The authors indicate how the larger community context and organizational relationships of the department probably affected its overall response to the crisis.

FOREWORD

This document is one of a series of publications prepared by the staff of the Disaster Research Center, The Ohio State University. This aspect of the work of the Center has been sponsored by the Office of Civil Defense under Contract OCD-PS-64-46, Work Unit 2651-A. Below is a listing of the materials which have been included in the monograph and the report series.

Monograph Series

Thomas E. Drabek, Disaster in Aisle 13: A Case Study of the Coliseum Explosion at the Indiana State Fairgrounds, October 31, 1963

Russell R. Dynes, Organized Behavior in Disaster: Analysis and Conceptualization

Daniel Yutzy with William A. Anderson and Russell R. Dynes, Community Priorities in the Anchorage, Alaska Earthquake, 1964

William A. Anderson, Disaster and Organizational Change: A Study of the Long-Term Consequences in Anchorage of the 1964 Alaska Earthquake

David S. Adams, Emergency Actions and Disaster Reactions: An Analysis of the Anchorage Public Works Department in the 1964 Alaska Earthquake

George Warheit and E. L. Quarantelli, An Analysis of the Los Angeles Fire Department Operations During Watts

Report Series

(Authored by various members of the Disaster Research Center staff)

The Functioning of Established Organizations in Community Disasters

The Functioning of Expanding Organizations in Community Disasters

The Department of Public Works: A Community Emergency Organization

Community Functions Under Disaster Conditions

Military-Civilian Relations in Disaster Operations

The Police Department in Natural Disaster Operations

The Fire Department in Natural Disaster Operations

The Warning Process in Natural Disaster Situations

The Local Civil Defense in Natural Disaster: From Office to Organization

CONTENTS

FOREWORD 11

ILLUSTRATIONS v

TABLES vi

PREFACE vii

ACKNOWLEDGMENTS ix

Chapter

I. INTRODUCTION: ORGANIZATIONS UNDER STRESS 1

 Community Organization for Emergency

 Types of Organized Responses in Community Crises

 Type I Organizations

II. THE STRESS SITUATION 14

 The Setting

 A Chronology of Events

 Wednesday, August 11, 1965

 Thursday, August 12, 1965

 Friday, August 13, 1965

 Saturday, August 14, 1965

 Events after Saturday

 Consequences of the Disturbance

III. THE LOS ANGELES FIRE DEPARTMENT: NORMAL OPERATIONS 22

 Administration

 The Chief Engineer

 The Deputy Fire Chief

 The Deputy Chief for Staff Administration

 The Deputy Chiefs for Fire Suppression

 The Deputy Fire Chief for Personnel and Facilities

 Fire Suppression

 The Communications Section

 The Interpersonal Structure

IV. FIRE DEPARTMENT RESPONSE TO THE DISTURBANCE 40

Administration

- Period One: Increasing Demands -- Incipient Stress
- Period Two: Maximum Demands -- Maximum Stress
- Period Three: Decreasing Demands -- Diminishing Stress and Return to Normalcy

Fire Suppression Operations

- Period One: Increasing Demands -- Incipient Stress
- Period Two: Maximum Demands -- Maximum Stress
- Period Three: Decreasing Demands -- Diminishing Stress and Return to Normalcy

Communications

- Period One: Increasing Demands -- Incipient Stress
- Period Two: Maximum Demands -- Maximum Stress
- Period Three: Decreasing Demands -- Diminishing Stress and Return to Normalcy

V. SUMMARY AND CONCLUSIONS 61

Administration

- The Fire Suppression Bureau
- The Communications Section
- The Overall Organizational Response
- The Extraorganizational and Community Setting

APPENDIX 74

ILLUSTRATIONS

Figure	Page
1. Los Angeles Fire Department	23
2. Fire Suppression Bureau	26
3. Communications Section	33
4. Use of Chief Officers and Acting Chief Officers	42
5. Remaining Available Field Chief Officers and Acting Chief Officers	43
6. Engine Company Emergency Activities	44

TABLES

Table	Page
1. Types of Community Organizations	4
2. Types of Organized Behavior in Crises	6

PREFACE

Some of the monographs in the series published by the Disaster Research Center (DRC) present theoretical discussions of organizational responses to community crises. Others of the monographs deal with general topics such as warning problems in large-scale emergencies. Still others in the series are primarily descriptive accounts of specific disasters. This particular monograph reports yet another kind of research undertaking. It is a case study of one specific complex organization in a particular kind of community stress situation.

The monograph examines in a sociological framework the operations of the Los Angeles Fire Department during the civil disturbance -- the so-called Watts riot -- in August 1965. However, an attempt is made to go beyond the details of a single case study. An effort is made to set the description and analysis in a larger context by first describing different kinds of organized responses to disruptions of community life. The difference between a consensus type of crisis as seen in natural disasters, and a conflict or dissensus kind of emergency such as is manifest in civil disturbances, is noted. The focus of the monograph is then concentrated on one major type of collective response, that manifested by complex or formal organizations with bureaucratic structures. More specifically, three major components of the Los Angeles Fire Department are examined and it is shown how the structure and functioning of that organization was altered during the disturbances. Considerable attention is given to modifications in administrative decision-making procedures, the handling of tasks, and the patterns of communication within the organization. In conclusion it is indicated how the larger community context and organizational relationships of the department probably affected its overall response to the crisis.

One implication of this study is that while all community emergencies have many features in common, there are also certain important differences between major types of emergencies. For example, it is clear from this particular case study that the Los Angeles Fire Department had difficulty functioning during the civil disturbances chiefly because of the disturbances per se, and not because of

the number, frequency, nature, or distribution of the fires in Los Angeles over a given period of time. The conflict or dissensus situation created particular demands that pressed upon capabilities and hindered the department in making fully appropriate adjustments and achieving a totally adequate response. These kinds of demands would not have existed in a consensus type of crisis. Consequently, a similar number, distribution, etc., of fires in a natural disaster could probably be handled with less modification of regular procedures and relatively fewer problems.

On the other hand, this case study also suggests that in a far more massive type of community emergency such as might be engendered by a nuclear bombing the Los Angeles Fire Department would probably be overwhelmed. If the organization could not operate as effectively as was desirable in a much less serious emergency situation, it seems unlikely that the tremendous demands of a nuclear holocaust would be more adequately handled. This certainly would be true given existing resources and plans. Likewise, given the fact that the Los Angeles Fire Department is one of the better organized and most highly experienced organizations in the country in dealing with large-scale fire emergencies, it seems reasonable to suppose other departments could be expected to be faced with demands that would go far beyond their current capabilities.

Russell K. Dynes
E. L. Quarantelli
Co-Directors
Disaster Research Center

ACKNOWLEDGMENTS

We wish to thank the many members of the Los Angeles Fire Department, who by giving time and being very cooperative made this study possible. We especially wish to acknowledge the assistance provided by Deputy Fire Chief Charles W. Bshme, Captain Se. rle Bennett, Battalion Chief Dofei J. Brunetti, Chief Ray Hill, and Chief of the Communication Section (Westlake) Darwin J. Nielsen. However, any statement in this report, factual or impressionistic, is, of course, the responsibility of the authors and need not necessarily reflect the views and opinions of any member of the Los Angeles Fire Department.

Furthermore, as is true of all studies made by the Disaster Research Center, no persons are identified by name and identifying features have generally been either omitted or masked when specific positions have been discussed. While this may weaken the dramatic impact of the account, it keeps faith with the persons and officials who gave data to Center field teams with the understanding that their confidence would be respected.

CHAPTER I

INTRODUCTION: ORGANIZATIONS UNDER STRESS

The major objective of this monograph is to analyze a complex organization under stress. The organization utilized for this purpose is the Los Angeles Fire Department. The period of stress occurred during the disturbances in southcentral and southeastern Los Angeles, California, during August 1965.

The organization selected for case study is just one example of a particular type of organization. We are dealing only with fire departments, and large ones at that. Moreover, this type of organization is but one of at least four different classes of organized groups that get involved in community stress situations. In this particular instance, we are focused on a complex organization, not an expanding, extending, or emergent group. Communities, furthermore, may be affected by different kinds of crises. The emergency here was a civil disorder, not a natural disaster.

Nevertheless, there are certain common aspects which cut across all these possible variations and allow us to go beyond the simple description of a specific organization in a particular historical setting. The community context within which the Los Angeles Fire Department is later analyzed has many distinguishing, if not unique, characteristics. It shares, however, one overriding similarity with all communities -- both in the United States and abroad -- in that it possesses certain problem-solving organizational mechanisms. These social mechanisms are brought to bear on major stress situations regardless of their origin or nature. While large-scale emergencies and the communities within which they occur may differ along particular lines, they also share certain similarities. For example, all extensive crises have a disruptive effect on the social structure of the community within which they develop.¹ By the same token, all communities have certain organizations within them by which they attempt to deal effectively with emergency situations. These two facts have served as the guiding principles for this study, and much of the remainder of this chapter will set forth in more detail some of their implications.

Community Organization for Emergency

Each year many communities in the United States, and in the rest of the world as well, are confronted with large-scale crises, including natural disasters such as tornadoes, earthquakes, floods, etc., as well as dissensus situations such as mob violence and civil disturbances. These two types of emergencies differ in some respects.² There is generally a widespread consensus among community members regarding natural disasters -- they are seen as being undesirable and should be combated by the entire community. Dissensus situations, on the other hand, clearly indicate a difference of opinion among

community members. Thus, one type emergency is met by an almost unanimous consensus; the other reflects fundamental differences which result in community conflict.

Nonetheless, the two kinds of crises lend themselves to a similar kind of analysis.³ As noted earlier, all types of widespread emergency situations have disruptive effects on community structures. This monograph will focus on an example of this basic disruption and on the relatively unplanned and unanticipated changes in one organization heavily involved in the overall community response.

There are a number of dimensions to the aforementioned disruption.⁴ First, it can be expected that organizations within the community may lose some of their material and personnel resources, that their capabilities will be reduced. Moreover, it can be anticipated that many of the organizations within the community will have to face new tasks such as handling the injured and the dead; restoring public facilities; providing food, shelter, and clothing for victims; and so on. Demands on organizations during crises may differ both in degree and kind when compared with the pre-emergency setting. It is likely that community relations which have developed over a long period of time may be shattered or become difficult to implement since communication with others becomes problematic, if not impossible. For many, the knowledge of what is "real" becomes uncertain. In short, the emergency has widespread social consequences in that it tends to create a disruption in the traditional social relationships in the community.

This disruption of social relationships within a community may be especially accentuated during civil disorders where a deep dissensus is being given manifest form. In almost all natural disasters, the individual members of the community tend to act cooperatively in warning of danger, in the administration of first aid, the salvaging of personal possessions, the restoration of community services, and so on. This is not true in dissensus situations.

In attempting to understand the response of a community, its members and organizations, to a large-scale emergency or disaster, it is helpful to see the community, even in its pre-crisis state, as a problem-solving entity. While the initial response of a community to a crisis usually comes from individuals, it is the network of organizations within the community which bears the major burden of emergency action.⁵ The resources of individuals, even large numbers of them, are insufficient to cope with the dimensions of a major disaster or dissensus situation. Thus the community is not only the site of the disruption, it is also the locus of collective activity which attempts to overcome this disruption. This is understandable when one recognizes the community as a problem-solving entity. The community, when viewed in this light, can be seen possessing patterned social relationships which have developed around problems which have been faced on a routine, regularized basis. This meeting of problems over a period of years leaves a residue of sentiment, knowledge, and organization within communities which can guide them as they face new disruptions as occasioned by major emergencies.

The problem-solving functions of communities generally reside within specific organizations. A factory, for example, is organized around "solving" the problems associated with the production of goods. Schools are organized to deal with problems associated with education. Hospitals, clinics, emergency rooms, first-aid stations, are organized to handle the day-to-day medical problems which exist within the community. While many of the organizations are concerned with "private" problems which must be solved, other organizations are concerned with public problems which affect many members of the community.

Not all organizations become equally involved in a given community's response to an emergency situation. Generally, those organizations with private concerns are much less likely to become actively involved in the community's emergency response than are those organizations expressly created to serve the public interest. For example, the personnel of a manufacturing plant are not expected to become involved in fighting a general alarm fire. Fire department personnel, contrariwise, are expected to protect the entire community from fire. Moreover, organizations differ in their possession of what might be called emergency resources. Using the previous example, fire departments have personnel and material resources such as trucks, ladders, hoses, pumps, etc., with which to combat blazes and fires. A manufacturing firm in most instances possesses neither trained personnel nor equipment adequate to meet even a modest fire.

Thus, for our purposes, one can classify organizations in a community by use of two descriptive variables, the degree of community orientation and the possession of community resources. These two variables can be arranged in four different combinations (table 1). First, and most important for this case study are those which are usually identified as being community emergency organizations. These possess both a community orientation and emergency resources. In certain circumstances it is possible for other kinds of organizations to become involved in coping with community stress situations. These organizations may possess a community orientation but have few if any emergency resources. A church group, for example, may become active in the collection and distribution of clothing. Too, other organizations which possess resources which can be used in an emergency may become involved. A private contractor, for instance, may have heavy duty cranes which can serve vitally useful functions during a disaster period. Finally, there are many organizations in most communities which have a private orientation and which possess no emergency resources. These organizations are rarely involved and often cease operations within the community during the crisis period.

It is in the relationships among these various types of organizations that community stress is most evident following the impact of a stress agent. Community stress results largely from the fact that the customary relationships among these various types of organizations are disrupted. Many organizations are "forced" to accept new tasks or to adapt existing patterns to the increased demands of the emergency period. In effect, one can account for the emergence of much community stress by seeing it as the result of a disrupting agent which produces unplanned and unanticipated changes in the community's patterned organizational structure.

TABLE 1

TYPES OF COMMUNITY ORGANIZATIONS

Description	Examples	Organizational Characteristics	
		Community Orientation	Emergency Resources
Community Emergency Organizations	Police, Fire, Red Cross, etc.	+	+
Community Relevant Organizations	Welfare, Religious, and Service Organizations	+	-
Emergency Relevant Organizations	Contractor Unit with Heavy Equipment, Department Store with Trucks	-	+
Nonrelevant Organizations	Luxury Retail Stores, Entertainment Organizations	-	-

This occurs since (1) the community emergency organizations are pushed beyond their capabilities and, because of this, they must supplement their capabilities with added resources, including personnel, which changes the nature of the organizations; (2) other organizations, either extracommunity or supportive, must assume unusual activities and functions during the emergency period; which creates (3) the necessity for new patterns of coordination and control among the involved organizations.

Perhaps this conceptualization of community stress comes closer to what was mentioned earlier as the "disruption of the social structure." The community emergency organizations, either because of their specific legal responsibility or because of traditional community expectations, can no longer fulfill these expectations. This may necessitate the addition of resources which modify their organizational structures. In addition to this type of supplementation, organizations often find themselves involved with unfamiliar tasks and activities. The patterns of coordination and control among community service organizations developed prior to the event, or even specific disaster or emergency planning becomes of limited value since the activities of various organizations have now shifted. This is accentuated if noncommunity emergency organizations enter the picture. This means that earlier arrangements which served as the basis of coordination can no longer be used since there are now new elements in the community system to be coordinated. These new patterns of coordination have to be developed when organizations are coping with great demands or are assuming new and unfamiliar tasks.

Types of Organized Responses in Community Crises

Not only is there a particular pattern of community organization, there is a differential collective response in actual emergency periods. During these periods groups carry out certain tasks, some of which may be old, routine, and established; or instead, they may be new or unusual ones for the groups involved. For example, when a police department controls traffic, a fire department fights fires, a radio station transmits the news, or a hospital treats the injured, they are performing tasks normally associated with them. On the other hand, the nonregular or newly created nature of tasks can be seen in situations where a National Guard battalion is charged with the responsibility for providing water for a community, an American Legion post begins to shelter evacuees, or nuns from a parochial school sort and distribute donated clothing from a relief center. Thus, in addition to classifying organizations on the basis of private and public orientation with or without emergency resources, one can further classify them as performing routine or emergent tasks.

One can further distinguish between groups on the basis of their organizational structures -- as having either established or emergent structures. Organizations or groups with established structures are those in which the members have explicit pre-emergency social relationships with one another, especially in their work activities. These organizations may be highly bureaucratic in form, such as a fire department, or they may be much less formal in

nature as in a VFW post. This distinction, however, is not the important one. More crucial is the existence of the organization as an entity prior to the emergency. Established organizations with a pre-emergency existence have somewhat similar work relationships in emergency periods. Thus, off-duty members of a city fire department recalled during an emergency period would normally have had work relationships prior to the emergency. These relationships are then more or less maintained as the organization engages in established or emergent tasks during the community crisis. In short, there is a carry-over of the pre-crisis social bonds into the work activity generated by the disrupting event.

On the other hand, a new group structure may develop or come into being during the emergency. Such groups may emerge from a small pre-crisis core or they may involve the crystallization of some totally new entity. The crucial feature is that they have no actual pre-emergency existence, at least in the form they assume during the crisis. An example of this type organization might be a local Red Cross chapter whose small core of professional personnel provides the nucleus for large numbers of volunteers who undertake most of the group's work. Another example which defines more clearly the emergent quality of these groups would be those associated with search-and-rescue operations following major emergencies. These groups typically emerge in the immediate postdisaster emergency period and usually disappear as the community's organizational response quickens and the search-and-rescue stage is passed.

The particular types^b of organized behavior that appear in the immediate postemergency period are depicted in table 2.

TABLE 2

TYPES OF ORGANIZED BEHAVIOR IN CRISES

Structure	Tasks	
	Regular	Nonregular
Old	Type I (Established)	Type III (Extending)
New	Type II (Expanding)	Type IV (Emergent)

Type I organizations are those established to carry out regular tasks. This type is exemplified by the official members of a city fire department extinguishing fires after an earthquake has struck a community. An example of this kind of organization is, of course, what is later described and analyzed in this monograph.

Type II organizations are those with expanding structures that are assigned regular tasks. Most frequently these organizations are the result of pre-disaster community planning. These organizations exist on "paper," with but a small core of professionals prior to the disaster event. This type

organization could be characterized by Red Cross volunteers operating a shelter following a hurricane, with supervisory assistance being offered by the permanent staff officials of the local Red Cross chapter.

Type III organizations are those which undertake nonregular tasks. An example of an extending organization would be a private construction company utilizing its men and equipment to dig through debris during rescue operations following a tornado.

Type IV groups or organizations are those with emergent structures. These groups largely cope with nonregular tasks. An example of such a group would be an ad hoc group made up of the city engineer, county Civil Defense director, a local representative of the state highway department, and a colonel from the Corps of Engineers who coordinate the overall community response during a flood.

Viewing these various types in the context of the above discussion of community organizations, Types I and II are clearly community emergency organizations. Type I organizations have both a community orientation and manifest emergency resources. Type II organizations have a community orientation and latent emergency resources. Type III organizations most typically come from among those organizations which have a community orientation but lack emergency resources relevant for the community in its crisis state. Type III organizations are not "expected" to become involved in the community's emergency response but, nonetheless, they "extend" their organizational activities in the emergency social system. Type IV groups are much less formalized since they are clearly emergent in nature. Their activities, while less discernible than the other types are, nonetheless, patterned and observable. The groups emerge during emergency periods and arise largely from within the vortex created by intersections of the community's formal and informal emergency response. These organizations and groups, then, constitute the range of organized activity within the community as it attempts to cope with the disrupting influences of a major emergency.

Type I Organizations

In this monograph, attention will be on a Type I or established organization, the Los Angeles Fire Department. As can be gathered from the discussion above, such an organization is largely the creation of a community in anticipation of emergency events. As such, they possess both a community orientation and emergency resources. Type I organizations are inevitably involved in any community emergency. There is a public expectation that they will become involved. As a result of this expectation, they are automatically notified of crisis situations necessitating the involvement of their resources. Moreover, there are organizational expectations of involvement, either on the basis of previous activity or by the definition of the emergency relevance of the organization. Because these organizations are structured to respond to emergency situations, they usually mobilize quickly. Type I organizations usually have built-in mechanisms for assessing the demands which will be made on them and at the same time certain more or less standard procedures for increasing their organizational capabilities, e.g., the recall of off-duty personnel, the activation of reserve apparatus, and so on.

Type I groups are those typically designated in sociology as complex organizations with a bureaucratic structure.⁷ Perhaps paramilitary organizations such as police and fire departments best exemplify them. However, public utility companies, general hospitals and many city government agencies are, in varying degrees, organizations of this type. In pre-crisis situations, these complex groups have a fairly clear-cut line of authority, specific tasks, designated channels of communication, and explicit decision-making roles.

As will be pointed out in some detail later, Type I organizations such as fire departments attempt to adhere to regular activities as much as possible even during major community emergencies. In some respects there is relatively little change in the behavior of these organizations. Typical, for example, is the effort in an emergency to confine themselves to traditional tasks. When organizations such as police and fire departments are forced by unusual circumstances to engage in some nonregular tasks, there is an effort to revert back as quickly as possible to their regular responsibilities. Whether intended or not, such restriction of activity has the consequence of helping prevent crisis demands on Type I organizations from outstripping their response capabilities.

The statement that Type I organizations seem to change relatively little during an emergency perhaps needs to be qualified by saying that there appears to be little change in that the regularly employed personnel continue to undertake the regular tasks of the organization. Nevertheless, in an emergency there often occurs in these groups varying kinds of internal structural rearrangements. Decision making, for example, tends to occur at lower levels in the hierarchy than is normally the case. However, whatever the internal changes and conditions responsible for them, they seem to permit Type I organizations to function approximately in the same way in both the pre-crisis and emergency periods. Within the context of the community as a problem-solving entity, one can say that when the demands created by an emergency can be handled by Type I organizations, the activating event can be treated as only a localized community emergency.

The opening paragraph of this chapter suggests that the major objective of this monograph is to analyze a complex organization under stress. While much of the above discussion of Type I organizations has touched on what is meant by a complex organization, a more explicit definition is in order before proceeding further. For the purpose of this monograph, a complex organization is defined as one with a relatively permanent and relatively discernible interaction system.⁸ This definition emphasizes three major elements. First, complex organizations are conceived of as discernible interaction systems, that is, they are systems of stable relationships or interaction patterns which can be observed over prolonged periods of time occurring between incumbents in an organization. Secondly, the system of interaction is relatively complex, both horizontally and vertically; and thirdly, the interaction system is relatively permanent, i.e., it exists over an extended period of time.

The emergence, development, and persistence of these stable relationships and patterns can be attributed in large measure to the normative structure of the organization. This structure consists largely of those various social

norms which define how classes of persons ought to behave in specific situations; they apply to categories of people. In addition to the various norms which apply generally to categories of persons in social situations, organizations develop certain norms of their own. These norms define the expected behavior of the various incumbents in organizational positions. Norms at both levels are reinforced through the application of sanctions of both a positive and negative nature.

Organizational structures are the product of other factors as well. The normative structures of society and of specific organizations are not, in and of themselves, sufficient to explain the recurrence of certain organizational patterns. Haas⁹ suggests that organizational structures result also from what he calls the interpersonal structure. In brief, he implies that as persons interact over time within the context of the organization they develop sets of stable person-to-person expectations. These expectations are not necessarily related to the positions in which persons interact. Instead, they are a function of the relationships that exist between persons as persons. Thus, one must understand both the normative and the interpersonal structures of an organization in order to fully understand it as an interaction system of stable relationships which exist over prolonged periods of time. This is true irrespective of whether the interest is in the study of organizations under stress or nonstress situations.

Now that a complex organization has been more explicitly defined, an explanation of what is meant by organizational stress is in order. In this monograph, when the term organizational stress is used it implies an organizational state or condition when the demands being made on an organization exceed its capability of response. The concept assumes that under routine, nonemergency circumstances there is a state of relative equilibrium in the organization -- a dynamic equilibrium between the demands being made and the capabilities of organizational response.¹⁰

It is helpful to view organizational stress as existing along a continuum with the degree of stress being determined by: (1) an increase in organizational demands, (2) a decrease in the organization's capabilities, and/or (3) a combination of the two.

Drabek points out that a maximum stress situation initially produced by a crisis could be characterized in the following way:

- I. Change in the demands made on the organization.
 - A. Quantity
 - 1) Sharp increase.
 - 2) Increase is unanticipated.
 - B. Priority
 - 1) Consequences of organizational action threaten central values of organization or society, i.e., organizational actions are viewed with increased seriousness.
 - 2) Immediate organizational action is required.

C. Qualitative Changes

- 1) Demands previously met, but not currently being met, are being made on the organization.
- 2) New demands not previously made on the organization are made and temporarily accepted by the organization.

II. Change in Organizational Capability

A. Intraorganizational

- 1) Absence of personnel, especially key personnel.
- 2) Absence of important equipment, material or buildings.
- 3) Absence of crucial information or records.

B. Extraorganizational

- 1) Absence of personnel, especially key personnel.
- 2) Absence of important equipment, material or buildings.
- 3) Absence of crucial information or records.¹¹

We shall subsequently see that many of these conditions prevailed in the crisis situation in which our organization under stress operated.

Since a later chapter of this monograph will deal with the specific organizational characteristics of the Los Angeles Fire Department, they will not be discussed here. It is important to note at this time, however, those sections within the organization which will form the foci of analysis: administration, fire suppression, and communications. While these three sections are not completely separate in reality, inasmuch as they are highly interdependent and interrelated, efforts will be made to isolate them in order to facilitate their analysis. Administrative acts will be considered as those which emanate from organizational incumbents who hold the rank of deputy chief or higher. The fire suppression analysis will concentrate on the activities of the fire suppression bureau while the analysis of communicative behavior will focus on the communications section of the fire department.

These three sections of the organization will be analyzed within the framework of the following ideas derived in part from the aforementioned Drabek study. In other contexts, the statement of these ideas might be seen or treated as testable hypotheses but it would be misleading to imply they were used in such fashion in our analysis. Instead these ideas primarily guided what we looked for in the data and helped us to organize the material; in this sense there was no "test" of propositions or even derivations of them from the data.

1. As the degree of organizational stress increases, the administrative decision-making process will change. For example, the number of both official and unofficial decisions made could increase. The assumption here is that decision making, a crucial aspect of administration, cannot proceed in the way it normally does when an organization is under stress.

2. As the degree of organizational stress increases, organizational tasks will be handled in a different way. For instance, operational personnel may develop a priority of tasks to which they will increasingly limit their activities as well as those of the group. Here, it is being assumed that

when an organization comes under stress, some activities will be seen as more crucial or important than others and otherwise routine tasks may be disregarded or ignored.

3. As the degree of organizational stress increases, the communication patterns will shift. For example, use might be made of modes of communication not usually employed. Being assumed here is that organizations under stress have to communicate more speedily and efficiently than they ordinarily do under usual everyday conditions.

Having set forth our conception of organizations, especially Type I or complex organizations, and certain concepts and ideas which will guide and organize our presentation, we turn in the next chapter to a description of the specific stress situation that faced the Los Angeles Fire Department.

NOTES: Chapter I

1. This can be seen in different attempts to conceptualize the term "disaster." See the discussion, for example, in Allen Barton, Communities in Disaster: A Sociological Analysis of Collective Stress Situations (Garden City, N. Y.: Doubleday, 1969), pp. 35-54; Charles E. Fritz, "Disaster," in Contemporary Social Problems: An Introduction to the Sociology of Deviant Behavior and Social Organization, ed. by Robert K. Merton and Robert A. Nisbet (New York: Harcourt, Brace and World, 1961), pp. 651-694; and Charles P. Loomis, Social Systems: Essays on Their Persistence and Change (Princeton, N. J.: D. Van Nostrand Company, 1960), pp. 129-167.
2. See E. L. Quarantelli, "Mass Behavior and Governmental Breakdown in Major Disasters: Viewpoint of a Researcher," The Police Yearbook 1965 (Washington: International Association of Chiefs of Police, 1965), p. 107.
3. See Ralph Turner, "Collective Behavior," in Handbook of Modern Sociology, ed. by Robert E. L. Faris (Chicago: Rand McNally, 1964), pp. 382-425.
4. The ideas expressed in the next few pages are developed at length in Russell R. Dynes, Organized Behavior in Disaster: Analysis and Conceptualization, Disaster Research Center Monograph Series (Columbus: Disaster Research Center, The Ohio State University, 1969).
5. See James D. Thompson and Robert W. Hawkes, "Disaster, Community Organization, and Administrative Process," in Man and Society in Disaster, ed. by George W. Baker and Dwight W. Chipman (New York: Basic Books, 1962), pp. 268-300; William H. Form and Sigmund Nosow, Community in Disaster (New York: Harper and Brothers, 1958); and Harry E. Moore, Tornadoes Over Texas (Austin: University of Texas, 1958), especially pp. 310-317.
6. This particular typology was first set forth in E. L. Quarantelli, "Organization Under Stress," in Symposium on Emergency Operations, ed. by Robert C. Britson (Santa Monica: System Development Corporation, 1966), pp. 3-19.
7. For general discussions of complex organizations see Amitai Etzioni, Modern Organizations (Englewood Cliffs, N. J.: Prentice-Hall, 1964); Peter Blau and W. Richard Scott, Formal Organizations (San Francisco: Chandler, 1962); Theodore Caplow, Principles of Organization (New York: Harcourt, Brace and World, 1964); and James D. Thompson, Organizations in Action (New York: McGraw Hill, 1967).

8. Much of the following discussion is presented in more detail in J. Eugene Haas, Role Conception and Group Consensus (Columbus: Bureau of Business Research, The Ohio State University, 1964), pp. 25-31. See also Thomas E. Drabek, Laboratory Simulation of a Police Communications System Under Stress, Disaster Research Center Monograph Series (Columbus: College of Administrative Science, The Ohio State University, 1969).
9. For a more detailed description of the concept of interpersonal structure, see Haas, Role Conception. A somewhat similar notion is discussed in Tamatsu Shibutani, Society and Personality (Englewood Cliffs, N. J.: Prentice-Hall, 1961), pp. 324-331.
10. See Thomas E. Drabek, J. Eugene Haas, E. L. Quarantelli, and Russell R. Dynes, "Research in Organizational Stress Theory," to be published in the National Institute of Social and Behavioral Science Symposium Studies Series.
11. Drabek, Laboratory Simulation.

CHAPTER II

THE STRESS SITUATION

The Los Angeles Fire Department as an organization established by the community to protect human life and property has to cope daily with a great many localized emergencies. These emergencies include burning houses, automobiles, rubbish piles and major conflagrations. Thus, on an average day during the dry season when there are a great many brush fires, the Los Angeles Fire Department responds to approximately 350 fire-related emergencies. A number of different types of life-saving activities such as ambulance service are also a part of the daily organizational tasks. Consequently, the department is accustomed to dealing with a wide variety of minor crises and localized emergencies. However, between August 11 and 17 in 1965 this complex organization was faced with the most extensive stress situation it had ever encountered. This stress grew out of the department's involvement in the disorders which occurred over approximately 35 square miles of Los Angeles -- but particularly centered in the Watts area -- at that period of time.

This monograph does not pretend to examine the origins or development of the disorders, nor does it focus directly either on the participants or their behavior.¹ However, the situation faced by the fire department cannot be adequately understood without some knowledge of the sequence of events that unfolded and about how they were perceived by organizational personnel. Therefore, this chapter will first set forth a brief description of the area where the disturbance occurred and then present a chronology of events. Some of the major consequences of the widespread disorders are set forth in a concluding section.

The Setting

The Los Angeles-Long Beach standard metropolitan area includes parts of both Los Angeles and Orange counties, California. At the time of the 1960 census, the area had a population of 6,742,696 and a total acreage of 4,842 square miles. Los Angeles county had a 1960 population of 6,038,771; 2,479,015 of whom lived within the city limits of Los Angeles. In addition to the city of Los Angeles, there were 87 political subdivisions in the county in 1960. These had a total population of 3,559,765. Twenty-three of these subdivisions with a total population of 2,479,015 are contiguous to the city of Los Angeles. The largest of these is Long Beach with a population of 344,168. The disturbances thus occurred in the center of a densely populated area involving many small and large municipalities with a wide range of normal everyday problems of law and order, and fire prevention and control.

Of course, by 1965 all of the cited figures were higher. However, not only had the population of the area increased numerically, it had changed somewhat in composition. As in many American cities of the north and far west, the city of Los Angeles has had a heavy in-migration of blacks in recent

decades. The summary report of the governor's commission on the disturbance (the McCone Report)², indicates that while the population of Los Angeles County trebled between 1940 and 1965, the black population increased almost tenfold during the same period, from 75,000 in 1940 to 650,000 in 1965. About half of the population lives in the southcentral part of the city, and especially in the Watts district directly south of the central business district of Los Angeles.

A postdisturbance fire-department report describes rather well the nature of the general area in which the disorders took place, and in which the organization had to carry out its tasks.

The area contains 32.47 square miles which is approximately 7 percent of the 463.40 square miles which are within the city limits. . . . Occupancies within the zone range from small single-family dwellings to large manufacturing plants. Residences in the southern portion of the area are nearly all one-story structures. Quite a few larger two-story dwellings are located in the northern part of the district. A considerable majority of all dwellings in the area are at least thirty years old.

A number of closely-grouped two-story, garden-type apartment houses are located along Main Street and some of the other primary thoroughfares in the southern portion of the district. Several public housing projects are situated in the area, chiefly in the community of Watts.

Manufacturing occupancies range in size from small job shops to great industrial complexes which cover many acres. One of the larger manufacturing concentrations in the area is the Goodyear Tract, located near Gage and Central Avenues. Multi-storied structures rise in the extreme northern part of the zone. This section borders the southern limits of the central business district with its multitude of hotels, apartment houses, business firms, and various lofty buildings.

Some of the more prominent landmarks in the riot area are the Sports Arena, the Coliseum, Wrigley Field, the Los Angeles County Museum, the University of Southern California campus, Shrine Auditorium, and the Orthopedic Hospital. With the exception of Wrigley Field, all of these structures are at or near to Exposition Park.

Small to large business occupancies lie along the arterial streets. The principal business district of Watts is centered on 103rd Street to the east of Compton Avenue.

The estimated population of the riot zone as of April 1, 1965 . . . represents approximately 12 percent of the 2,731,000 people in the city of Los Angeles as of that date. Concurrently, the average number of persons per occupied dwelling unit in the Watts area was 4.1 compared with an overall city average of 2.9.

That portion of the riot zone south of Slauson Avenue is located primarily within the geographical boundaries of Battalion 13 of the Los Angeles City Fire Department. The area north of Slauson Avenue, for the most part, is within the borders of Battalion 8. For at least the past three years, more fires have occurred within the confines of Battalion 13 than in any of the other eighteen battalions which cover the balance of the city. Battalion 8 ranked second in the number of fires during the fiscal year ending on June 30, 1965 and third during the two preceding years.

Through the fiscal year of 1964-65, about twenty percent of all fires occurring in the City of Los Angeles were within the approximate 30 square miles of the combined areas of Battalions 8 and 13. During this same period, one out of every three false alarms, 30 percent of all incendiary and suspicious fires, 37 percent of all juvenile fires, and 18 percent of all burn cases occurred within this area of the city.³

A Chronology of Events

The data used in the compilation of this chronology have been gathered from a wide variety of sources including police and fire department records, newspaper accounts, the aforementioned McCone Report, and other sources indicated in the Appendix.

Wednesday, August 11, 1965

On the evening of Wednesday, August 11, 1965, a California highway patrolman arrested a black citizen of southcentral Los Angeles on suspicion of drunken driving. During the arrest, the accused, along with his brother who had been a passenger in the car and his mother who was summoned to the scene, allegedly resisted the arresting officers. In short order, a number of black citizens, estimated at more than 1,000 persons, gathered at the scene of the arrest which was adjacent to the Watts area. Following a series of incidents between the police and the spectators, the onlookers became overtly hostile and at 7:40 p.m. stoned the last police car to leave the location. The gathering thereupon did not disperse; instead, small groups that emerged from it ranged up and down the streets of the area, although they did not move more than a few blocks from the scene of the arrest. Between 8:15 p.m. and 1:00 a.m., roving groups stoned automobiles, pulled motorists from their cars and beat them. A police command post set up in the area was menaced but not attacked. Up to midnight no unusual fire-related activities occurred.

Thursday, August 12, 1965

However, fire units called into the area were harassed by hostile bands on two occasions during the early morning hours of Thursday morning. The first such incident occurred at 12:41 a.m., the second at 5:36 a.m. In each case fire apparatus was bombarded with missiles and debris as they responded to a mob-set auto fire and a routine call in the area.

On Thursday afternoon a meeting of the Los Angeles County Human Relations Commission was held in an auditorium, eleven blocks from the scene of the initial arrest. It brought together a great many representatives of neighborhood groups and other black leaders to discuss the problem of the maintenance of law and order. During the course of the meeting, however, the tone and conduct of the meeting shifted to a discussion of the grievances felt by blacks.

That evening, between 6:45 and 7:15 p.m., spectators gathered at the scene of the trouble of the night before. In less than an hour a crowd formed that supposedly numbered 1,000 persons. Firemen starting to come into the area at 8:52 p.m. to fight fires in overturned cars were shot at and bombarded with rocks. Around ten o'clock a pumper had to be temporarily abandoned under a barrage of missiles and random gunfire. At 10:46 p.m. the first disturbance-related structural fire (i.e., in a building) occurred. At this locality police had to hold back hostile spectators as firemen fought the blaze.

Friday, August 13, 1965

Shortly before midnight, the perimeter of the disturbance area expanded as the crowd members moved into several surrounding streets. After midnight, several other large structural fires were set. Five hundred police officers were summoned to the area and by using various riot control techniques, including fender-to-fender sweeps by police cars, they were able to restore a semblance of order by 4:00 a.m. Shortly after 5:00 a.m., officers were removed from emergency perimeter control since the situation seemed to be under control.

The tranquility was short-lived, however, and by 8:00 a.m. unruly groups had gathered again in the commercial section of Watts. By midmorning they were spreading into previously untouched localities. General looting in the Watts and adjacent commercial areas became widespread. At 10:50 a.m., the chief of police made a formal request for National Guard assistance. Inasmuch as Governor Brown was out of the country, the Lt. Governor was the ranking executive officer in the state. He ordered the Guard mobilized at 3:35 p.m. and signed the official proclamation at 5:00 p.m. Although there were 1,336 troops assembled by 6:00 p.m., for various reasons none were deployed until after 10:00 p.m.

During Friday afternoon, there began a seemingly deliberate burning of certain kinds of businesses. The disorders and looting spread. By late afternoon, disturbances were being reported as far as fifty and sixty blocks north of the original trouble spot. Arson efforts increased, spilling eastward into county territory and southward into the city of Compton. Because of lack of adequate police protection, fire units had to be withdrawn from certain localities until the police could gain some degree of control over hostile groups in the streets.

Friday night found the disturbance at its worst. The first death occurred between 6:00 and 7:00 p.m. when a black bystander was killed in an exchange of gunfire between police and some unruly elements. Looting reached

its peak that evening. Blaze after blaze broke out until at 1:00 a.m. on Saturday there were over 100 engine companies and 26 ladder trucks of the Los Angeles Fire Department fighting fires in the area. While the incidence of new fires declined somewhat in the southern sector of the disturbance area, this was more than counterbalanced by an increase in the number of incendiary fires in the north.

Saturday, August 14, 1965

By early Saturday morning, police units reinforced by members of the National Guard moved en masse along the streets in an effort to control activities and to enable the fire department to fight the many unattended fires. By 3:00 a.m. on Saturday 3,356 Guardsmen were on duty. (The full commitment of the National Guard was reached by 2:00 p.m. Monday when 13,393 troops were in the area.) The maximum commitment of the Los Angeles Police Department was 934 officers, while the maximum for the sheriff's office was 719.

In spite of increased law enforcement and National Guard personnel, the area was not under control at any time during the late hours of Friday night and the early hours of Saturday morning. Throughout Saturday the looting and burning continued in spite of strenuous efforts to control it. Because of the seriousness of the situation, the Lt. Governor imposed a curfew on a 46.5 square-mile zone, 32.5 square miles of which was in the city limits of Los Angeles and covered all of the Watts area. The curfew, which went into effect at 8:00 p.m., made it a crime for unauthorized persons to be on the streets after this hour. Since almost all other organizations had suspended operations in areas where there were disorders, the only formal groups active in the curfew zone were the police, military, and fire services.

The curfew had its effects. Saturday night was relatively calm although a block of stores was burned on one of the main thoroughfares. At that particular location, fire units had to abandon their efforts three separate times and withdraw because of sniper fire. A gun battle ensued between law enforcement officers, the National Guard, and the snipers, marking the last major disturbance in the area. After that time, police and military domination of the curfew area was virtually complete except for isolated incidents.

Events after Saturday

Governor Brown returned on Saturday night and on Sunday toured the area which had become quiet although a few new fires were ignited and some old ones rekindled. By Tuesday the situation had returned to near normalcy and curfew which had been imposed on the area was lifted. In all, 3,438 persons had been arrested. The last 250 National Guardsmen were not removed, however, until August 28, seventeen days after the original arrest had triggered the disturbance.

The sequences of activities depicted here are, of course, after the event. They thus imply an order and a perception of the overall situation which was not available to the participants -- including fire department

personnel -- at the times they had to act. That is, unlike in our retrospective account, at any given time during the stress period the involved parties not only were limited in their perspective regarding what was actually occurring but they were of necessity unaware of what the outcome would be. As such, the information presented only partly conveys the complexity and ambiguity of the problems that faced fire department personnel at the time of the disturbance.

Consequences of the Disturbance

There were 34 persons killed as a result of the disorders. Of this number 31 were blacks shot by the police or the military. In addition, 1,032 persons were injured. Of this latter number, 90 were Los Angeles policemen, 10 were National Guardsmen, and 136 were firemen. A total of 32 firemen were wounded directly at the hands of participants in the disorders although only four received gunshot wounds. There were an additional 22 persons from other governmental agencies and 773 civilians injured. One hundred and fourteen of these injuries resulted from gunshot wounds.

Overall property losses were estimated in the McCone Report at about 40 million dollars. More than 600 buildings were damaged by burning and looting. Of this number, more than 200 were totally destroyed by fire. Although fire department officials regarded all of the fires as being incendiary in origin, only 27 arson arrests and 10 arson complaints were filed.

The various fires ignited were not randomly set. No residences were deliberately burned. Evidence seems to indicate that certain types of business occupancies were much more apt to be burned than others. For example, there were 42 food or supermarkets, 32 liquor stores, 25 furniture stores and 23 clothing stores burned and/or looted. This total accounts for approximately 40 percent of all the occupancies damaged, burned and/or looted. Conversely, certain other types of business establishments such as gasoline service stations and automobile dealers were left practically untouched. Likewise, industrial complexes covering acres of ground were undisturbed.

Fire department apparatus suffered considerable damage. A total of 104 apparatus underwent either body or mechanical damage, including four set afire by Molotov cocktails. Equipment likewise was strained by far above normal extensive and rapid use. For example, an engine company placed a wagon battery into operations seven times on one shift; another crew on the same company used this heavy stream appliance an additional five times. Nearly half a million feet or 92.3 miles of hose lines were laid.

During the disorders between early Thursday morning, August 12, and the lifting of the curfew on Tuesday afternoon, August 17, between 2,000 and 3,000 fire alarms were received. One thousand of these occurred between 7:00 a.m. on Friday and 1:00 a.m. on Saturday. A number of these were false alarms, but nevertheless required a response.

As all the figures above indicate, considerable demands were made on the fire department. It has already been noted, and will be detailed even more later, that the height of the disorders, arson, and looting occurred between 5:00 p.m. Friday and 7:00 a.m. Saturday. It was during this period, as we shall see, that the demands placed on the department exceeded its organizational capabilities. As such, according to the formulation discussed earlier, it was an organization undergoing stress.

Implied in all of this is the idea that the department, or at least segments of it, had to change its behavior given the stress situation. Accordingly, in the next chapter we turn to a description of the structure and functioning of the Los Angeles fire organization under normal circumstances. After depicting that, we will be able to examine more systematically what changes did or did not occur in both the structure and the functions of the department.

NOTES: Chapter II

1. A scholarly analysis is presented in Anthony Oberschall, "The Los Angeles Riot of August 1965," Social Problems 15 (Winter 1968): 322-341. A good popularized account of the disturbance is given in Robert Conot, Rivers of Blood, Years of Darkness (New York: Bantam, 1967).
2. Popularly known as the McCone Report, it is entitled Violence in the City -- An End or a Beginning? (Los Angeles: Governor's Commission on the Los Angeles Riots, 1965). A sharp criticism of the report, including the accuracy of some of its factual data is presented by one of the consultants of the commission in Robert Blauner, "Whitewash Over Watts," Trans-action 3 (March-April 1966): 3-9, 54.
3. Harold Greenwood, The South-Central Los Angeles Riot Fires (Los Angeles: Los Angeles City Fire Department, 1965), pp. 4-5.

CHAPTER III

THE LOS ANGELES FIRE DEPARTMENT: NORMAL OPERATIONS

The stated goals of the Los Angeles Fire Department include the prevention and suppression of fires in the city of Los Angeles. Around these goals the department has developed a highly complex organizational structure, meeting, without doubt, the criteria we specified earlier for identifying such a kind of group. The table of organization of the department (fig. 1) reveals something of its structural complexity.

For the purposes of this monograph, it would be superfluous to attempt a detailed description of the entire fire department, inasmuch as our primary foci of analysis are limited almost exclusively to the administration, the fire suppression, and the communications sections of the organization. It is not meant to imply that other sections of the department are less important to the total functioning of this complex group or that they were inactive during the disturbance. This, of course, is not true. What we are suggesting is that since we are primarily concerned with studying an organization under stress it is logical to center our attention on those phases of the organization's activities which have the greatest demands placed upon them.

Therefore, the purpose of this chapter is to describe the "normal" activities associated with the day-to-day conduct of the department, especially as they are related to its administration, fire suppression, and communications aspects. We conclude with an examination of the ramifications of the interpersonal structure of the organization on the group's operation

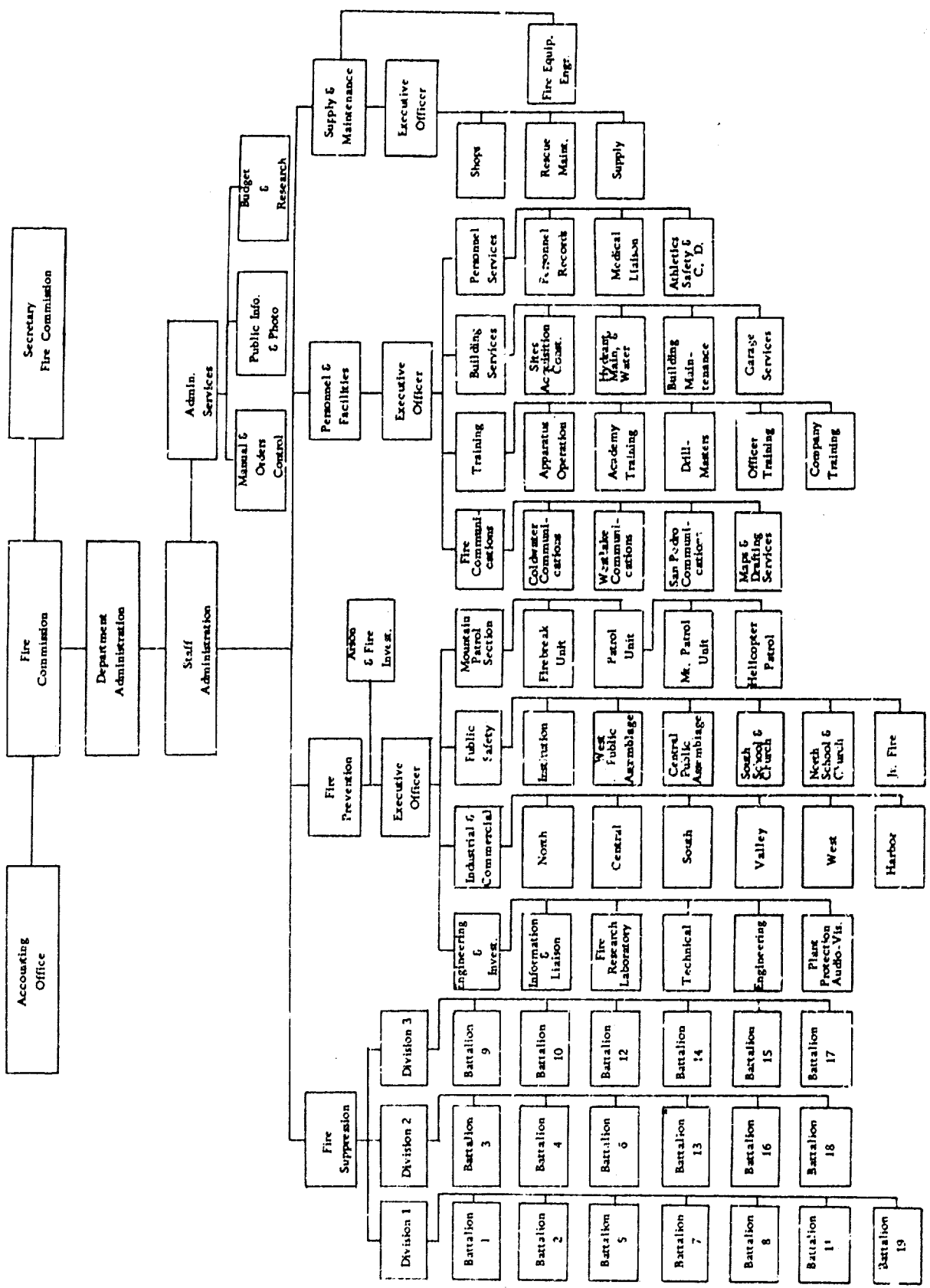
Administration

A review of the plan of organization indicates that the administrative lines of authority and decision making are clearly marked. Being a paramilitary organization these lines are followed rather closely, especially during everyday operations of the department. The chain of command follows the ranking of its officers and men. From top to bottom it is:

Chief Engineer
Deputy Fire Chief
Assistant Fire Chief
Fire Captain
Engineer
Fireman

It is difficult to say that one set of behaviors is administrative, and another operations, and another communications. We are also cognizant of the fact that every position from chief engineer to fireman carries with it at least a minimum amount of administrative responsibility. However, incumbents

FIGURE 1
LOS ANGELES FIRE DEPARTMENT



in some positions are far more likely than others to initiate and channel departmental directions and policies throughout the organization. Accordingly, for purposes of this monograph, the behavior -- especially the decisions -- of the chief engineer and the deputy fire chiefs, will be treated as primarily administrative in nature.

The Chief Engineer

The chief engineer is the ranking officer in the department. He achieves his position as a result of experience and through competitive civil service examinations.

He is responsible for the conduct of the entire department and serves as its chief liaison with the fire commission and the public. Most matters of major importance come to him for consideration and final approval. Under normal conditions he works from the fire headquarters in downtown Los Angeles. His duties are difficult to outline in that they are so pervasive as to encompass almost everything that concerns the department. His personal involvement in any particular situation is almost always measured by its importance.

The Deputy Fire Chief

There are seven deputy fire chiefs in the department: one in staff administration; three in fire suppression; and one each in fire prevention, personnel and facilities, and supply and maintenance. These staff officers, along with the chief engineer, form the staff cabinet of the department. They meet weekly to discuss common concerns covering an extremely wide range of problems. In addition to a broad range of general responsibilities, the deputy fire chiefs are charged with certain specialized tasks related to the conduct of their individual offices and bureaus. They serve important liaison functions within the department as seen by an analysis of the plan of organization. These incumbents occupy the positions which serve as the matrix between the vertical and horizontal levels of the department. As such, they serve as the primary links between the administrative and operational phases of the department.

The Deputy Chief for Staff Administration

The deputy chief for staff administration is more or less responsible for the day-to-day operations of the fire department and his duties include the coordination of all its activities and programs. As second-in-command he is closely associated with the chief engineer. In the absence of the latter, even for one day, he literally occupies the chief's office and assumes all of his duties.

There is within the department a system of moving up which includes the filling of every major office at all times. As noted, when the chief engineer is absent his office is physically occupied and his duties assumed by the administrative deputy. The latter's office and duties, in turn, are assumed by the deputy chief of the personnel and facilities bureau. When this occurs,

the deputy's office is occupied by the assistant fire chief who serves as the executive officer of the personnel and facilities bureau, and so on. In this manner, there is always a fully legitimized incumbent in every office in the department.

The Deputy Chiefs for Fire Suppression

The fire suppression bureau is the largest and most complex one in the department. (See fig. 2.) The responsibilities of the deputy chiefs are, for the most part, administrative in nature. Among their routine tasks are included such matters as personnel problems, disciplinary procedures, service on review boards, attendance at semi-official meetings of the department including retirement dinners and a host of related activities. As pointed out earlier, they serve as the chief liaison between the administrative and operational-logistic levels of the department. Their physical offices are in the departmental headquarters building but they maintain a close working relationship with the officers and men in the field. They will, for instance, occasionally assume the duties of a line chief in the latter's absence. Usually, however, their tasks are almost entirely administrative and their presence at a fire, even a greater alarm fire (one to which a second assignment is sent), is the exception rather than the rule.

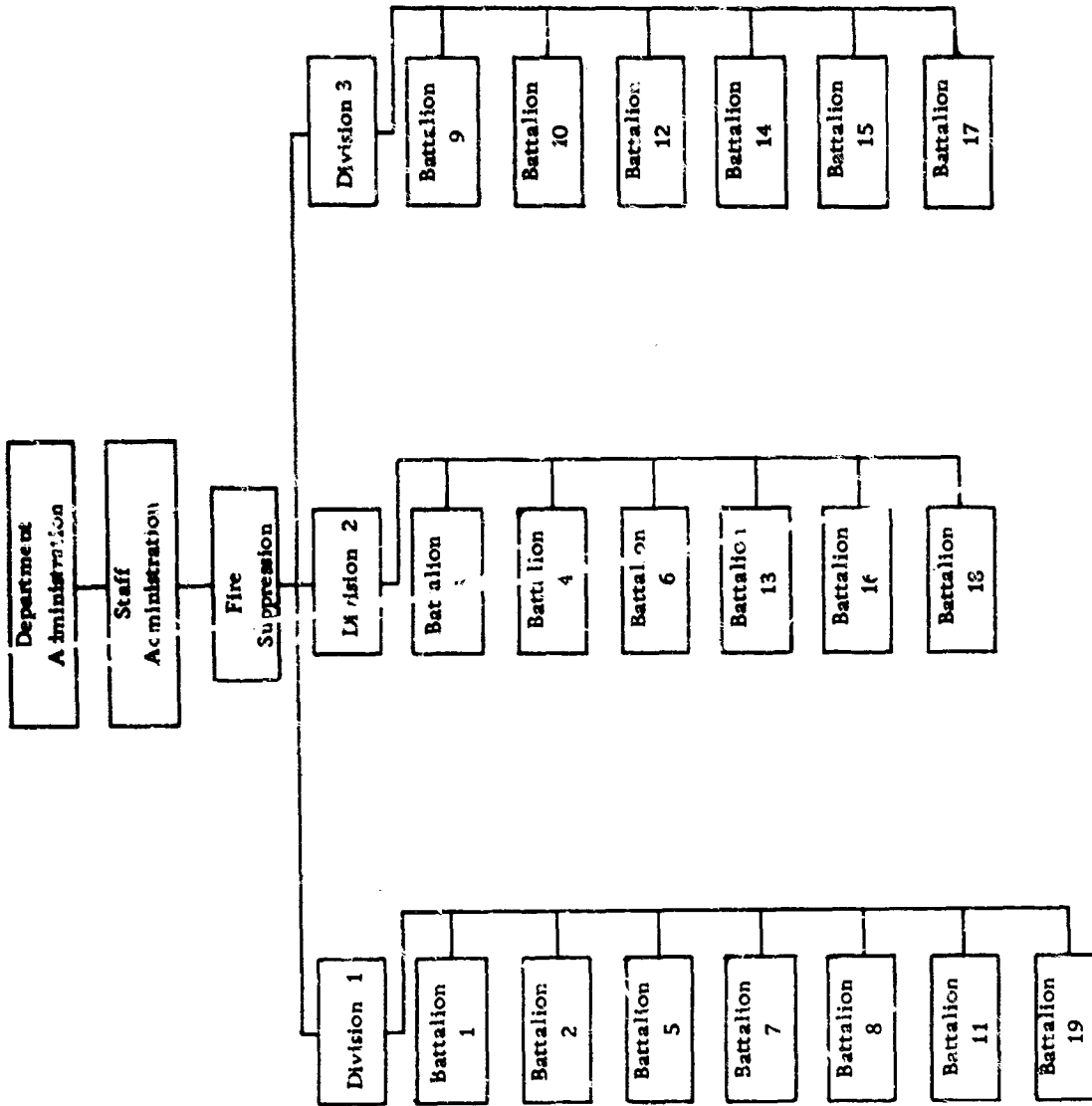
In addition to transmitting communications from the chief engineer and the deputy chief for staff administration, the deputy chiefs engage in extensive communications with other bureaus in the department. They also serve as the intraorganizational liaisons between the fire department and these organizations most related to them: the police department, civil defense personnel, the utilities companies, and the mass media outlets. Many of these formal liaison relationships are reinforced by strong interpersonal ties as a result of many years of working together with organizational counterparts in other agencies.

The Deputy Fire Chief for Personnel and Facilities

The deputy fire chief for personnel and facilities has an extremely wide range of responsibilities, even under normal conditions. The bureau contains four major sections: fire communications, training, building services, and personnel services. The deputy's duties include the preparation and review of all building plans, proposed changes, repairs, and so on. He is in charge of the communications offices and their operation. The preparation of maps, departmental athletic programs, safety programs, personnel and garage services, and training procedures are also a part of his responsibility. He also serves on a large number of extrajurisdictional advisory committees and represents the fire department at various civic functions.

The scope of this deputy's activities is so inclusive that he rarely acts in an unofficial capacity. Unlike the deputy fire chiefs for fire suppression, his duties are quite diversified and his authority is very pervasive. His immediate subordinates include an executive officer with the rank of assistant fire chief and three battalion chiefs, one for each of the major

FIGURE 2
FIRE SUPPRESSION BUREAU



sections of the bureau. The fourth section, that of personnel services is supervised by the assistant fire chief and a senior personnel analyst.

A very cursory description of the task assignments of the major staff officers in the department has been given. Their assignments are sharply defined within the context of the total department, but somewhat loosely defined in terms of how the individual performs his specific tasks. In spite of this the department does follow some rather rigidly prescribed patterns for all incumbents.

First, the entire department is acutely aware of the chain of command. The paramilitary structure and a tightly integrated system of interrelationships makes personnel throughout the department highly sensitive to position and rank. Orders are almost always transmitted along the chain of command. On occasions when an officer in the chain of command is bypassed due to his absence or unavailability, an unofficial norm states that the officer transmitting the order and the one receiving it will make joint efforts of a sustained nature to clear the order with the bypassed officer as quickly as possible. Officers involved in move-up operations expend a great deal of effort informing one another of existing conditions, and so on.

Closely related to the transmission of orders along the chain of command is the pattern of intradepartmental communication. The exchange of information is expected to follow the chain of command much as an order, and variations from this are exceptions to the rule. Every officer interviewed stressed the necessity of keeping one another "filled in" and indicated that failure to do so resulted inevitably in the application of negative sanctions. This "filling in" is done in two ways. First, there is within the communications section of the personnel and facilities bureau, a formal system of notification by which dispatchers automatically call fire officials and others, such as the police, utilities, news media, etc., at various stages of an emergency. For example, in the event of any greater alarm fire, the dispatcher automatically notifies the battalion chief in whose district the fire is occurring. As the magnitude of the emergency increases, as more companies respond, communications officers are responsible for additional notifications, including the appropriate deputy chief and ultimately the chief engineer. By the same token, the administrative and fire suppression officers are expected to keep the communications section fully informed of their whereabouts so as to facilitate the process of notification.

In addition to this formal chain of communication, the administrative officers expect to be kept aware of significant events of a public relations nature. For example, if the home of an extremely prominent person burned, the chief engineer would expect to be notified. This is not because the fire presented some particular problem for the department, or because such notification is called for in the formal operating procedures, but because the chief engineer would be likely to receive inquiries about it and would want to respond to them without additional briefing. Or if some fireman were involved in an incident which might attract widespread news coverage, the chief engineer, the deputy chief for staff administration, and the deputy chief for personnel and facilities would expect to be briefed by the man's captain or battalion chief so as to be fully conversant with the situation.

The third matter with which the administrative officers are concerned has already been alluded to, that is, public relations. Since the fire department is an organization explicitly created to deal with emergency situations, especially fires, and because its performance is constantly open to public observation and evaluation, it is acutely conscious of its public image. This consciousness and concern is expressed in a great many ways not the least of which is the employment of a staff officer with the rank of battalion chief who serves as a public relations representative. He works closely with the public news media and is the official liaison between the department and the general public.

The concern of the administrative officers for good public relations is passed on to every man in the department. The operating manual of the communications section includes these instructions.

It is important to give the general public the proper impression of the Fire Department. The dispatcher who answers the phone by saying, "Fire Department," represents to the person calling the entire Fire Department and the services offered.

One of the communications officers said, "In the communications section, I would say that we are all public relations men, the captain especially. But anyone that answers the phone in there has to consider himself a public relations man."

The fire suppression officers and men are also sensitive about their public image. Great and painstaking care to avoid needless and excessive property damage at fires is a part of the training program. The careful overhauling of a fire to insure against rekindles is an expression of pressures from insurance underwriters but more than that, it is an expression of the pride taken by officers and men in their work, one result of which is to maintain a "good" public image.

Administration of the department under normal conditions is highly formalized and follows the plan of organization, for the most part. To summarize the overall concerns of the administrators in the department, we can say they are acutely conscious of the chain of command both as it relates to the transmission of orders and interdepartmental communications. They are also highly sensitive to their public image and go to considerable effort to keep it untarnished by indications of carelessness or inefficiency.

Fire Suppression

As stated in the introduction to this chapter, the Los Angeles Fire Department was organized primarily to fight fires. In a real sense one can say that the structure of the organization emerges from these functions. We implied earlier that there are many other activities of the fire department such as educational programs, athletics, supply and maintenance, and so on; but fire suppression is the most important one from a functional perspective.

This is not meant to imply that every bureau or every person in the department is equally involved in fire suppression. Obviously all members of the organization are not. However, we are stating that fire suppression is the most important single function of the department and because of the nature of this function, the amount of goal substitution introduced by individuals and other bureaus is always somewhat limited.

The fire suppression units represent most ostensibly the entire department. The performance of these units is critically evaluated, not only by members of the public and by insurance underwriters but by those whose status and position would be most affected by poor performance, i.e., the administrative staff and line officers.

The importance with which the bureau is viewed can be determined by an analysis of the plan of organization. The fire suppression bureau is clearly the most extensively staffed and the most structurally complex of all subunits in the department. Since it forms the heart of the operational-logistical aspects of the organization, it will be the focus of our attention as the operations of the department are considered both under normal and stress conditions.

The fire suppression bureau is a highly complex system of interrelationships and as such defies simplistic description and analysis. The bureau contains three major divisions designated by the numbers 1, 2, and 3. These three divisions contain 19 battalions with a total of 109 engine companies, 42 truck companies, and 24 rescue squads. In addition, there are 10 loaded reserve engine companies and 9 reserve truck companies. The men and equipment are housed in 109 fire stations located strategically throughout the city. The reserve trucks are not loaded and adequate equipment is lacking to put more than three of them into full-scale operation.

The normal apparatus capability of the department is further expanded, in that they have 14 engine companies that can be split. These companies have two or more pieces of apparatus normally assigned them. When split and manned, they increase the department's engine company total to 133.

Each of the divisions and their subsections, i.e., the 175 companies and squads, operate three separate shifts or platoons which are designated by the letters A, B, and C. There are three complements of officers and men, one for each platoon. The schedules are arranged so that they work twenty-four hour shifts every other day for four days. They are then on relief for four days. During a 30-day month, each platoon will have worked a total of ten 24-hour days or a monthly total of 240 hours. (This compares with a 160 hour month worked by most hourly employees.)

The magnitude and complexity of the fire suppression bureau can also be seen by a résumé of the officers and men employed. There are three deputy chiefs, one for each of the three platoons. When the A shift is on duty, the A deputy chief is in charge of the fire suppression bureau, and so on. Their tasks have been outlined above and are basically administrative in nature.

Since there are three divisions, 1, 2, and 3, and because there are three platoons, A, B, and C, for each division, there are nine assistant chiefs in all. That is, division 1 has an assistant chief for its A platoon; division 2 has an assistant chief for its A platoon; and division 3 has an assistant chief for its A platoon and so on for B and C. On any given day there will be three assistant chiefs on duty, in addition to the appropriate deputy chief.

The assistant chiefs, who are also referred to as division chiefs on occasion, are in charge of the various battalions and companies in their division. Their duties include a great many administrative responsibilities and they rarely become involved in fire fighting activities, although they are quartered in various stations throughout the city.

As noted, there are nineteen battalions in the fire suppression bureau and inasmuch as each battalion has three platoons, or shifts, a total of fifty-seven battalion chiefs are employed. The battalion chiefs maintain their offices and quarters in one of the station houses in their district. They do not normally respond to initial alarm fires, but they do respond to all greater alarm fires and to those where loss of life or serious property damage is threatened. Each battalion chief has, on an average, approximately eight companies and five stations under his jurisdiction.

The fire suppression bureau contains 477 fire captains who function from area stations placed throughout the city. Their duties include the directing of fire fighting activities and, in almost all instances they respond with the first assignment of men and apparatus. They remain at the scene of the emergency throughout its duration. In the event of a greater alarm fire, the battalion chief is summoned and may assume command of the operation. The captains are also responsible for the care and maintenance of quarters and equipment. They conduct fire suppression drills on a systematic basis, keep all company records, and requisition needed men, equipment, supplies, and so on.

At the time of the disturbance there was a total of 627 engineers in the service of the fire suppression bureau; approximately 210 for each platoon. They are responsible for the driving of fire apparatus and for certain tasks associated with its deployment, use, and minor maintenance.

The largest number of personnel employed by the bureau hold the rank of fireman. In August of 1965 there were 2,024 firemen in the bureau, one third of whom were on duty at a given time. Their duties are primarily associated with fire suppression but in addition the fireman's duties include drills, maintenance of quarters and equipment, fire prevention, rescue, and similar activities.

Altogether, the fire suppression bureau personnel numbers approximately 3,400, one third of whom are on duty at one time. Their responsibilities range from minor rescues to the combating of major conflagrations. They carry on extensive training maneuvers and drills, assist in fire prevention, are

responsible for the routine care and maintenance of quarters and equipment and, at the administrative levels, are charged with matters related to records, requisitions, discipline, review boards, and a multiplicity of other details which arise during the daily round of departmental business.

In addition to the large number of men employed, the bureau facilities and equipment are quite extensive. When one considers that they maintain 109 stations and over 200 pieces of fire and rescue apparatus, not counting fire boats, tenders, chiefs' cars, and other miscellaneous equipment, one is made more fully aware of the bureau's size and complexity.

Perhaps this complexity contributes to the maintenance of the bureau's organizational boundaries and helps the group to continue carrying out its traditional tasks and continue attempting to achieve its goals (or in more technical terms, assists in keeping task substitution and goal displacement at a minimum).¹ The bureau is an integral, functioning part of a larger, paramilitary organization. As indicated earlier, it is the window through which the world views the entire department. If for no other reason than this, it would tend to be rather rigid in the performance of its expected duties. But we are suggesting something more, for even highly structured, formal organizations can and do experience significant goal displacement and substitution. We are suggesting that the organizational complexity occasioned by the platoon system, a system which provides three incumbents for every position, makes the appearance of new or emergent forms of organizational behavior most difficult.

For example, one battalion chief may feel that the expected method of fire suppression is inferior to one he has envisaged. If he were the only incumbent the possibility of altering the standard operating procedures would be much enhanced. However, since there are two other incumbents occupying his identical position and fifty-three others with highly similar, if not exact, job descriptions, alterations in operating procedures can only come slowly and always through departmental channels. Hence, inertia created by such organizational complexity and interrelations militates against quick acceptance of individual innovations or easy substitution of traditional ways of carrying out tasks.

Related to this, of course, is the process of standardization of tasks necessitated by the bureau's organization and by the demands placed on it. The characteristics of the platoon system, with its multiple incumbents, presupposes the standardization of procedures without which the efficiency of the bureau would be jeopardized. Thus, the fire suppression bureau's organization in many respects manifests many of the characteristics of the classic bureaucratic structure.²

The Communications Section

The communications section of the fire department is a subsection of the personnel and facilities bureau. There are three other subsections of the bureau but our focus will be on the communications subsection for reasons to be specified later.

The chief officer of the personnel and facilities bureau is a deputy chief, and, although he is technically in charge of all the various subsections in this bureau including the communications one, he is rarely involved with their daily operations. For practical purposes, the communications section has a battalion chief as its ranking officer whose duties, while primarily administrative in nature, include the day-to-day supervision of the entire section. In all, there are forty-five men in the section, including the battalion chief, who work on a twenty-four-hour shift utilizing a three-platoon system.

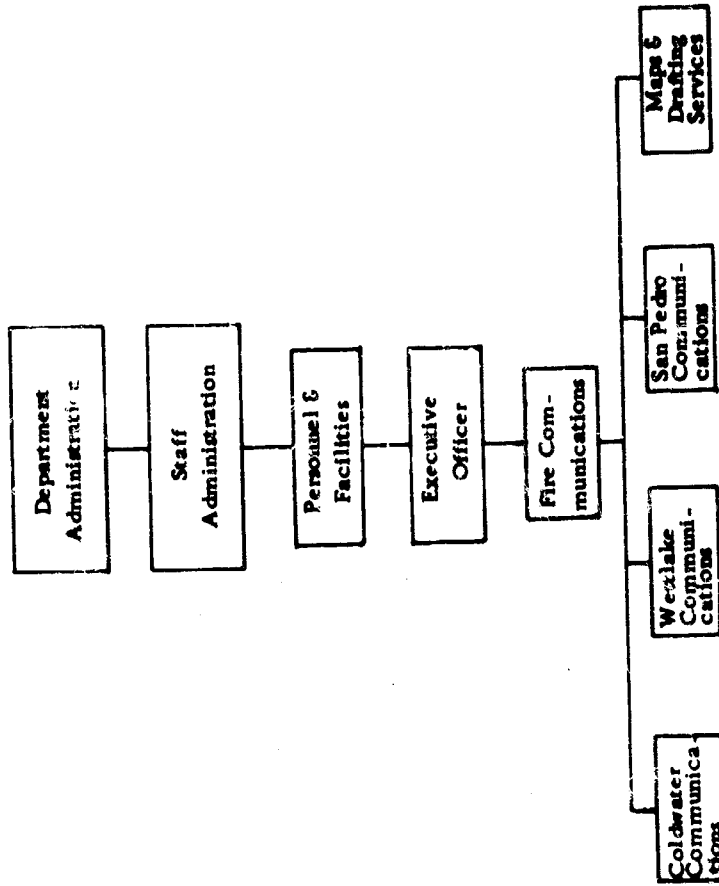
There are three communications centers so located as to be strategically convenient to all areas of the city. They are Coldwater, San Pedro and Westlake. The Coldwater center is located in the northern part of the city and is particularly involved with the frequent brush fires of that area. Three captains and thirty-eight firemen are assigned to this center. The San Pedro center is situated at the southern tip of the city and is responsible chiefly for the harbor area. One captain and six firemen are assigned to this center.

Westlake is the largest in size (although not in personnel) of the centers and is located in the central area of the city. (This area is referred to as "the metropolitan jurisdiction" by the fire department, inasmuch as it contains the central business district of Los Angeles and its immediate environs.) Westlake serves as the coordinating office for the entire communications section. As such, it carries the largest amount of radio, telephone, and teletype traffic. It is at Westlake that the department houses its principal communications services. The center maintains a direct telephone and telegraph line to every station house in the city, to the department's main offices, and to a number of city departments and bureaus, including the police, water, and power. During daily business hours it receives all incoming departmental calls and in addition serves as the main dispatching facility for the fire suppression bureau. (The four radio frequencies of the department in August of 1965, one for each of the communications centers and one for command-operational purposes, were assigned and controlled by the Westlake center.) Normally, there are four captains and eleven firemen assigned to this center.

Although all three centers experienced more than normal activity during the disturbance, the Coldwater and San Pedro centers were only peripherally involved. The Westlake center, on the other hand, served as the communications and operations center for the department during the emergency period. As such it was the coordinating point for most of the department's fire suppression activities. Therefore, the majority of this description and analysis will be confined to the activities at Westlake.

Perhaps the best way to describe the functioning of the center is to outline its activities on a "normal" working day. Usually two captains and five dispatchers are on duty. One of these captains is a day captain; that is, he works an eight-hour shift and has no counterparts in the platoon system. The day captain is in charge of the operations of the center but under normal conditions rarely occupies himself with its routine activities. His duties are usually more administrative and supervisory than operational.

FIGURE 3
COMMUNICATIONS SECTION



The shift or platoon captain is the officer responsible for the daily operations of the center and as such occupies an important and highly strategic position in the department's fire suppression activities. The shifts relieve one another officially at 8:00 a.m., although the relief procedures begin anytime after 7:00 a.m. The captains and dispatchers brief one another on a great many details dealing with the operations of the department, especially as they relate to the fire suppression bureau. Among the most important items discussed are: the current fire situation, i.e., the number and location of existing fires and overhauling activities; the condition and whereabouts of all fire apparatus; the companies on drill and thus away from their quarters; a listing of personnel off-duty; and so on. Most of this information, along with a great deal more, will have been placed on a daily operating calendar prior to the changing of shifts so that there is no information gap as a result of platoon changes.

Each morning the teletype system which runs from Westlake to all 109 fire stations, is checked, as are all four radio frequencies. The alarm system which runs into each fire station is also checked five times in each twenty-four-hour period to insure its proper functioning, and the direct line telephones which connect the center with all stations are checked twice. If for any reason the stations are not contacted within ten minutes of the designated hours, they contact the center by utilizing one of the alternate systems. Hence, there is a double check on all communications systems operating between Westlake and the other communications centers and between Westlake and the entire fire suppression network of stations. Once a week the C platoon checks all reserve apparatus to determine if it is being used, where it is, what its present condition is, and similar matters. This is done so that the dispatchers will be fully aware of its availability in event of an emergency.

A great many calls are channeled through the Westlake center from local fire stations ranging from requests for supplies and apparatus repairs to fumigation reports and funerals. In addition, the center maintains close communications with the various utility and city departments regarding hydrants, water mains, street closings and repairs, and problems of that kind. The center is also responsible for the transmission of such information to the affected fire stations and personnel.

The daily activities of the engine and truck companies normally include fire prevention and/or training drills. Since these activities take many companies from their quarters to other areas of the city, it is necessary for the Westlake center to rearrange the housing of other companies in order to insure adequate fire coverage of the entire city at all times. For example, if too many companies from the inner-city are out of quarters, either because of drill, fire prevention duties, or engagement in actual fire fighting, the Westlake center will move some companies from outlying areas into some of the vacant station houses so as to insure a minimum of protection for all sections of the city. The dispatcher ordering the move up informs the company transferring quarters of the reasons for the move and instructs them on its urgency. Most move-up operations are performed in a nonemergency fashion, i.e., they are made without sirens or flashing red lights.

Because of this "moving up" policy, it is extremely important for the center to keep in radio contact with all companies engaged in duties outside their stations. An effort is made by the center to know the whereabouts of every piece of fire apparatus in the department at all times, and to this end, all in-service apparatus is expected to remain in communication with the center. Thus, a great amount of radio communication is maintained between the various companies and the center. The center is also kept aware of the presence of the department's administrative and line officers. For example, a battalion chief who responds to a fire, or leaves his quarters for any length of time for any reason, is required to communicate his whereabouts to the center. In like fashion, the administrative chiefs will inform the center of their movements in order to facilitate emergency notifications.

Thus, the communications staff at Westlake is kept apprised of the location of the department's personnel and apparatus. This facilitates the coordination of their distribution and allocation in the event of an emergency. The center receives all emergency calls. It dispatches apparatus assignments varying from a single rescue squad with two or three men, to eighteen pieces of apparatus with eighty to ninety men for a major fire in the metropolitan area.

When a call comes into the center an operator receives it. If it involves an emergency, a slip is completed on which the necessary information is noted; it is then time-stamped and handed to a dispatcher. The dispatcher in turn sounds an alarm in the appropriate stations and makes an apparatus assignment on the basis of the nature of the emergency, its location, magnitude, and similar information. The company or companies responding will notify the center upon their arrival at the scene and will indicate something of the details of the emergency's nature. If they request additional apparatus and personnel, the emergency is automatically regarded as a greater alarm fire and the battalion chief in whose district the emergency is occurring will be notified.

The center contains a large map of the city on which the status of the fire department is kept current. Fires and other emergencies, apparatus and personnel placement, and other related information is posted in such a manner as to keep the communications staff completely aware of the demand capability of the department. It is with the aid of this map that company move-ups are made.

The dispatchers occupy especially crucial positions during periods of high organizational demand. They must keep track of the department's men and equipment and, although they have the status-map and other aids, much information must be retained by memory. This becomes especially complex when there are changes in shifts, since the on-coming dispatchers must be fully briefed before assuming their duties. This sometimes involves a considerable length of time, but delays in shift changes rarely occur.

The Westlake center and its personnel are also crucial in that they serve as the hub of the department during large-scale emergencies. The duties of the staff at the center are outlined in the emergency operating procedures

of the department. Under these procedures, all departmental activities are coordinated from the Westlake center, including the deployment of men and apparatus and the maintenance of all departmental communication. The deputy chief for personnel and facilities serves as the operations chief under the emergency procedures with headquarters at Westlake.

From the preceding description of the communications section and of the Westlake center, it can be said without equivocation that they serve extremely vital functions within the fire department generally, and moreover that they are entirely indispensable to the fire suppression bureau and its emergency operations.

The Interpersonal Structure

In the first chapter of this monograph it was suggested that a Type I complex organization is maintained in part by its normative structure and in part by its interpersonal structure. The latter is defined as containing, "those expectations which have emerged as a result of the types of relationships that have developed between persons independent of the positions they enact."³

Having dealt almost exclusively with the normative structure of the fire department, an examination of the interpersonal structure is in order. First, it is necessary to determine whether or not such a structure exists and secondly to discover what effect, if any, it has on the functioning of the department.

The Los Angeles Fire Department is an extremely complex organization and there is within it a great deal of interpersonal behavior. In keeping with the above, therefore, one should expect to find an interpersonal structure operating in such a manner as to influence the department's functioning. This assumption is at least partially substantiated by the data. However, it is only partially substantiated, for while the existence of an interpersonal structure can be easily and fully documented, its influence on the functioning of the department is not easily determined.

The structure of the fire department, at least for the sections most examined in this study, appears to follow a general pattern -- the level of authority and the number and intensity of the interpersonal relationships vary inversely. Part of this might be explained as a function of absolute numbers. There are only 7 deputy chiefs but more than 2,000 firemen. Obviously, the possibility for the development of a complex interpersonal structure involving a great many persons is limited at the highest levels. In addition, a number of officers queried indicated that they did not believe in fraternizing with the men of lower rank and expressed the belief that it was detrimental to the administration of the department to do so. Some of them cited previous military experience to justify or reinforce their views.

There are other salient factors which are instrumental in this differential pattern of interpersonal relationships. For example, in the lower

echelons among the engineers and firemen, there is a great amount of off-duty interaction. They fish, hunt, attend ball games, swim together, and otherwise associate with one another. This close association is fostered by the department in a number of ways. For example, it conducts a highly developed intramural sports program including handball and bowling leagues. Another contributing factor is the unusual living arrangements of these personnel. They eat, sleep, and work together in a way which is conducive to the development of strong interpersonal ties.

Still another factor is the shift procedures which provide four consecutive off-duty days three times a month. These relief periods come irregularly during the month. That is, they may come on a Tuesday, Wednesday, Thursday, and Friday one week and on Saturday, Sunday, Monday, and Tuesday two weeks later. Under these conditions it is logical to expect the men to develop certain interpersonal ties with the department and more specifically among members of their particular shift.

By contrast, the highest echelon personnel work a regular five-day, forty-hour week. When they leave the office at the end of a day they often do not see one another until the next morning. Their work schedules and living habits are much more "normal" when viewed in terms of the general public. Thus they are more apt to develop friendships outside their work groups and to maintain a much wider circle of acquaintances than the shift personnel.

The rather unusual living and working conditions of the lower echelon personnel also makes for the development of strong interpersonal ties among the wives of the men. Frequently they shop together, exchange baby sitting chores, attend movies, and otherwise interact with one another. In addition, there are a number of formally organized social clubs for the wives. These clubs express a wide variety of interests out all of them have a strong social and interpersonal base.

As the men are promoted they tend to become more socially isolated, especially from their previous peers. Incidentally, one of the factors which impedes this social isolation is the existence of the wives' clubs noted above. The women seem to maintain their social ties long after their husbands have become relatively isolated within the organizational structure.

The preceding discussion does not mean to imply that there is not a pattern of friendships and animosities; a set of informal relationships based on past acquaintance, mutual assignments, past conflicts, shared experiences, etc., is operating among the higher echelon officers. Such a pattern does exist at all levels within the department and on occasion it manifests itself in both covert and overt ways.

For example, one of the highest ranking officers in the department during the course of his interview indicated that when he wanted an estimate of the morale of the men in the various stations, he would talk with a certain fireman with whom he had been a rookie twenty-five years previously. Another officer admitted that he avoided passing down orders to one of his subordinates

because they tended to disagree on a great many procedural matters. Rather, he waited until the subordinate was off-duty and then would transmit the order to his platoon counterpart. During the rioting, as a result of personal ties, a chief officer in a bureau other than fire suppression was placed in charge of one of the command posts which had been established to coordinate the field activities of the department.

These examples from the data seem to indicate most clearly the presence and operation of an interpersonal structure within the department. At the same time it must be noted that they stand out because they are exceptions to the rule. As such they probably have a limited influence on the total operation of the department both under normal and stress conditions.

This may be due in part to the following factors: (1) As noted, the department has a highly formal, paramilitary structure with sharply defined job tasks for all positions. (2) The department has a formal document to guide them during large-scale emergencies. These emergency operating procedures include the reallocation of the department's resources including its personnel. Although these procedures were never formally declared in force during the rioting, the department did make the majority of personnel assignments on the basis of them. These procedures tended to negate the possibility of appointments on the basis of the interpersonal ties alone, inasmuch as most of the officers in the department have specifically assigned duties during an emergency period. (3) The department has a clearly outlined chain of command with an extensive recall and move-up system which is rigorously followed during normal operations and which was only slightly altered during the rioting.

In conclusion, it must be emphasized again that the data are not substantial enough to determine the total impact of the interpersonal structure on the department, either in terms of its normal activities or under stress conditions. Such a structure does exist and it does have an impact on the total operation of the department. At the same time, there are a number of factors inherent in the more formal structure of the organization which seem to limit this influence.

This then is the structure of the Los Angeles Fire Department during normal operations. In the next chapter we turn to an examination of its structure during a far-from-routine situation.

NOTES: Chapter III

1. For a discussion of goal displacement see Amitai Etzioni, Modern Organizations (Englewood Cliffs, N.J.: Prentice-Hall, 1964), especially pp. 10-12.
2. The term "bureaucracy" is used here, of course, not in the pejorative sense, but as it is conceptualized in sociology. For discussions of the term, see Peter Blau, Bureaucracy in Modern Society (New York: Random House, 1956); James G. March, ed., Handbook of Organizations (Chicago: Rand McNally, 1965), especially pp. 142-193, 650-677, 802-837, and 910-971; and Nicos Mouzelis, Organization and Bureaucracy: An Analysis of Modern Theories (Chicago: Aldine, 1967).
3. For a detailed discussion of this concept see Thomas E. Drabek, Laboratory Simulation of a Police Communications System Under Stress, Disaster Research Center Monograph Series (Columbus: College of Administrative Science, The Ohio State University, 1969).

CHAPTER IV

FIRE DEPARTMENT RESPONSE TO THE DISTURBANCE

In the previous chapter we outlined in relative detail the "normal" operations of the Los Angeles Fire Department, especially as they are related to the administration, fire suppression, and communications sections. This chapter describes the operations of these same three sections of the organization as it responded to the disorders of August 1965. In order to do this most effectively, it is helpful to divide the disturbance and the demands it placed on the fire department as a result of the subsequent fires, into three phases. These, when viewed longitudinally, form a stress continuum.

The maximum stress experienced by the fire department was the result of a cumulative process; a process which culminated in a period when the overall demands made on the department were in excess of its overall organizational capability. As we shall see later, however, the three sections of the department did not undergo equivalent degrees of stress.

The disorders and the fires began rather inauspiciously with the initial but unusual incidents of Wednesday evening and Thursday morning, August 11 and 12. They increased in magnitude until they became a large-scale, major emergency during the late hours of Friday and the early hours of Saturday, August 13 and 14. It was during this period that the department experienced its maximum stress. The demands diminished markedly following the peak hour, which occurred at 1:00 a.m. on Saturday, August 14. They continued to decrease irregularly throughout the remainder of the day. Sections of the department began to return to an uneasy normalcy on Sunday and Monday, August 15 and 16 but department operations, especially in the fire suppression bureau and in the communications section, were somewhat altered for about a week following the first events of August 11 and 12.

What is being suggested is that the fire department experienced a period of stress during the disturbance and furthermore that this stress manifested itself in the form of a continuum with the degree of stress being determined by the disparity between two major variables: (1) the change in organizational demands and (2) change in the organization's capability. More succinctly stated, the demand-stress periods will be divided as follows:

- Period One: Increasing Demands -- Incipient Stress; Wednesday, August 11, 9:00 p.m. to Friday, August 13, 5:00 p.m.
- Period Two: Maximum Demands -- Maximum Stress; Friday, August 13, 5:00 p.m. to Saturday, August 14, 7:00 a.m.
- Period Three: Decreasing Demands -- Diminishing Stress and Return to Normalcy; Saturday, August 14, 7:00 a.m. to Wednesday, August 18, 7:00 a.m.

It is recognized that such a division is somewhat arbitrarily conceived, although it can be substantially justified by graphic representation, (see figs. 4, 5, 6), and by the data itself.

Administration

Period One: Increasing Demands -- Incipient Stress

The administrative chiefs of the department were briefed on the disorders at a regularly scheduled meeting of the fire commission held on Thursday morning, August 12. There had been two incidents involving the fire department early Thursday: one at 12:41 a.m. and one at 5:36 a.m. In each case, fire apparatus was subjected to bombardment with rocks and other missiles as they responded to the alarms in southcentral Los Angeles.

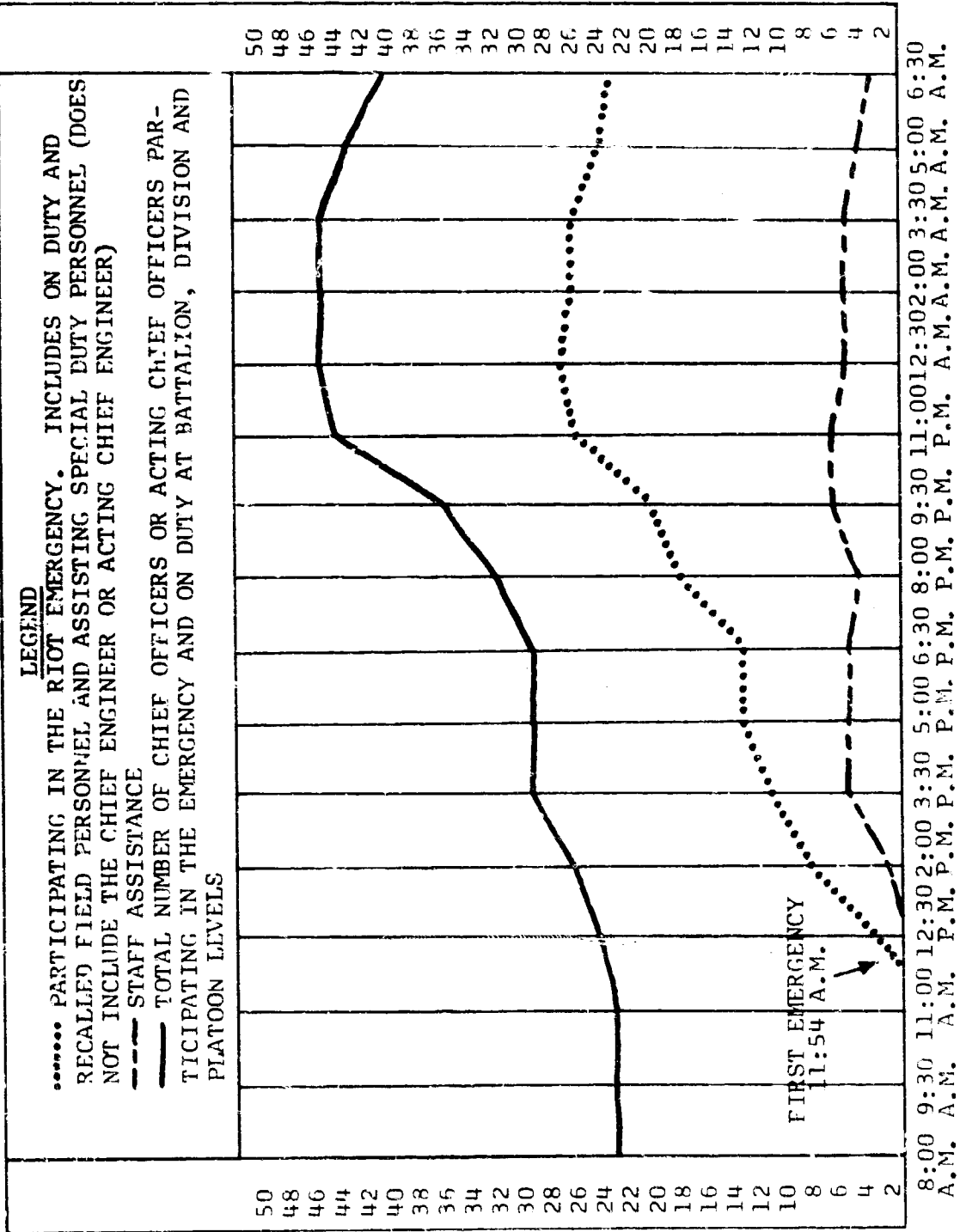
The fire commission and the chief officers, independent of but coincidental with the mayor and chief of police, felt that the disturbances were probably isolated events and that they would not develop beyond this initial stage. This assumption allowed the chief engineer of the department to leave the city, as originally scheduled, which generated a move-up in position of departmental personnel. The deputy chief for staff administration became the acting chief engineer and the deputy chief of the personnel and facilities bureau became the administrative deputy. (The chief engineer returned on duty on Saturday and assumed charge of the department at about 9:00 a.m.)

On Thursday night three additional incidents in southcentral Los Angeles involving the fire department occurred: one at 8:52 p.m., one at 9:00 p.m., and another at 9:50 p.m. In each instance, the responding men and apparatus were subjected to heavy harassment by some residents of the area. The fire department personnel were deluged with bottles, cans, rocks, asphalt pieces weighing up to five pounds, pieces of iron, and other objects. The windshields on two pieces of apparatus were broken and one fireman was struck with a missile which required his being placed off-duty. At the 9:50 p.m. response a departmental pumper was abandoned due to gunfire. It was recovered later with police assistance.

At the second of these three alarms, the battalion chief in charge decided not to take apparatus and personnel into the area, without the assurance of adequate police protection. He notified the deputy chief in charge of the on-duty platoon of this decision. The platoon chief then called the acting chief engineer at his home and advised him of this action. The acting chief left home at once and arrived at departmental headquarters about 9:00 p.m. He immediately contacted the police department and requested assistance and protection for fire personnel. He was informed that efforts would be made to provide armed escorts but that the police were being besieged with calls for assistance and, therefore, could not guarantee adequate protection at all fires.

The acting chief then contacted the platoon commander and informed him of the limited availability of police protection. At about 9:30 p.m., the

FIGURE 4



USE OF CHIEF OFFICERS AND ACTING CHIEF OFFICERS FOR THE PERIOD 8:00 A.M. .. 8/13/65 (FRIDAY) TO 8:00 A.M. - 8/14/65 (SATURDAY)

acting chief and the deputy chief of the fire prevention bureau (who had voluntarily returned to departmental headquarters) drove to the battalion headquarters of the companies involved in order to discuss the situation with the officers in charge. They also inspected the damaged apparatus

At 10:00 p.m. it was decided by fire and police officers in the area to respond to fires in groups or convoys of several pieces of apparatus. These groups, first called task forces and later task groups, usually were composed of two engine companies, a truck company, and a battalion chief. The units remained in a close-knit group while at a fire location, and left in a body when operations were completed.

Under normal circumstances, when a greater alarm fire occurs or when the situation demands several different types of apparatus the procedure of the department is to dispatch men and apparatus from several different stations. For example, early Thursday night, apparatus was being sent from three different station houses: 57, 64, and 65. These units would approach the fire from several different locations and would frequently arrive individually at the emergency scene. This procedure seemed to encourage the harassment of individual and isolated companies. It also increased the possibility of accidents as the streets were crowded with persons and abandoned cars. This mode of response also made it much more difficult for the police to provide adequate escort, since it necessitated a police cruiser for each piece of responding apparatus.

As a result of the plan agreed on at the 10:00 p.m. consultation, it was decided that the fire apparatus would meet at an arranged location, pick up a police escort and proceed to the emergency. If the police did not have sufficient manpower and equipment to provide protection, the task force was instructed to proceed to the fire without them. If, however, the men were subjected to heavy bombardment, they were to return to their quarters and permit the fires to burn.

It was at 10:45 p.m. that the first structural (i.e., building) fire was reported since the disturbances had started. The fire was in a large food market and was well developed when the responding companies arrived. The fire was extinguished, although a mob harassed the men continually in spite of the presence of several police squads.

At about this time the acting chief ordered the dispatchers at Westlake to make no assignments to automobile fires in the disturbance area, especially if it appeared that the car was badly burning and if it was in the street. The chief also instructed the center to refrain from dispatching equipment to small liquor store fires without specific instructions to do so. Hence, there was a period of about five hours on Thursday night and Friday morning, August 12 and 13, when the department was not responding to automobile and small structural fires.

The acting chief went from the battalion headquarters in the disturbance area to the Westlake communications center at about midnight. When he arrived, he discovered a number of high ranking fire personnel, many of them off duty,

who had heard of the difficulties and who had voluntarily come to the center in order to discover the true magnitude of the situation.

At that time, he authorized the transfer of men and apparatus from station 65 to station 64 for the remainder of the night, because the former station was in the heart of the disturbance area and there was considerable uncertainty regarding its safety. Later during the disorder, five additional stations were vacated for varying periods of time. At least one of these stations was also used by the National Guard as a rest and staging area and another by the police as part of its operations center in Watts.

It was late Thursday night that the first command post was established at station 64. This station normally serves as the battalion headquarters for battalion 13 and is located in the southern end of the initial disturbance zone. The command post was established at station 64 for two reasons: the station was in the area where the disorders were occurring, and it was large enough to provide quarters for the men and apparatus from station 65.

The command post concept had been employed by the department on prior occasions of high organizational demand. Each command post is, in effect, a small fire department complete with its own field officers, personnel, apparatus, and the necessary logistical support, including a mobile communications unit. Later, during the height of the disturbances and fires, the activities of the department were being directed by the administrative officers at Westlake. They would transmit orders via radio and telephone to the field officers at the command posts, who in turn would supervise the field operations.

Throughout the late hours of Thursday and the early hours of Friday the acting chief, when at the Westlake center, maintained direct contact with the police department via direct line telephone. On several occasions during these hours, fire officers in the field radioed the center requesting police protection. When this occurred, the acting chief would call the police and request assistance. Since the Westlake center was capable of monitoring all police communications, the acting chief was frequently able to determine whether his requested assistance had been dispatched. For example, at about 2:00 a.m. a drive-in restaurant was set afire. When the fire department responded, its personnel were met with missiles and gunfire so intense that they had to retreat. The battalion chief in charge advised the acting chief that they were withdrawing from the scene. The acting chief then called the police and requested assistance. Then, by monitoring the police radio, he heard that the police were sending several cars to the fire location, at which point he instructed the fire dispatcher to reassign a full task force. This time they were able to reach the fire and extinguish it.

During this interim, between withdrawal and re-entry, the communications center received a number of telephone calls asking why the fire department had not responded to the fire. This was a pattern which persisted throughout the entire disturbance. Property owners, mercantile proprietors, and others would call and ask why the department was neglecting to fight fires. Frequently, this social pressure seemed to influence the response of the organization, although the data are not conclusive enough to indicate the exact patterns.

As figure 3 indicates, there was very little fire activity between 3:00 a.m. and 10:00 a.m. on Friday. This being the case, the acting chief left the Westlake center at about 3:30 a.m. and returned to his home. With the changing of shifts at 7:00 a.m. on Friday engine company 65, which had spent most of the night at station 64, returned to its own quarters. At approximately 8:00 a.m., the acting chief returned to departmental headquarters, took care of some necessary paperwork, then drove to the disturbance area to review the damage caused by the fires of the previous night. He then drove to the battalion headquarters at station 64 and went over the procedures to be followed, as outlined the night before. He fully briefed the oncoming battalion chief and his officers of the situation and suggested that they contact him before making any additional changes of a major nature.

The acting chief then talked with the deputy chief in charge of the on-duty platoon, which had relieved the B platoon at 7:00 a.m. The platoon commander indicated that he had just called a meeting with the assistant chief in charge of the division and with the battalion chiefs in all areas adjacent to the disturbance zone. At this meeting, the acting chief reiterated the orders of the night before, i.e., no two-man companies or squads should respond to emergencies within the disturbance zone and furthermore that task forces should request and secure police protection before responding to emergencies in the general area of the disorders. The men were advised to be prepared for missiles, and to respond to emergencies in their hard helmets and goggles so as to minimize the possibility of injuries from thrown objects and broken windshield.

In addition, the battalion chiefs were informed to use their own judgment regarding a withdrawal from the scene in case of vigorous physical attack. It was decided at this meeting that all task forces, unless otherwise directed, would respond to emergencies in the disturbance area without the aid of sirens. This was designed to lessen the bombardment of personnel and apparatus. It was felt that the sirens tended to announce the arrival of emergency vehicles which, in turn, seemed to result in larger and more hostile gathering of spectators.

At 10:30 a.m. disorders began again in the neighborhood of station 65 and the men and equipment were transferred to station 64 once again. While at battalion 13 headquarters, located in station 64, the acting chief was contacted by personnel at departmental headquarters and informed that a local political figure had made some detrimental remarks about the fire department on local television. Since the acting chief was fully cognizant of the situation referred to, he was requested to return to headquarters and make a tape which was to be played over a local station. This he did at about 12:00 noon.

Upon returning from lunch at 1:00 p.m., the acting chief tuned in the fire radio and began monitoring fire communications. At about 1:10 he heard one of the battalion chiefs fighting a fire in the Watts area indicate that they were under such heavy attack that they were withdrawing. The situation appeared to be worsening. In order to get a first-hand appraisal, the acting chief returned to battalion 13 headquarters. On the way he noticed two very large fires about two blocks apart. When he arrived at battalion 13

headquarters, which was still serving as a command post, he phoned Westlake and inquired about the availability of additional task forces which could be sent to these two large fires. One of the companies which had been forced to leave the area by gunfire had a rear tire shot out and was returning to the command post for repairs. An assistant chief from the supply and maintenance section had provided an emergency escort for the small truck bringing the replacement wheel and tire. Upon arrival, that assistant chief was relieved of his supply and maintenance responsibilities and assigned, along with a battalion chief, to a six-company task force. They were directed to make their way back into the area to attack these two large fires, simultaneously, if possible, or one at a time if forced to do so by the actions of the people in the streets. Before sending this six-company task force to these fires, the acting chief instructed the officers to change their fire fighting tactics. This was shortly after 1:40 p.m. on Friday.

The normal procedure in fighting a fire, as pointed out in the previous chapter, includes the careful use of water to avoid excessive water damage and a meticulous overhauling of the structure to insure against the possibility of a rekindle caused by undetected sparks, shorted wires, and so on. The acting chief indicated that the men should attack the fires with big lines capable of throwing thousands of gallons of water per minute. They were to "knock the fires down," get out, and not worry about water damage because fairly extensive looting was being undertaken. In the event of rekindles, the department would merely return again, knock the fire down and drown it as completely as possible. (As it turned out, some structures were ignited as many as six times during the course of the emergency, thus departmental procedures directed at the prevention of rekindles would have been time-consuming and ineffective.) This procedure improvised on Friday afternoon was used throughout the first two periods of the emergency.

The question of self-protection was also discussed at this briefing. The Los Angeles Fire Department had an established policy which prohibited the use of fire equipment and personnel in "riot" suppression. This policy was emphasized, particularly as it related to carrying of firearms. Under no circumstances were the men to be armed. It was decided, however, that the men could use heavy streams of water but only for purposes of self-defense. Thus, the use of large hoses and heavy streams was designed to knock down and drown large fires as quickly as possible and also to provide some protection in case of direct attack.

By 5:00 p.m. on Friday, there were thirty engine companies including fifteen officers at fires in the area. At 4:45 p.m. the platoon commander requested a conference with the acting chief, at which time he expressed concern about the men staying after dark. It was already apparent that the department was not going to be able to knock down all of the fires then burning before darkness set in. The acting chief, the platoon commander, and the division chief moved into the area which was being burned and, after consultation, decided to pick up most of their fire lines just before dark. Each company was to keep one 2½-inch line in operation, with the exception of those companies using wagon batteries, which need two large lines to supply them.

Simultaneously, the acting chief sent a liaison officer from the fire department to the police operations center. The officer selected was normally assigned to the arson section of the fire prevention bureau and had worked closely with police on numerous occasions. Thus, departmental officials were attempting to plan ahead, although they had little information on which to estimate their future operational needs.

Period Two: Maximum Demands -- Maximum Stress

On his arrival at the police operations center, the fire department's liaison was informed that there were not enough police officers available to provide protection for all of the fire units already deployed in the area. At about 7:00 p.m., several fire companies had to withdraw from the area because of heavy attack. In the meantime, a number of large fires were ignited some fifty blocks north of the original disturbances. The department, therefore, established a second command post at station 22, and an off-duty platoon commander was recalled and placed in charge of its operations.

It became obvious to the acting chief about 9:00 p.m. that he would not be able to supervise in person the field operations of the department from the command post at battalion 13 headquarters. He was unable, because of the increased scope and magnitude of the fires, to keep fully informed of the department's activities and thus decided to free himself of field command. A battalion chief was placed in charge of the command post at 13, and the acting chief went to the Westlake center where he felt he could obtain a better overall picture of the developing situation.

Earlier in the day, the acting chief had discussed with the deputy chief of the personnel and facilities bureau the possible necessity of issuing a recall of off-duty personnel. (Although the department's emergency operating procedures were not formally in effect, the deputy chief of the personnel and facilities bureau had assumed the role of chief operations officer and was directing much of the nonfield activity of the department at this time. The Westlake center had been activated as the operations center at noon on Friday.)

It was agreed to issue an initial recall of personnel when 40 of the department's 109 stations were completely empty of men and apparatus. This occurred at approximately 8:00 p.m. and the operations chief ordered the first recall. By 9:30 p.m. enough additional personnel were on duty to man the department's twenty pieces of reserve apparatus. An additional ten companies were provided by taking certain two-engine companies, dividing them into single-engine companies, and staffing them with recalled firemen.

The acting chief arrived at the Westlake center about 10:00 p.m. Shortly thereafter, the chief of the Los Angeles County Fire Department called and offered assistance, if needed. His offer was not accepted until 12:35 a.m. Saturday when the city department requested and received six full companies from the county to fight fires in an area along the city-county line.

In the meantime a second recall of departmental personnel was made at 11:00 p.m. on Friday, in order to bring every piece of apparatus in the city

up to the status of a fully manned company. This was especially important in that the department was seriously depleted of reserve men and apparatus at this time. A number of companies had been drawn from the San Pedro jurisdiction for duty in the disturbance area and three of its stations were being occupied by companies of the Long Beach Fire Department.

Early Saturday morning, the City of Vernon Fire Department, which had also volunteered assistance, was requested by the Los Angeles Fire Department to respond to a blaze just west of Vernon's city limits. This request was made inasmuch as the Los Angeles department had only one company available in the whole area at the time. The request was granted and the Vernon department proceeded to extinguish the fire. This mutual aid was granted by the participating departments on a volunteer basis, since a formal declaration of local peril and/or disaster had not yet been made (such a proclamation automatically activates the mutual aid pacts of the organizations involved).

The National Guard, which had been mobilized earlier in the day, entered the disturbance area at 10:00 p.m. on Friday. By 3:00 a.m. on Saturday, 3,356 of them had reinforced the police sufficiently to permit some minimum control of the disorder-torn streets. This enabled the department to begin a systematic attack on the 40 major fires burning at that time.

By 4:30 a.m., the number of new fires began to slacken and the operations chief, who had been on duty for twenty consecutive hours, returned home for some rest, in order to return to duty the following night if necessary. The acting chief returned to his home at 7:30 a.m., after he had briefed the oncoming platoon commander of the fire situation and of the emergency procedures being followed. The return of these and other chief officers to their homes, along with the changing of shifts in the various stations throughout the city, marked the end of the period of maximum demand and stress.

Period Three: Decreasing Demands -- Diminishing Stress and Return to Normalcy

The chief engineer of the fire department, who had been out of the city on Thursday evening and all day Friday, returned to his post on Saturday at 9:00 a.m. Upon arrival, he called the acting chief and received a thorough briefing on the events of the previous hours. The chief engineer then attended a meeting with the mayor, the chief of police, and representative of the National Guard at 10:00 a.m. At this meeting a more or less master plan was devised to cope with the situation in case it escalated to the proportions of the prior night.

Following the meeting, a condition of "local peril" was declared by the mayor. This declaration made mutual aid mandatory on the part of all fire departments in the region. The Los Angeles Fire Department had already received some assistance on the previous night, but this was, as indicated, on a voluntary basis. As it turned out, no additional demands were made on any of the neighboring city fire departments.

It was decided by the chief engineer and the operations officer, who had now returned to duty, to issue a third recall of personnel. The recall

was issued at 2:00 p.m. with the men scheduled to report for duty at 9:00 p.m. Saturday. This recall was designed to keep the reserve apparatus and the split companies fully manned throughout Saturday night and Sunday morning.

Although the disorders, looting, and burning were not as extensive on Saturday as on the day before, they continued to present serious problems to fire and security personnel. The situation was serious enough to prompt the acting governor to impose a curfew on a 46.5 square mile area and to declare a state of extreme emergency. The declaration of an extreme emergency automatically activated the California Civil Defense Fire and Rescue Service. On Saturday at 2:35 p.m., the chief engineer requested a fully manned civil defense heavy rescue unit to occupy one of the city's northernmost stations in the San Fernando Valley. The request was granted shortly thereafter. This was the only request made of the civil defense organization during the disturbance since the bulk of the fire activity had already passed. (However, a number of other civil defense units were held in readiness, placed on standby status, or alerted in at least six other counties outside of Los Angeles.)

The number of fires ignited on Saturday night and early Sunday morning did not reach the level of those of the night before, but the men were being subjected to more gunfire. About 2:30 a.m. on Sunday, the acting chief, who had relieved the chief engineer at 10:30 p.m. requested two National Guardsmen to ride on each piece of apparatus sent into the disturbance area. The National Guard was not able to comply with this request. However, because their responsibilities lessened with the intervention of the military, the police were able to send a total of thirty-six patrolmen and five sergeants to the two command posts at about 2:45 a.m. Later on Sunday, the National Guard was strong enough numerically to assign Guardsmen to every piece of responding apparatus.

The fire activity on Sunday evening was much greater than that of a normal Sunday night but it did not develop to the degree of the two previous nights. It was serious enough, however, to prompt the chief engineer and the operations chief to remain at the Westlake operations center until approximately 11:00 p.m. Shortly after this hour, when it became apparent that there would not be a repetition of the previous nights, the chief engineer and the operations chief returned to their homes. A platoon chief was placed in charge of the department for the remainder of the night.

With the changing of shifts at 7:00 a.m. on Monday, August 16, the department returned to near normalcy, especially as far as its administration was concerned.

Fire Suppression Operations

In the previous chapter it was indicated that the administrative activities and the operations of the fire suppression bureau are highly integrated, even under normal conditions. During the emergency they were even more intricately interwoven. This interrelationship is apparent from the foregoing description and analysis of the administrative activities of the department.

Obviously, many of the administrative decisions made during the emergency were the result of unusual conditions experienced by fire suppression personnel. In some instances, administrative decisions were simply legitimizations of "deviant" fire suppression procedures.

Taking cognizance of this, it was necessary to outline many of the fire suppression procedures in detail under the description of the administrative activities listed above. Therefore, this section devoted to the operations of the fire suppression bureau, will endeavor to examine more minutely the bureau's altered procedures as well as its logistical problems. Some repetition is inevitable under such a format but efforts have been made to avoid it, where possible.

Period One: Increasing Demands -- Incipient Stress

At 9:00 p.m. on Thursday, having already experienced considerable harassment from a mob during an earlier run, the battalion chief in charge of the response refused to remain in the area without police protection. He withdrew his companies and permitted three automobiles which had been set on fire to burn unattended. This was, of course, a radical departure from established policy -- unusual enough to prompt a phone call by the on-duty platoon commander to the acting chief at the latter's home.

This was the first time in the history of the fire department that such a decision was made. It was to become a repeated decision again and again during the disturbance as firemen were forced by unruly mobs to retreat and permit a fire to burn. This perhaps more than anything else caused consternation and frustration on the part of fire personnel. One chief officer said, "I never thought I would see the day when we would pull away from a fire when it was still evolving." Another chief had to be ordered from the scene of a fire a second time when danger to personnel became acute.

It appears in retrospect that the intent of some of the people in the streets, in their harassment of fire personnel, was mainly aimed at preventing the extinguishing of fires until they had sufficiently evolved to insure heavy damage or total loss. While there was a great amount of gunfire, especially on Saturday night and early Sunday morning, only four firemen were wounded. Of course, firemen who heard shots all around them as they fought blazes were not aware that in most instances they were being harassed rather than directly attacked.

One of the most significant changes in the department's operating procedure occurred at approximately 10:00 p.m. on Thursday: that of the task force response. The development of the task force concept resulted from (1) the danger to men and apparatus, (2) the need for mutual protection in the face of mob harassment, and (3) inadequate police protection. The task force concept was employed throughout the emergency period, although it was altered somewhat slightly when field command posts were fully established. Initially, where the number of chief officers available for assignment was exceeded by the possible number of task forces, companies were rotated in the groups and the commander had a different assignment of units from each response. Later,

the composition of the grouping was kept consistent from one response to another with the task force being most frequently identified by the name of the chief officer in command.

The department attempted to respond to street box alarms until 12:14 p.m. on Friday, August 13. At that time it became apparent that the overwhelming majority of street box alarms originating in the disturbance area were false. The decision to suspend answering box calls was made by the operations chief and communications staff at the Westlake center.

As noted under the discussion of administrative activities, another radical departure in the department's fire suppression procedures was that of using heavy streams to knock the fires down, drowning them as quickly as possible and neglecting overhauling attempts. This procedure was first formalized at approximately 1:30 p.m. on Friday, although some of the fires which had been extinguished early Friday morning had not been extensively overhauled. This method of fighting fires enabled the department to respond to a great many more calls than would have been possible following usual procedures in that they could extinguish a fire quickly to prevent its spread to another fire location.

Fire personnel experienced some initial difficulty in fighting fires in this manner. They had been thoroughly conditioned by intensive training to use extreme caution and to guard against accidental rekindling. Many of the men and officers underwent a period of personal frustration when forced to abandon the standard methods so deeply ingrained in them.

Period Two: Maximum Demands -- Maximum Stress

The demands on the department became so widespread early on Friday evening that several major decisions relating to field operations were made.

First, there was a recall of off-duty personnel issued at 8:00 p.m., in order to bring the department to its maximum strength. Every piece of apparatus which would run was manned. This included some equipment in the shops for minor repairs and new units which had not been completely outfitted. An additional recall of personnel was made at 11:00 p.m. on Friday to insure that every piece of apparatus in the department was at fully manned status.

Second, a priority of response was established. From highest to lowest, it was as is listed below.

1. Occupancies where a life hazard was believed to exist were given maximum priority. At least once during the disturbance, five personnel had to cease fighting a fire in order to rescue looters who were trapped on the upper floor of a large retail establishment.
2. Large and valuable properties such as supermarkets and furniture stores were assigned second priority.

3. Structures in areas not subjected to previous incendiaryism were given third priority.
4. Structures which had not been previously ignited were assigned the next highest priority.
5. Isolated structures, especially ones containing small occupancies, were next.
6. Automobiles were given the next to last minimum priority.
7. Alarms received for fires in areas made untenable by the rioters were given minimum priority.

Third, the fire suppression bureau had to assume the duties of other city departments as well as those of some private corporations during the emergency. For instance, the utility companies would not go into the disturbance area to disconnect services. On numerous occasions, fire personnel with inadequate training and equipment had to handle high voltage electric lines. These lines, downed by actions of the people in the streets and by the numerous fires, posed a serious threat to fire and other personnel in the area.

It also became incumbent upon the department during the disorders to answer emergency requests from within the disturbance area. The city ambulances refused to respond to calls from the area. This necessitated the deployment of fire department rescue squads to answer requests for emergency service, although this was not one of their normally accepted functions. These squads were accompanied on emergency runs by an engine company which offered some protection in case of attack. On one of the nights, during the height of the department's activity, squad 22 delivered a baby in the heart of the disturbance zone.

In addition, certain logistical problems not normally associated with the department's responsibility were encountered. For example, under normal procedures associated with large-scale fires, the private corporation which provides the petroleum products for the fire department will send a large tank truck to the scene of the fire from which departmental apparatus can replenish depleted supplies. Because of the disturbance, this corporation would not send their equipment into the area. This necessitated the use of departmental tank trucks which were placed at the two command posts.

When apparatus were low on fuel, they were forced to leave the scene of a fire and return to the command post for a new supply. (Twenty-five hundred dollars worth of petroleum products was used by the department during the period of the rioting.) The feeding and housing of personnel, including the police and Guardsmen assisting the fire department, also presented some logistical adjustments which were unanticipated. (A total of \$8,940 was expended on food for departmental and supporting personnel.) So, in addition to the increased demands being placed on the organization by the disturbance and by the numerous fires, it had to assume certain functions not normally regarded as legitimate demands on departmental resources.

On Friday evening and early Saturday morning, there were over 200 fires burning, including 40 major fires of a second-alarm nature. At one time on Saturday morning there were approximately 20 large structural fires and an additional 20 minor fires in autos, sheds, and rekindles, to which the department could not respond in that its apparatus was fully engaged. At this time, a minimum number of companies were being held in reserve to cover the remaining 93 percent of the city. Worthy of note at this point is that fires and emergencies in other parts of the city were about 50 percent below normal. This unexpected decrease was very instrumental in keeping the demand-capability ratio from becoming totally unbalanced. The reasons for this lessened activity elsewhere is unclear, although more residents of Los Angeles probably stayed home that evening than was usually the case at the start of a weekend in this metropolitan area.

At the period of maximum demand, 1:00 a.m. Saturday, the department had 102 engine companies and 26 truck companies in service. The command posts had 7 engine companies and no truck companies in reserve. There were, however, no personnel to man the 7 engines. During this period, the department had 54 engine and 19 truck companies covering that portion of the city not affected by the disorders (fig. 6).

As outlined in detail in the previous chapter, the Los Angeles Fire Department had an authorized strength in August of 1965 of approximately 3,400 suppression personnel. They were responsible for manning 109 engine companies and 42 truck companies. The Los Angeles Fire Department had 10 loaded reserve engine companies and 9 reserve truck companies. It also had 14 engine companies that could be split; that is, they had more than one piece of apparatus assigned them. These 14 companies, when split and manned, increased the department's strength to 133 engine companies. The maximum truck company strength was 51, although this figure is misleading in that the department had equipment for only 45 truck companies. Thus, by splitting multiple companies and by manning all loaded reserves, the department could theoretically raise its total number of loaded engines and trucks to 178.

However, during the period of maximum stress, the department was actually able to mobilize approximately 1,500 firemen, 157 engine companies and 45 truck companies. The additional engine companies were formed by splitting the 14 companies mentioned above and by splitting 24 companies not usually regarded as open to such division. This was made possible, in part, by the utilization of multicompany task forces.

Early on Saturday morning, the department had 27 chief officers and 5 staff officers engaged in emergency operations. This accounted for 32 of the 45 officers of battalion chief rank or above on duty at the time (figs. 4 and 5).

Period Three: Decreasing Demands -- Diminishing Stress and Return to Normalcy

By Saturday morning, August 14, most of the important operational adjustments had been made. Throughout Saturday activity was sporadic, with the day's peak occurring at 3:00 p.m. when there were 35 engine companies on duty in the

Watts area. On Saturday night and early Sunday morning, the most pressing problem was harassment by gunfire. This problem was all but solved with the assignment of police units and Guardsmen as escorts.

Many of the companies which had been operating at command posts and other stations began to return to their own quarters with the changing of shifts at 7:00 p.m. on Sunday. By Monday at 7:00 a.m. all but a few companies were in their own stations. On Sunday and subsequent days, the firemen were engaged primarily in dealing with rekindles. It was also on Sunday that fire personnel began to return to normal fire fighting procedures, paying more attention to overhauling, and so on, than they had been able to in the previous days.

The governor declared the emergency over on Tuesday, August 17, and the curfew was lifted. On Wednesday, the fire department had returned to almost complete pre-emergency operations with the cessation of task force operations and with the return of all but one of the companies to their own stations.

Communications

The communications section of the fire department, like the fire suppression bureau, experienced a period of unique and heavy demands during the Los Angeles disorders. This is understandable since the communications section forms, in a sense, the central nervous system of the entire organization. Its strategic importance has already been outlined in a previous chapter and, therefore, needs no additional documentation at this time.

Period One: Increasing Demands -- Incipient Stress

The chronology of events for the communications section follows a very similar pattern to the two sections already discussed. Unlike other sections of the department, however, it was cognizant of the initial incidents of the disturbance from the very beginning. The communications staff knew that the events of Thursday morning were highly unusual. Nothing happened during the daylight hours of Thursday, however, to indicate that there would be any repetition of these incidents and the battalion chief in charge of the communications office returned to his home at approximately 4:00 p.m.

At 9:30 p.m., he received a call from the captain on duty at Westlake informing him of the conditions that were developing. After a brief discussion, the battalion chief decided to return to the center in order to assist the staff on duty and to be available for decision making of a higher level than normally necessary. Upon his arrival he noted that there were signs of excitement and concern among the personnel in the center. There were no signs of disorganization, but there were definite signs that the men were involved in a situation which deviated from normal operating procedures.

The battalion chief was contacted by the acting chief at about 10:00 p.m. and informed of the decision to respond to fires in task force strength. At about the same time, dispatchers were instructed to refrain from sending

apparatus to small, isolated structures and automobiles etc. in the area, unless specifically instructed by a chief officer to do so. During the period between 9:00 p.m. Thursday and 2:30 a.m. Friday, the center maintained extensive communications with field units who were calling incessantly for police protection. The acting chief arrived at Westlake at about midnight and directed departmental operations from there until he went off duty at about 3:30 a.m.

The activity at the communications center became extensive enough by 10:30 a.m. on Friday to necessitate the day captain's involvement in the dispatching of men and apparatus. He began to assist the shift captain by keeping the status board current and by receiving many incoming telephone calls. The volume of telephone traffic had picked up considerably by this time including a great many long distance calls from fire officials and others in distant cities.

It was not long, however, until he was asked by the shift captain to assume the dispatcher's position, since he was extremely well informed on the availability of departmental apparatus and highly skilled in the mechanics of the job. Immediately he began a series of move-ups to keep the city covered as completely as possible. The day captain remained at the dispatcher's post without relief until about 4:30 p.m., when he was replaced by the shift captain.

Period Two: Maximum Demands -- Maximum Stress

Shortly after 5:00 p.m. on Friday, it became apparent to communications officers that the situation was worsening and that additional communications personnel would be needed. In consultation with the acting chief and with the operations chief, who had established the operations office at Westlake at noon, it was decided to extend the shift of two of the dispatchers on duty and to recall four more. Another communications captain was recalled and the battalion chief in charge of communications remained on duty. At this time the other two communications centers were also instructed to recall sufficient personnel in anticipation of increased demands in the outlying areas of the city.

By 8:00 p.m. on Friday, the Westlake communications center, which under normal conditions would have a captain and five dispatchers on duty, had the following personnel actively engaged in the dispatching and communications process: eleven dispatchers; three captains; two battalion chiefs, one in charge of communications and one in charge of public relations; the operations chief; the acting chief engineer; and two fire commissioners; a total of twenty-one persons. In addition there were numerous other departmental officers at the center for personal consultation with the chief officers, as well as a number of visitors including a fire chief from Stockholm, Sweden.

There were times when the noise level in the center reached the point that those doing the dispatching had to call for silence in order to understand the voice transmissions coming from the field. While the large number of persons in the center did present some space and noise problems, it was a

definite advantage to have the chief officers and fire commissioners present. It enabled those making crucial decisions to confer with their superiors concerning dispatching, police protection, and so on.

The day captain assumed the dispatcher's position again around 8:00 p.m. and began to dispatch to fires on the basis of the priority system outlined above. Later Friday night and early Saturday morning, he alternated with the other two communications captains as the dispatcher in charge of assignments and move-ups. An unexpected source of assistance for communications personnel came from a local television station which was providing its viewers with live coverage of the disorders and fires. The communications center had a large television set tuned in and personnel were able to get a better idea of the magnitude of the situation and the location of the fires than they could have from ground-level observations.

From approximately 9:30 p.m. on Friday until 2:00 a.m. on Saturday, the communications facilities of the department were in extremely heavy demand. During this period there were fifteen persons receiving calls and dispatching equipment. In addition, the volume of phone calls being transmitted through the center remained very high, due in part to the second recall which was being issued for 11:00 p.m. There were occasions during this period when there were not enough personnel and equipment available to handle all of the demands being made. Dispatching slips were not being filled out but rather the calls were received by operators who would verbally give the necessary information to those doing the dispatching. The dispatcher would decide what priority the call should receive and would make the assignment accordingly. In short, the whole communications process was being telescoped to include only those elements absolutely necessary to the dispatching of apparatus and the maintenance of field communications.

There were frequent occasions during the peak period when there were insufficient phones to handle all of the necessary calls. Another major problem which emerged was that of maintaining contact with units in the field. Although there were communications vans at the two command posts, neither was operated extensively during the emergency. The dispatching was being made by personnel at Westlake via direct line telephone and radio to the command post officers. In this manner the staff at Westlake attempted to keep the location and status of all apparatus up to date. Efforts to do this were unsuccessful for two reasons.

First, there was a breakdown of communications between the companies in the field, the command posts, and the center as a result of limited radio frequencies and the lack of adequate receiving equipment on fifty-five pieces of first-line fire apparatus. The department normally operated on four radio frequencies: one for each of the communications centers and one for administrative purposes. They were using two radio frequencies at this time to keep in contact with the command posts and field units, and two were being used by the other communications centers. Had all of the apparatus in the department been equipped with four frequency radios, the communications center could have expanded their facilities to alleviate some of the backlog of transmissions and some of the confusion resulting from overloaded frequencies.

A second communications problem arose from the movement of companies in the disturbance area without adequate consultation or notification of command post and communications personnel. On occasion certain units of a task force would leave the scene of the one fire without reporting their move to either the command post or the communications center, join units split from other task forces, and proceed to a new fire, perhaps not even reported to the Westlake center. With this unannounced splitting of task forces in the field, it was impossible for the communication center to maintain an up-to-date status condition on all units.

Throughout the night of August 15 and the early morning hours of August 14, the communications personnel and facilities were unable to cope adequately with the demands being made on them. Efforts to adjust to these demands were made in the form of additional personnel and altered dispatching procedures. But in spite of strenuous efforts to retain control of the department's command posts and field units, the communications center could not handle the demands being made. Its facilities became overloaded and the overall efficiency of the response of the department was impaired. One communications officer said, "When the situation took place that the department was thirty or forty fires behind, it was not only because we lacked companies to dispatch, but because of the slowness of the communications process."

This faltering in operations can be better understood when it is realized that there were approximately 1,000 alarms channeled through the Westlake center in the twenty-four hour period between 7:00 a.m. Friday and 7:00 a.m. Saturday. The majority of these calls were reported after 5:00 p.m. on Friday. These 1,000 calls compare with a routine day when the center handles about 125 emergency reports.

Period Three: Decreasing Demands -- Diminishing Stress and Return to Normalcy

During this period the communications staff operated, for the most part, on the priority system established on Friday night. Dispatching was still being done on a task force basis and the command posts operated until near the end of the emergency. For the fire department this period lasted until the changing of shifts on August 18.

On Saturday the communications officer in charge had an additional five telephones installed in the center. He also made preliminary arrangements for a limited recall of communications personnel and consulted extensively with the chief engineer, the operations chief, and the officers in charge of the two command posts. The major problem on Saturday night was that of mob interference, especially in the form of gunfire. As a result of this, the Westlake staff was occupied with a great amount of extradepartmental communications notably with the police and National Guard.

By Monday morning the fire situation had returned to near normal and the communications section began to operate on standard procedures. On Wednesday morning it had returned to complete normalcy and was operating as it had before the disorders.

It is estimated that the center received approximately 2,500 alarms in a period of four days. As already noted, approximately 1,000 of these were processed in the twenty-four hour period between 7:00 a.m. Friday the 13th and 7:00 a.m. Saturday, August 14th. The actual number of alarms is unknown because of the breakdown of formal record keeping at the communications center.

Much more could be described about the activities of the fire department during the emergency period of the disturbance. This would however merely add details to the general picture already sketched in this chapter and not present any new elements necessary for understanding the operations of the Los Angeles Fire Department. Accordingly, we turn in the next chapter to the conclusions that can be drawn from the operations of this organization under stress.

CHAPTER V

SUMMARY AND CONCLUSIONS

This chapter draws from the descriptions in the previous pages a summary of the changes which occurred, as a result of organizational stress, in the three sections of the fire department studied. More specifically, this analytical summary is made in the light of the definition of organizational stress initially suggested, i.e., a state or condition when organizational demands exceed organizational capabilities. This definition, when expanded, includes the following possibilities.

First, there may be a change in the nature of the demands made on the organization. This could include both quantitative and qualitative changes in demands as well as shifts in the order of priority in which they are to be met. Second, the capability of the organization may be diminished as a result of certain intraorganizational and/or extraorganizational factors. This might include the loss of personnel, equipment, facilities, and information. Thus, organizational stress could result from: (1) an increase in the demands made on the organization, (2) a decrease in organizational capability and/or (3) a combination of the two.

Our analytical summary, in addition, is made in the light of the guiding ideas also suggested earlier.

1. As the degree of organizational stress increases, the nature of the administrative decision-making process will change (e.g., the number of both the official and unofficial decisions made will increase).
2. As the degree of organizational stress increases, group tasks will be handled in a way different from normal times (e.g., organizational incumbents will develop a priority of tasks to which they will increasingly limit their activities and those of their group).
3. As the degree of organizational stress increases, the communication patterns will shift (e.g., use will be made of modes of communication that will increasingly maximize speed and efficiency).

These kinds of organizational changes in behavior are however not independent of the larger social setting in which they occur. We therefore conclude this chapter with an examination of the community context in which the fire department operated. Special attention is given to extraorganizational factors insofar as they affected the demands upon and the capabilities available to the Los Angeles Fire Department.

Administration

In one definitional sense, the administrative section of the department never experienced a period of stress. That is, there was never a period when there were more decisions to be made than there were personnel to make them. There were, however, several significant changes in the decision-making process and in the general administration of the department.

The chief administrative officers became personally involved in almost all of the early decision making related to the activities of the fire suppression bureau and the communications section. This was in large measure due to the unique and increased demands being made on the organization. As the demand-capability ratio of the department became imbalanced, the rate of administrative decision making increased. There was also an increased amount of face-to-face decision making and consultation between chief officers, especially during Times One and Two when the normal operating procedures of the department were undergoing change. In addition, the extradepartmental administrative consultations were highly accelerated, especially during the first two periods. Police, neighboring fire departments, utility companies, other city departments and officials, and the National Guard officers were contacted frequently throughout the time of the disorders.

As a result of increasing stress, there was a high degree of latitude accorded officers in the field. This resulted in a very large number of informal decisions being made which were later either legitimized or rescinded by administrative chiefs. For example, on Thursday evening when a battalion chief in the fire suppression bureau, without prior consultation, withdrew from the scene of a fire and refused to allow fire units to return without adequate protection, he made a decision which was beyond the scope of his normal authority. Since the conditions precipitating this decision, as well as the decision itself, were highly unusual, the acting chief of the department was notified immediately. After consultation with police and other fire officers, he fully legitimized and formalized a decision which was made by an unauthorized officer and which was a radical departure from normal policy.

On the other hand, some other decisions made by officers in the field were rescinded by higher ranking administrative personnel. On one occasion, a fire officer was seen carrying a hand gun. This was a violation of departmental policy and, although it was a response to an unusual situation, it was not regarded as a legitimate response by administrative chiefs. Accordingly, the officer was ordered to remove his weapon, and the basic policy was restated for the entire organization.

Throughout the disturbance, especially during the early stages when administrative officers were attempting to adjust the department to a rapidly changing demand situation, they legitimized a series of interim, non-normal procedures. However, once these procedures were formally accepted they became the legitimate norms for the department as long as they were needed. For instance, the acting chief early Friday morning made a personal visit to the oncoming battalion chief in charge of fire suppression at one of the most heavily involved stations. At that time he carefully outlined the procedures

which had been informally adopted the night before and stated that they were to be followed until further notice. He also reiterated the guidelines under which the battalion was to operate. Thus, what a day earlier would have been regarded as extremely deviant procedure became the accepted norm.

The operation of these interim norms can be illustrated by this example. When a field officer, under heavy physical attack, had to be ordered a second time from the scene of a fire, he was reprimanded by a ranking officer. He also experienced some negative sanctions from his peers, being referred to by one of them as a "glory hound" and by another in an unflattering tone as "the hero." Normally, of course, to abandon fighting a fire would constitute about the worst offense the field officer could have committed.

Very early during the civil disorder the administrative officers in the department, first informally, then through the legitimization of emergency procedures, developed a priority system under which the department operated. While this system was related to the response priorities later developed and formalized by officers at the operations center, it was not identical. These sets of priorities dealt with interdepartmental procedures and policies and not with the department's responsibilities to the general public.

The priorities developed were simple and few. The maximum priority was centered on the physical safety of departmental personnel. Needless and prolonged exposure to violence or attack was to be avoided. This included the right of personnel to refuse to respond to calls or to withdraw from fires where disorders presented a serious threat to personal safety.

Related to this was the reaffirmation of the department's policy which prohibited its involvement in control of rioting or any kind of civil disturbance. The administrative officers saw the department's primary function as being fire prevention and suppression. Prior to the disorders, fire and police administrators had agreed that control of disturbance is essentially a police problem, and should fires be set during a disturbance, the fire department would direct all of its activities to fire control. During the disorders it was decided that only in the defense of fire personnel, and then only as a very last resort, were streams of water to be used on unruly or violent civilians.

The third priority the department informally adopted for its internal operations was that of preventing needless damage to its apparatus and equipment. Frequently specific organizational personnel would be charged with the responsibility of supervising the picking up of lines, etc., when their destruction was threatened by mob members. Drivers were expected to follow avenues and streets where resistance was minimal, not only for the safety of the men but to avoid apparatus being subject to physical attack. In spite of these precautions, it took approximately 1,900 hours of shop labor to repair the damage inflicted on departmental equipment.

Another activity engaged in by administrative officers was that of developing future plans in an effort to estimate possible demands and to provide for maximum capability. By 2:00 p.m. Saturday, the chief engineer and

the operations chief had issued a rec 11 for 8:00 p.m. in order to remain at maximum capability in anticipation of heavy fire activity on Saturday night and Sunday morning. They also considered the possibility of putting the entire fire suppression bureau on twelve hour shifts, which would have alleviated some of the problems growing out of the platoon system. The twenty-four hour shift proved to be too long for many men; the maximum fatigue level was being reached after six to eight hours of continuous duty. The problems of logistics, especially those of feeding and housing large numbers of personnel in strange quarters, would have been ameliorated considerably by twelve hour, rotating shifts. It was unofficially decided to operate on such a basis, if the fire activity remained excessive through Sunday night. This, of course, turned out to be unnecessary.

The activities of the administrative officers in the department returned to normal before those of the fire suppression bureau and communications sections. Once the basic changes had been made, the top echelon of administrative officers played an increasingly less important role in departmental operations. By Sunday night they had relinquished operational command of the department to those normally in charge, i.e., the deputy chiefs in charge of fire suppression and their battalion chiefs.

Although the fire department had a rather comprehensive plan for emergency operations, it was never officially declared in force. The department utilized a number of procedures from the plan but these were more or less informally adopted. The fact that it had been primarily devised for fighting brush fires seems to have been a major factor in the absence of any attempt to implement the plan in detail.

Clearly, under the stress of the situation, the nature of the administrative decision making changed in the Los Angeles Fire Department. Decisions were made by officials and in ways which were far from routine. The contents of the decisions were also different from what was usually considered in normal times.

The Fire Suppression Bureau

The fire suppression bureau, as indicated earlier, constitutes the basic core of the entire fire department. It is the unit which deals directly with fires. Because of this, the bureau bore the brunt of the heavy demands placed on the organization during the 1965 disturbances.

Essentially, there were four kinds of demands made on this part of the department which tended to produce stress. First, civilians harassed personnel, hindering the carrying out of traditional organizational roles and necessitating adjustments in this; second, the extremely large number of fires in a short period of time was far in excess of what the bureau was accustomed to; third, there were certain new demands made which normally would not be accepted as legitimate; and fourth, the bureau's resources were somewhat diminished by the necessity to vacate several stations in the area of greatest disorders. As mentioned above, the difficulties associated with feeding and

housing large numbers of personnel in quarters other than their own presented some logistic problems. Being unable to change shifts in one's own station also made coordination more difficult than otherwise would have been the case.

Since the department and particularly the bureau had not experienced these demands in a significant and prolonged manner before, it was largely unprepared for them. As a result, the bureau had to function initially on an ad hoc basis. It responded to the new demands by adjusting its normal procedures and by attempting to strengthen its capabilities.

One of the adjustments made by the fire suppression bureau was that of developing a priority system. Some fire situations were defined as being less worthy of departmental attention than others. In essence, this meant that some demands were less legitimate than others insofar as commitment of resources was concerned. With this new definition, the bureau endeavored to keep demands within the realms of capability by reducing the number of demands it would accept as legitimate.

An effort was also made to increase capability by developing abbreviated fire suppression procedures. Overhauling, the most time consuming of all suppression activities, was discontinued as was the bureau's response to blazes in certain small structures, automobiles, rekindles, and similar kinds of situations. This freed personnel and apparatus from extended commitment to given fires of low priority. The procedure of "knocking down" fires likewise increased organizational capability by providing personnel and equipment more quickly for the extensive and more important fire suppression duties.

In addition, the bureau sought to maintain its organizational balance by increasing its capability through the recall of departmental personnel and by activating all reserve apparatus. As firemen were recalled, companies were split and resplit and all normally inactive motor equipment was activated and fully manned. Additional manpower was recalled to bring every company in the city to fully manned status. The latent capabilities of the organization were made manifest.

A third way the bureau tried to keep a balance between demand and capability was by drawing on extraorganizational resources. During the height of the disorders, the Los Angeles Fire Department requested assistance from at least three other fire departments. Although this was kept to a minimum, it was done in an effort to meet all demands regarded as legitimate.

Still another way in which the bureau and department attempted to maintain organizational balance was by refusing to accept all but the most urgent demands placed on it by extraorganizational agencies. As noted, it was not always able to do this completely; nevertheless, it tried to keep such demands at a minimum and free itself from them as quickly as possible. This is one of the reasons departmental officers were adamant in their insistence that the department refrain from any "riot" suppression activities. Any move in such a direction would have tremendously increased the demands on the organization.

Thus, the bureau sought to maintain its equilibrium by: (1) redefining the demands it regarded as legitimate, (2) increasing its capability both through abbreviated fire fighting procedures as well as through the recall of personnel and the activation of additional apparatus, (3) drawing on extra-organizational resources, and (4) limiting the number of extraorganizational demands accepted.

Obviously, the bureau handled its tasks during the emergency in a different way from its normal operations. The demands on this section of the organization were controlled. The capability of this part of the department was in a genuine sense increased.

The Communications Section

Within the framework of our definition, the communications section, like the fire suppression bureau, experienced a number of periods of varying stress. There were times when the demands being placed on it exceeded its capability, and there were times its capability had to be adjusted in order to keep pace with increased demands. Most of the stress was produced by the tremendous increase in demands, by the highly unusual circumstances associated with them, and by a lack of certain facilities.

The Westlake center, which handled approximately 125 emergency alarms on an average pre-disturbance day, was suddenly confronted with the necessity of handling over 1,000 alarms in a twenty-four hour period. Telephone, radio, and teletype communications experienced a similar escalation. Equipment as such did not malfunction; the vast majority of difficulties were of a human or organizational kind.

One of the most difficult problems encountered by the communications section was that of keeping track of fire suppression units operating in the field. During the period of maximum stress, the communications section could not maintain a current location check on all fire suppression personnel and apparatus. This was due to the movement of companies without direction from either Westlake or the command posts as well as the heavy overload on radio frequencies which sometimes made communications impossible.

Extraorganizational communications were also much greater during the emergency than they are during a normal period. Constant contact had to be maintained with police, utility companies, various city departments, mass media agencies, other fire organizations, governmental groups, and so on. Since most of these communications were via telephone, there were periods when there was an inadequate number of instruments and other facilities to handle all of the calls. However, additional equipment would have required more personnel and the communication center was already crowded.

Another stress-producing factor was the danger associated with the disturbances in the streets. Every time a task force was dispatched, there was the possibility that its men and apparatus would be attacked. Because of this uncertainty a much greater effort was made to remain in frequent, if not

constant, radio contact with all units in the field and with the command posts from which they were operating. This resulted in a tremendous increase in the total volume of communications maintained between the center and field units. This increased demand, growing out of concern for the protection of personnel, further overloaded an already burdened communications system.

The response of communications personnel to this stress was much like that of the fire suppression bureau. They constantly sought to adjust the demand-capability ratio so as to minimize its stress. This they also did by reducing the number of demands considered legitimate and by attempting to maximize their capabilities.

The communications section made efforts to reduce the demands being made on it by discontinuing many of its routine and perfunctory duties. The checking of alarms systems, consulting with other city departments and utility companies on matters not related to the civil disorders, and all other activities not absolutely and immediately necessary for the functioning of the section and the department were discontinued. As the demands reached their maximum levels on Friday night and Saturday morning, the preparation of dispatching slips and other record keeping was also discontinued.

The communications section also sought to reduce demands being placed on it by refusing to involve itself with any alarms from street boxes. Approximately 90 percent of all street alarms reported in the city of Los Angeles are false under normal conditions. This percentage was even higher during the early hours of Friday morning, August 13. As a result, communications personnel decided officially at 12:15 p.m. on Friday to disregard all street alarms. This had the effect of reducing the number of demands being made on the communications section, and on the fire suppression bureau as well.

These efforts to reduce the number of legitimate demands was tantamount to the establishment of a priority system. As such, it assisted the communications section in maintaining its demand-capability equilibrium. Priorities had been more explicitly formulated in the other two sections of the department, but the consequences for operations were about the same in all cases.

As the communications section was establishing a priority system, it also attempted to increase its response capability. This included the recalling of a large number of personnel who were assigned strategic positions within the various centers. At Westlake the allocation of tasks was made chiefly on the basis of authority, experience, and skill. By placing the most experienced and skilful personnel in the vital dispatching roles, an attempt was made to maximize the efficiency of their operations.

This facilitation was further enhanced by placing men of relatively high rank, i.e., captains, in positions normally occupied by firemen. This placement not only put highly skilled operators in vital positions, which tended to increase the speed of response, but it minimized delays growing out of the necessity to legitimate deviant procedures. The captains doing the dispatching were the men who, under normal conditions, would legitimate any unusual operations. If the deviations were highly unusual, the battalion chief of the

communications section and other high ranking officers of the department were readily available for consultation.

Other attempts to increase the capability of the section included the monitoring of extraorganizational communications. The Westlake center monitored police broadcasts continuously in an effort to gain as much information about the disturbance and fire activity as possible. In addition, an unexpected source of assistance came from a local television station which was transmitting live aerial pictures of the disorders as seen from their news helicopter. By utilizing a large television receiver, communications personnel were able to acquire important information not available from their own resources.

Following the heavy demands placed on its telephones on Friday night and Saturday morning, five additional instruments were installed to increase the section's phone capability. However, this action had its drawbacks. More phones meant more noise in an already crowded room and a further need to integrate even more quickly information emanating from a variety of sources.

By reducing the number of demands normally regarded as legitimate, by increasing the capabilities through the recall of personnel, by adding additional equipment, and by utilizing extraorganizational resources, the communications section endeavored to keep its organizational stress to a minimum. Most of the time it succeeded. At times, however, demands exceeded even augmented capabilities. Shifts in the communication pattern were an inevitable outcome.

The Overall Organizational Response

For purposes of clarity of exposition and to highlight particular points, the three major sections of the fire department have been separately discussed in the preceding description and analysis. While such an approach is useful, it should not obscure the systemic nature of the organization we have been examining. That is, the Los Angeles Fire Department as a whole is a functioning social system with its various bureaus and sections highly interrelated and interdependent.

This functional interdependence was especially noticeable during the emergency period. When heavy demands affected one section of the department, there frequently were concomitant repercussions on other sections. This is well illustrated in the multicompany task force operations.

For reasons indicated earlier, the fire suppression section of the Los Angeles department moved to a procedure of sending two or more engine companies, a truck, and a chief officer to fires in the Watts area. This not only made for a better fire-fighting effort but allowed, as a technical analysis reported, "better control of fire companies than with individual company response." In addition, the procedure reduced the demand on radio-telephone communications since only one unit in the task force employed its transceiver. Thus, what was initiated for fire-fighting reasons had consequences both for control and communication processes.

It was indicated in the first chapter that the Los Angeles Fire Department, as a complex group with a community orientation and manifest emergency resources, was clearly a Type I organization. Its overall response to the crisis it faced did not materially differ from what other studies have discovered about such kinds of organizations. There was relatively little change in the personnel used or in the tasks undertaken, but there were varying kinds of internal structural rearrangements. Thus, compared with regular operations, administrative decision making, handling of tasks and communications patterns were all altered in significant ways during the emergency period.

Even those sections of the department not directly involved in the fire fighting also had to change their normal routines. The training section simply suspended operations. Personnel in supply and maintenance, while not faced with the demands experienced by the firemen out in the streets, nevertheless were busier than usual. There is reason to think that if the emergency had gone beyond the four days it did, even more drastic alterations of operations among the less involved segments of the department would have had to occur. While parts of an organization may undergo differential stress, to the extent there is a systemic relationship between the different elements, all will show some effects from an overall response to an emergency.

The problems of the fire department stemmed primarily from increases in demands upon the organization. There was relatively little loss of capability in the way of equipment or personnel. While there was a definite decrease in information flow, particularly in terms of feedback from the field, in itself this would have created at most a difficulty rather than a problem. The imbalance in the demand-capability ratio faced by the Los Angeles Fire Department resulted basically from qualitative and quantitative increases in demands rather than decrease in capabilities.

From an absolute viewpoint, the fire department could have been subjected to far more stress than it was. Many potential demands never manifested themselves. For example, there was no fire in any manufacturing plant or huge structure such as the Exposition Hall which even under normal circumstances would have required the attention of very large numbers of men and pieces of equipment. Firemen did not have to concern themselves with saving lives since in all, only four residences were destroyed and three were damaged. Furthermore, while fires occurred over a wide geographic area, the disturbance zone actually covered only 7 percent of the total city area for which the fire department was responsible. Likewise, while isolated incidents of disorder-related arson cases occurred outside the Watts neighborhood, fire calls in the rest of Los Angeles fell substantially below their normal rate for a four day period. Also, there never was any disruption of the water supply. Finally, there was relatively little wind to fan flames and carry embers, as could be seen in television films which show columns of smoke going straight up skyward from the many fires.

Despite the relative nature of the demands upon it, the fire department, as we have shown, had difficulties and problems. It attempted to deal with the situation by decreasing the demands and/or increasing its capabilities. But the internal changes instituted by the department were not enough to

prevent it from undergoing stress. No organization operates in a vacuum and the Los Angeles Fire Department was no exception to this condition.

The Extracorporational and Community Setting

Not only does the fire department operate as a functioning system, but it is related to the wider community and depends on this larger social system not only for the legitimation of its activities, but also for support in attaining its primary stated goals. To a considerable extent this greater system is made up of other organizations. In this particular case, this means other Type I organizations but especially police and fire departments.

Fire department personnel were nearly unanimous in agreeing that they could have successfully suppressed all major fires in a near normal fashion had they not been subjected to mob harassment and/or had they received adequate protection from law enforcement agencies. They pointed out that it was the physical attack upon their operational personnel which precipitated the decision to "let it burn." They felt that it was the harassment in the streets which led fire officials to change their fire suppression procedure, and to develop the operational priorities as a result of which some fires went unattended.

In support of these contentions, it appears from our analysis of the data that the fire department was largely influenced in terms of its demand-capability ratio by its extraorganizational relationships. For instance, had the police department been able to provide sufficient protection for fire units many of the changes made would have been unnecessary. (It should be noted that fire department personnel were not at all critical of policemen on this matter; in fact, many fire officials recognized the extremely difficult control situation in which the police department was involved, and expressed sympathy for the law enforcement agency.)

Moreover, if the disorders and fires had been confined exclusively to the city of Los Angeles, the city fire department would have been able to request mutual aid more freely. As it was, city fire officials hesitated to request assistance from neighboring fire-fighting groups because the latter were either heavily involved with fire activity or were anticipating such involvement. For instance, the Los Angeles County Fire Department is the sixth largest in the United States in manpower and the third largest in pieces of equipment. However, it too was very heavily involved in the situation since its zone of responsibility encompassed about one-fourth of the area in which disorders and fires occurred. Departments in other municipalities, the fire equipment and personnel of the California Disaster Office, the California Division of Forestry, and the United States Forest Service were all on a stand-by basis so the Los Angeles department was reluctant to invoke large-scale help from them as would have readily been done in other circumstances.

Also, the fire department was never able to coordinate its activities fully with those of other organizations heavily involved in the situation. One reason was that no overall emergency operating center was ever established.

although one at the Los Angeles Police Department assumed this function in a very limited way. A consequence was that each emergency organization had its own command and control center although most of them did have varying kinds of communication links with one another. If there had been one coordinating center, the Los Angeles Fire Department would probably have been able to utilize its manpower and equipment more effectively. For example, there might have been greater direct and immediate knowledge about what specific areas the police had under control and those in which their authority was in doubt. At times fire personnel were attempting to operate in areas from which the police had withdrawn, and vice versa.

In retrospect it also appears that the disorders, fires, and looting were not brought under control until the resources of the wider community system, that is, the state government, were made available. It was not until the National Guard was mobilized and deployed in large numbers that the stress on the police department was alleviated sufficiently to permit them to protect fire department personnel. Once this protection was provided, fire units were able to suppress the fires more effectively and in a more normal fashion.

From this it seems that: (1) the activities of various subsystems of a metropolitan community, i.e., fire and police departments, etc., are highly interdependent and interrelated, (2) when conditions in the community are such that they produce stress in one subsystem, they produce stress in other subsystems as well, and (3) the stress in such a community and its various subsystems is reduced when either the stress-producing agents are eliminated or when the capability of the community and its subsystems is expanded by the utilization of extracommunity resources.

This analysis brings us full circle to many of the considerations set forth in the first chapter. It was suggested that communities can be seen as systems of problem-solving organizations. Moreover, as subsystems within the community system, the various organizations were viewed as being highly interrelated and interdependent. Each in a sense is part of the context in which the others operate. To the extent that a key emergency organization is unable to fulfill its allocated or expected task, it sets limits on the possibilities of others achieving theirs. Thus, the Los Angeles Fire Department was not able to fight fires in the usual way as long as the Los Angeles Police Department was not able to control the streets.

The events and circumstances surrounding the disorders and disturbances in Los Angeles were of such a nature that few private citizens in the city became involved in the community's response. Rather, the response was made almost entirely by these organizations with a community orientation and with emergency resources. Even the National Guard can be seen as an extension of the problem-solving structure of the metropolitan area. Certainly, in this case, it had a community orientation and, in addition, it brought badly needed resources to bear on a crisis situation. In essence, the civil disorders produced extremely heavy demands on those community organizations which were responsible for the maintenance of public order and the protection of life and property. Thus, it was primarily the police and fire departments which were called upon to meet this community crisis.

In most natural disasters, these also are the two major kinds of organizations that inevitably get involved. However, in those types of community emergencies there is a general consensus about dealing with the crisis. A civil disorder situation, on the other hand, is a dissensus situation. In the instance of the disturbances in Los Angeles and particularly around Watts, the emergency organizations themselves were perceived as being one of the parties in the conflict. It is true that fire department personnel were not the direct object of hostility in the same way as policemen were, but nevertheless they were defined as being part of the conflicting groups.

The larger community context, be it dissensus or consensus, affects the overall organizational response in any crisis. The activities of any particular organization in turn are influenced by the overall organizational response. Given the dissensus situation in Los Angeles with its effects on the functioning of such agencies as the police, in turn affecting the carrying out of fire department tasks, it was almost inevitable that the latter organization could not fully protect the community from fires but for a time instead had to "let it burn."

NOTES: Chapter V

1. Hilton Jarrett, Fire Data from the Watts Riot: Results of Preliminary Analysis and Evaluation (Santa Monica: System Development Corporation, 1966), p. 18.

APPENDIX

A METHODOLOGICAL NOTE

The preceding analysis was generally based on interviews obtained by DRC staff members in three different trips to Los Angeles. The first field team initiated its study on Sunday, August 15, while there was still an emergency although the shooting and fires had diminished considerably. In all, a total of sixty-one interviews were recorded on tape, a great majority of them in response to a lengthy questionnaire focusing on such matters as task assignments, lines of authority, communication patterns and decision making. The bulk of the interviews were conducted with very heavily involved members of the fire suppression bureau and the communications section of the Los Angeles Fire Department. While particular units or shifts were selected for study, all men within those groups or categories were interviewed. In addition, information was obtained from a cross section of administrative personnel including officials at the highest echelons in the department.

In the analysis use was also made of data contained in the following publications.

1. Marvin Adelson, Observations on Emergency Operations in a Civil Disorder (Santa Monica: System Development Corporation, 1966).
2. Charles W. Bahme, "The Watts Fires and Their Lessons," Fire Journal (1966): 10-14.
3. Robert Blauner, "Whitewash Over Watts," Trans-action 3 (March-April 1966): 3-9, 54.
4. Jerry Cohen and William S. Murphy, Burn Baby Burn! The Los Angeles Race Riot, August 1965 (New York: E. P. Dutton, 1966).
5. Commentary Report (Los Angeles: Los Angeles Fire Department, 1965).
6. Robert Conot, Rivers of Blood, Years of Darkness (New York: Bantam, 1967).
7. Paul Ditzel, "Firemen Tackle Multiple Incendiary Fires," Fire Engineering (1966).
8. Fire Loss (Los Angeles: Los Angeles Fire Department, 1965).
9. Harold Greenwood, The South-Central Los Angeles Riot Fires (Los Angeles: Los Angeles Fire Department, 1965).

10. Hilton Jarrett, Fire Data from the Watts Riot: Results of Preliminary Analysis and Evaluation (Santa Monica: System Development Corporation, 1966).
11. Anthony Oberschall, "The Los Angeles Riot of August 1965," Social Problems 15 (Winter 1968): 322-341.
12. Riot Report (Los Angeles: Los Angeles County Fire Department, 1965).
13. Riot Statistics (Los Angeles: Los Angeles Police Department, 1965).
14. Statistical Report of the Emergency Operations of the Los Angeles Fire Department During the Mid-August 1965 South and Central Los Angeles Riots (Los Angeles: Los Angeles Fire Department, 1965).
15. Violence in the City -- An End or a Beginning? (Los Angeles: Governor's Commission on the Los Angeles Riots, 1965).

The following items were also used in this analysis.

1. The dispatching log of the Los Angeles County Fire Department for the period of the emergency.
2. Films of the disorders and fires made by television Channel 5, KTLA-TV and the Los Angeles County Fire Department.
3. Voice recorded tapes of the traffic from the Westlake dispatching center of the Los Angeles Fire Department.
4. Activity recap reports prepared by all Captains or acting Captains in charge of companies assigned to the Watts area.
5. Newspaper accounts in the Los Angeles Times, the Los Angeles Herald Examiner and the New York Times.
6. Microfilms of the eighteen volumes of supplementary data on which the McCone Report was based.

Unclassified
Security Classification

DOCUMENT CONTROL DATA - R & D

(Security classification of title, body of abstract and indexing annotation must be entered when the overall report is classified)

1. ORIGINATING ACTIVITY (Corporate author) Disaster Research Center Department of Sociology The Ohio State University Columbus, Ohio 43201		2a. REPORT SECURITY CLASSIFICATION Unclassified	
		2b. GROUP N/A	
3. REPORT TITLE An Analysis of the Los Angeles Fire Department Operations During Watts			
4. DESCRIPTIVE NOTES (Type of report and inclusive dates) One of a series			
5. AUTHOR(S) (First name, middle initial, last name) George Warheit and E. L. Quarantelli			
6. REPORT DATE December 1969		7a. TOTAL NO. OF PAGES 75	7b. NO. OF REFS 29
8a. CONTRACT OR GRANT NO. OCD-P3-64-46		8a. ORIGINATOR'S REPORT NUMBER(S) Monograph No. 7	
b. PROJECT NO. Work Unit 2651-A		8b. OTHER REPORT NO(S) (Any other numbers that may be assigned this report)	
c.			
d.			
10. DISTRIBUTION STATEMENT This document has been approved for public release and sale; its distribution is unlimited.			
11. SUPPLEMENTARY NOTES Number 7 in the Disaster Research Center Monograph Series		12. SPONSORING MILITARY ACTIVITY Office of Civil Defense Office of the Secretary of the Army Washington, D.C. 20310	
13. ABSTRACT <p>This monograph examines in a sociological framework the operations of the Los Angeles Fire Department during the civil disturbance -- the so-called Watts riot -- in August 1965. The focus of the monograph is on one major type of collective response, that manifested by complex or formal organizations with bureaucratic structures. Three major components of the Los Angeles Fire Department are examined and it is shown how the structure and functioning of the organization was altered during the disturbance. Attention is given to modifications in administrative decision-making procedures, the handling of tasks, and the patterns of communication within the organization. The authors indicate how the larger community context and organizational relationships of the department probably affected its overall response to the crisis.</p>			

DD FORM 1473

Unclassified

Security Classification

Unclassified

Security Classification

14. KEY WORDS	LINK A		LINK B		LINK C	
	ROLE	WT	ROLE	WT	ROLE	WT
Fire Department						
Civil Disturbance						
Formal Organizations						
Bureaucratic Structures						
Decision-making Procedures						
Tasks						
Patterns of Communication						

Unclassified

Security Classification

An Analysis of the Los Angeles Fire Department Operations During Watts. Unclassified. Disaster Research Center, The Ohio State University. Contract OCD-PS-64-46, Work Unit 2651-A, December 1969, 75 pp.

This monograph examines in a sociological framework the operations of the Los Angeles Fire Department during the civil disturbance in August 1965. Three major components of the department are examined and it is shown how the structure and functioning of the organization was altered during the disturbance. Attention is given to modifications in decision making, handling of tasks, and the patterns of communication within the organization. The authors indicate how the larger community context and organizational relationships of the department probably affected its overall response to the crisis.

An Analysis of the Los Angeles Fire Department Operations During Watts. Unclassified. Disaster Research Center, The Ohio State University. Contract OCD-PS-64-46, Work Unit 2651-A, December 1969, 75 pp.

This monograph examines in a sociological framework the operations of the Los Angeles Fire Department during the civil disturbance in August 1965. Three major components of the department are examined and it is shown how the structure and functioning of the organization was altered during the disturbance. Attention is given to modifications in decision making, handling of tasks, and the patterns of communication within the organization. The authors indicate how the larger community context and organizational relationships of the department probably affected its overall response to the crisis.

An Analysis of the Los Angeles Fire Department Operations During Watts. Unclassified. Disaster Research Center, The Ohio State University. Contract OCD-PS-64-46, Work Unit 2651-A, December 1969, 75 pp.

This monograph examines in a sociological framework the operations of the Los Angeles Fire Department during the civil disturbance in August 1965. Three major components of the department are examined and it is shown how the structure and functioning of the organization was altered during the disturbance. Attention is given to modifications in decision making, handling of tasks, and the patterns of communication within the organization. The authors indicate how the larger community context and organizational relationships of the department probably affected its overall response to the crisis.

An Analysis of the Los Angeles Fire Department Operations During Watts. Unclassified. Disaster Research Center, The Ohio State University. Contract OCD-PS-64-46, Work Unit 2651-A, December 1969, 75 pp.

This monograph examines in a sociological framework the operations of the Los Angeles Fire Department during the civil disturbance in August 1965. Three major components of the department are examined and it is shown how the structure and functioning of the organization was altered during the disturbance. Attention is given to modifications in decision making, handling of tasks, and the patterns of communication within the organization. The authors indicate how the larger community context and organizational relationships of the department probably affected its overall response to the crisis.

THE DISASTER RESEARCH CENTER

The Disaster Research Center (DRC), a part of the Department of Sociology at The Ohio State University, was organized in 1963. The Center is engaged in the scientific study of individual, group, organizational, and societal responses to community-wide disasters and other extreme stress situations. Major focus of the research is placed on obtaining an extensive and detailed picture of the human and social problems generated by these events, and how they are solved by affected persons, communities, and societies. The Center conducts field studies both in this country and overseas. Part of the research of the Center also involves the laboratory study of groups under stress.

DRC STAFF

Co-Directors

RUSSELL R. DYNES

E. L. QUARANTELLI

Field Director

WILLIAM A. ANDERSON

Laboratory Director

ROBERT ROTH

Research Assistants

DAVID ADAMS

J. MICHAEL BROOKS

JOHN BROUILLETTE

ROBERT DAY

THOMAS FORRENT

GARY KREPS

BENJAMIN MCLUCKIE

JAMES ROSS

ROBERT STALLINGS

STEPHEN VARGO

JACK WELLER

DENNIS WENGER

Fellow

ARNOLD PARR

Administrative Assistant

BARBARA TOOTLE

Secretaries

MARTHA CARR

JUNE REED