

# WORKSHOP IN POLITICAL THEORY & POLICY ANALYSIS

## Police Services Study Technical Report

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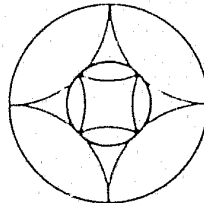
Activity Analysis of the  
Communications Center of the  
Chapel Hill Police Department

Prepared by the  
Police Services Study  
Center for Urban & Regional Studies  
University of North Carolina  
Chapel Hill, North Carolina

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August, 1976

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\*This report was drafted by Elaine Sharp with the assistance of project staff.

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### Executive Summary

This report describes communications operations of the Chapel Hill Police Department. The Police Services Study collected data on the activities of the department dispatchers and on the demands and requests for service placed upon the police department by citizens who contacted the dispatchers during the summer of 1976.

Chapel Hill communications personnel provide a wide variety of services--both directly to the citizens of Chapel Hill and to officers of the police department. These services are offered in response to requests received through several different sources: radio, telephone, in person walk-ins and the Police Information Network (PIN) computer terminal. Not surprisingly, the most frequent single source of demand for the dispatchers' attention is the radio (nearly half of all demands). Next most frequent is the telephone (about one-fourth). Walk-ins and the PIN terminal account for roughly equal portions of the remaining quarter. The mix of these types of demands does not fluctuate a great deal, with the exception of Monday-Wednesday mornings, when demands on information phone lines are notably high.

Dispatcher staffing levels during the observation period generally reflected fluctuations in demand levels. The second dispatcher appeared to be available to handle an increased workload generated by information lines, the PIN terminal, and walk-ins.

In responding to the various sorts of demands and requests made of them, the communications personnel apportion their work activities according to the demands placed upon them. High priority tasks such as radio communications (accounting for nearly one-half of all demands) require relatively little time to perform. They comprise only about one fourth of the activities undertaken by dispatchers. Record keeping activities and phone calls account for similar proportions of dispatcher activity.

Roughly 75% of the dispatchers' time is spent actively performing one or more of the tasks delineated above, although this varies somewhat according to time period. The remaining time is spent in anticipation of requests for service. Twenty-five percent may seem a sizable proportion of time where none of these activities are performed. This is the unavoidable cost incurred by any "watch" type operation, however. The activities of others (policemen and citizens) determine communications center workload. Our data indicate that within even a short time period activity levels fluctuate considerably. Personnel must be on hand to deal with demands as they occur.

One important finding of this study is that Chapel Hill communications personnel spend a large amount of their time dealing directly with the public, primarily via the telephone. In many cases (67% of citizen calls), no officer is dispatched and the dispatcher is the citizen's only contact with the department.

Although most requests for service are presented to the dispatchers in a rather routine fashion by citizens, there are a significant proportion (13%) when the caller is frightened, lacks confidence in his/her request's appropriateness, is apologetic, overtly demanding, or angry. One-third of these lacked confidence or were apologetic about the appropriateness of their calls, most of which involved crimes, potential crimes, and emergencies. The variation in caller demeanor indicates that citizens in Chapel Hill vary in their expectations of what their police force can and should do.

In contrast to the variation in citizen demeanor, the dispatchers treated almost all callers in a standard, matter-of-fact fashion. This is particularly significant when one considers that in only one-third of the calls received was a patrolman or detective sent immediately to the citizen. The impression of the department given by a dispatcher may be very important in many instances.

Requests for many different services were received from citizens:

I. Victimization or potential victimization	17%
II. Medical emergency, fire, disaster, potential of physical injury	14%
III. Disorders, nuisances, and traffic problems	10%
IV. Services	17%
V. Information	39%
VI. Other	4%

These requests are indicative of a broad "public safety" view of policing. Over two thirds of all telephone requests for service were non-crime or emergency related.

In addition to their crucial task of relaying information to and from police officers in the field, dispatchers provide a great deal of information service to the Chapel Hill community, and they represent the department to the public. Current departmental records do not reflect much of this service provision, and documenting this activity on a routine basis might well prove unwieldy. The data presented here do clearly indicate that dispatchers' activity contributes significantly to services provided by the Chapel Hill Police Department to the public.

## I. Introduction

(a) The study of the Chapel Hill Police Department Communications Center reported here is the result of a mutual interest on the part of the Chapel Hill Police Department and the Police Services Study of the Center for Urban and Regional Studies at the University of North Carolina at Chapel Hill. The Police Services Study, funded by the National Science Foundation, is in the second phase of its study of police organization and service delivery in various metropolitan areas in the U. S. At this stage the study is concerned with developing and testing data collection instruments for use in case study metropolitan areas to be selected for intensive, in-depth analysis. Thus, we as social scientists are interested in opportunities to observe police operations first hand and in tackling the problems of devising observation forms, questionnaires, etc. that capture the complexity of those operations.

At the same time, the Chapel Hill Police Department recognized that it could be important and useful to have more documented information relating to communications operations. At the present time departmental record keeping is designed to reflect the activities that are most directly tied to crime prevention and law enforcement. However, this does not capture the full range of services actually provided by the department to the citizens of Chapel Hill. For example, the department does not have records on the number of telephone calls from citizens handled by the dispatchers each day. Many of these calls involve requests for information, directions, and other situations in which the citizen is provided with a service which will not be recorded elsewhere.

Given the parallel concerns of the Chapel Hill Police Department and the Police Services Study, an analysis of the Chapel Hill Police Department dispatch office was agreed upon as mutually beneficial. The study has two concerns:

(1) First, a systematic description of overall operations. That is, what kinds

of demands are made upon the dispatchers, how many demands, what activities occupy the dispatchers' time? Of particular interest here, of course, are such questions as how many telephone calls are handled in a given time period, and what proportion of the dispatchers' time is devoted to telephone calls.

(2) Secondly, the study involves analysis of the content of telephone calls, in order to determine the kinds of demands being made upon the Chapel Hill Police Department through this medium. The telephone is, of course, the major means by which citizens directly request services from the police, but the types of service demanded varies widely. An analysis of the content of telephone service requests should give a more complete picture of the kinds of citizen demands to which the Chapel Hill Police Department is asked to respond.

#### (b) Observation Technique

In order to accomplish both purposes of the study, we used two different techniques of observation/analysis. (1) First, in order to study the overall operations of the communications center, it was necessary to systematically observe directly the operations during a variety of different times of day and days of the week. We needed to be sure that the 12 hours of observation we planned to devote would be representative of the differing times of day and days of the week. From our discussions with departmental communications personnel, we determined that the Thursday-Saturday period was distinctly different from the Monday-Wednesday weekday period in terms of the number and kinds of demands made upon the police department. (We excluded Sunday from the analysis.)

We also excluded the hours of 2:00 a.m. to 8:00 a.m. from consideration because they are the least active in terms of demands, and because we could not attend to our normal operations while also observing off and on throughout the 24-hours of the day. This left the 18 hours from 8:00 a.m. to 2:00 a.m. We broke this into three 6-hour periods, roughly corresponding to morning, afternoon

and night observation (8:00 a.m. - 2:00 p.m.; 2:00 p.m. - 8:00 p.m.; 8:00 p.m. - 2:00 a.m.). In short, we divided up the week into the 6 categories shown below, and selected randomly 2 one-hour periods for observation from all of the hours in each category.

	Mon.-Wed.	Thurs.-Sat.
8:00 a.m. - 2:00 p.m.	1	4
2:00 p.m. - 8:00 p. m.	2	5
8:00 p.m. - 2:00 a.m.	3	6

Our observations were intended to include answers to the following questions:

- what kinds of communication demands are made upon the dispatchers;
- how frequent are the various types of demands;
- what range of activities are the dispatchers called upon to perform;
- which activities take up most time.

In short, we needed to observe systematically the number and type of demands coming in, and the number and type of activities in response to these demands.

To do this, we developed two different observation forms--one for recording demands and one for recording activities. For each hour of observation we sent two observers, so that the two different kinds of observation could be done simultaneously. Samples of the observation forms used and more detailed explanations of their use are found in Appendix A.

(2) For the second part of our study, a different study technique was needed. Here the concern was with what kinds of service requests are received on the telephones, and the frequency and pattern of these various kinds of requests. In order to systematically study the content of telephone calls, we needed to be able to hear the callers' requests as well as the dispatchers' responses. Fortunately, the communications center is equipped to, and as a matter of course does, record all incoming calls on voice-activated dictabelt. By duplicating this

recording daily for about two weeks (July 1 to July 15), we were able to gather about 20 hours of recorded phone calls. Each hour of recording covers an actual time period of about 6 to 10 hours, depending on how many calls occurred and the intervals between calls. A total of 506 phone calls were made available in this way for analysis.

In order to systematically analyze these calls, we developed a standard coding form with categories for identifying the type of problem involved, the specific service requested if any, the dispatchers' response indication, citizen demeanor, dispatcher demeanor, length of time the call took, etc. This form and details about the coding of the calls using the form are contained in Appendix B.

## II. Communications Center Operations - Demands and Activities

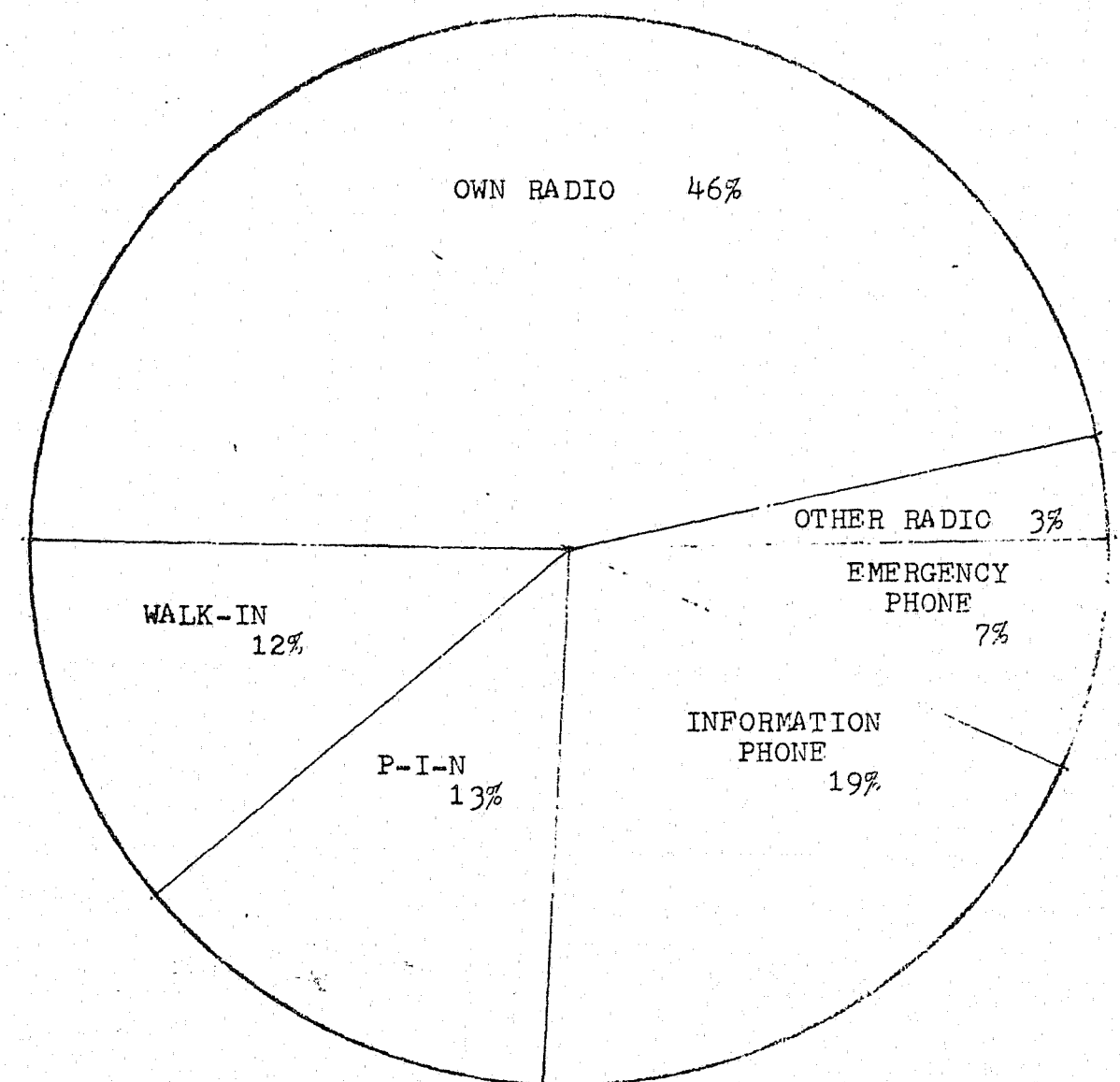
There are two ways of looking at the overall operation of the police dispatching service. One is to focus on the various sources of demand upon the dispatchers that require an immediate response from the dispatcher. For example, one would observe the number of radio calls received in a given time interval, or the number of telephone calls.

A somewhat different question about the dispatch function is what level of activities the dispatchers engage in during any given time interval. This approach focuses on the dispatchers' activities in response to the demands described above. The data here are the amount of time the dispatcher is engaged in telephone calls, or record keeping, or radio calls, etc., and the extent to which several activities must be carried on simultaneously.

In our study of the Chapel Hill Police communications center, we attempted to cover both of the above. That is, we collected data on demands and on dispatcher activities. This section of the report is organized according to these two different focuses. The first part of the section summarizes our observations concerning the sources of demand upon the dispatchers; then we move to a discussion of the dispatchers' activities.

FIGURE 1

BREAKDOWN OF DEMANDS BY TYPE





(a) Description of Types of Demands Upon Dispatchers

The following kinds of inputs require an immediate response from the dispatcher, and so are treated here as demands: (1) own radio (2) other radio (3) emergency telephone lines (4) information telephone lines (5) walk-in requests, and (6) the Police Information Network (P-I-N) terminal.

- (1) Own radio includes radio calls from Chapel Hill police, whether patrol officers or detectives. This type of demand is, of course, the first priority for the dispatchers. Incoming calls from patrol officers or detectives in the field must be responded to immediately.
- (2) Under "other radio" we included all radio calls from sources other than the Chapel Hill Police. This includes a variety of sources including Chapel Hill fire and public works, South Orange Rescue, UNC campus, Greensboro Highway Patrol Post, and other calls on the inter-city or mutual aid frequencies. In addition, calls coming in over the CB radio are included here.
- (3) "Emergency phone" includes all calls coming in on the four telephone lines listed as emergency lines.
- (4) "Information phone" includes all calls coming in on the four non-emergency telephone lines, as well as any calls on the intra-departmental intercom.
- (5) "Walk-in requests" refers to all those demands made upon the dispatcher in person. These include questions from patrol officers or detectives who come through the communications area and questions/requests from citizens who, if they do not immediately see anyone at the desk, will turn to the dispatchers.
- (6) The P-I-N terminal category includes inputs from the Police Information Network computer terminal. The P-I-N terminal makes a beeping sound when it is signalling a communication, so these demands were relatively easy to code. We did not, however, include as P-I-N terminal demands those occasions when the dispatcher initiates a request over the terminal, and later the information is received. These, like outgoing phone calls are included as activities, but are dispatcher initiated and thus not incoming demands.

Breakdown of Frequency of Demands by Type

One of the obvious questions that must be addressed is: What are the heaviest types of demand upon the dispatchers' time. That is, what proportion of demands upon the dispatcher come from own radio calls, what proportion from emergency phones, etc. Figure 1 provides part of the answer to this question based upon a summary of all 12 hours of our observation. Not surprisingly,

own radio is the major source of demand. Close to half (46%) of the demands we observed were own radio calls.

Next to own radio, the telephones are the largest source of demand. About 1/4 (26%) of the observed demands upon the dispatcher were telephone calls. It is important to note, however, that by far the larger portion of these telephone calls were on the information lines rather than the emergency lines. Nineteen percent of the demands upon the dispatcher came from the information phone lines, as compared with 7% from the emergency lines.

Next in frequency of demand are the walk-ins and the P-I-N terminal, each accounting for about 12% of the demands upon the dispatchers. Finally, other radio calls account for only a miniscule (3%) proportion of the demands upon the dispatcher. We should note here that the over-all level of demands and their distribution as to type may vary substantially by season. Since these data were collected in the summer, we expect that the over-all level of demands reflected here underestimate levels in autumn, winter, and spring months.

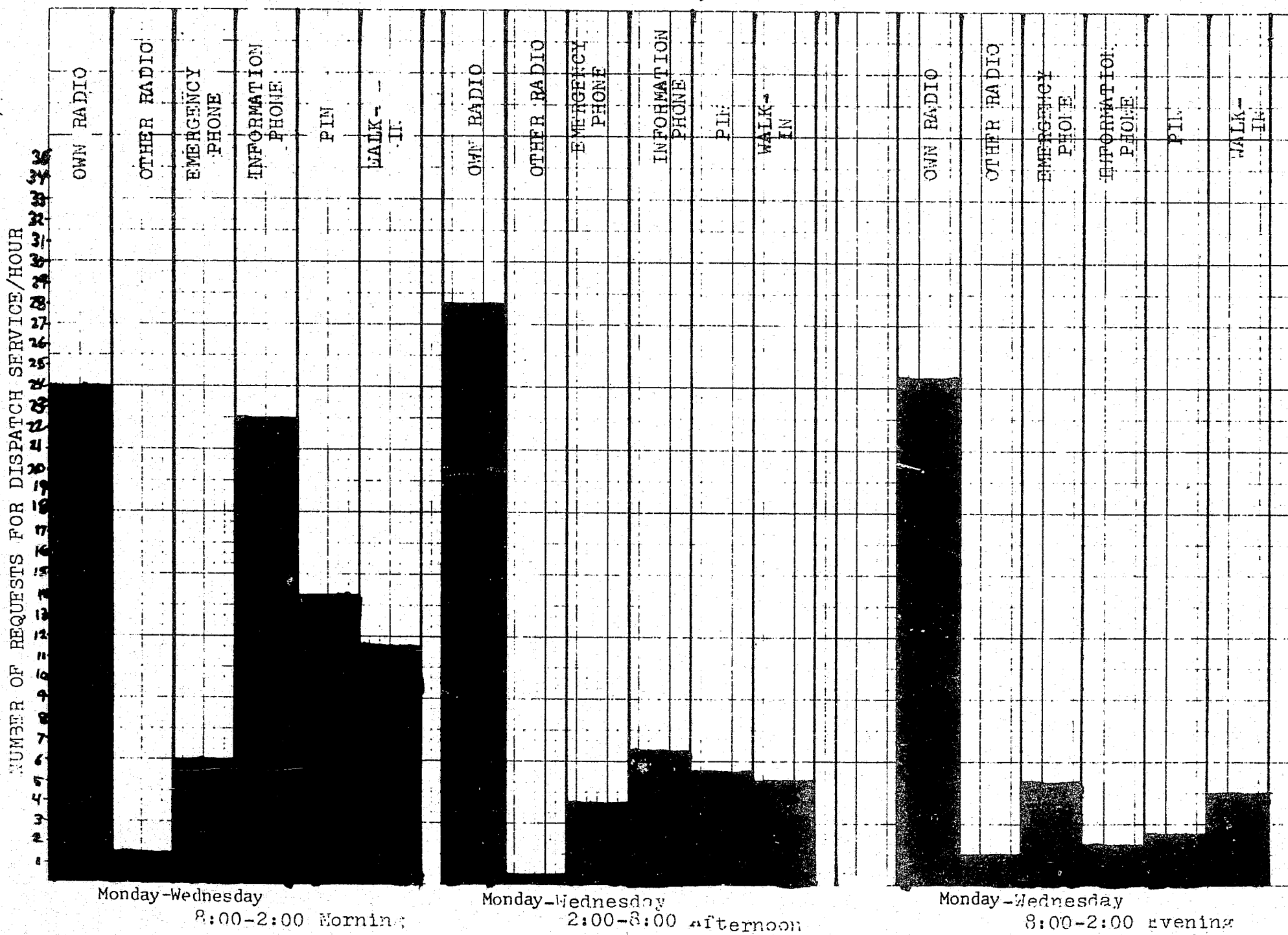
Figure 1 provides an overall picture of the sources of demand for dispatch action. Figures 2 and 3 show average per hour breakdowns separately for the 3 different times of day and the different part of the week we observed.<sup>1</sup>

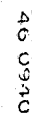
A few major points can be noted about Figures 2 and 3.

In the morning hours, the information phone lines are a relatively heavy source of demand. For the Mon.-Wed. period particularly, calls on the information lines almost equal calls from own radio in the morning hours.

<sup>1</sup>In other words, for the two Thursday-Saturday morning hours we observed, we took the total number of own radio calls and divided by 2, giving the average number of demands of this type for this time/week period; and, similarly, we averaged the demands of all other types for the 2 Thurs.-Sat. morning hours. Similarly, for the 2 Monday-Wednesday morning hours we observed, we took the total number of demands of each type and divided by 2, and so on for the other times of day-part of week combinations.

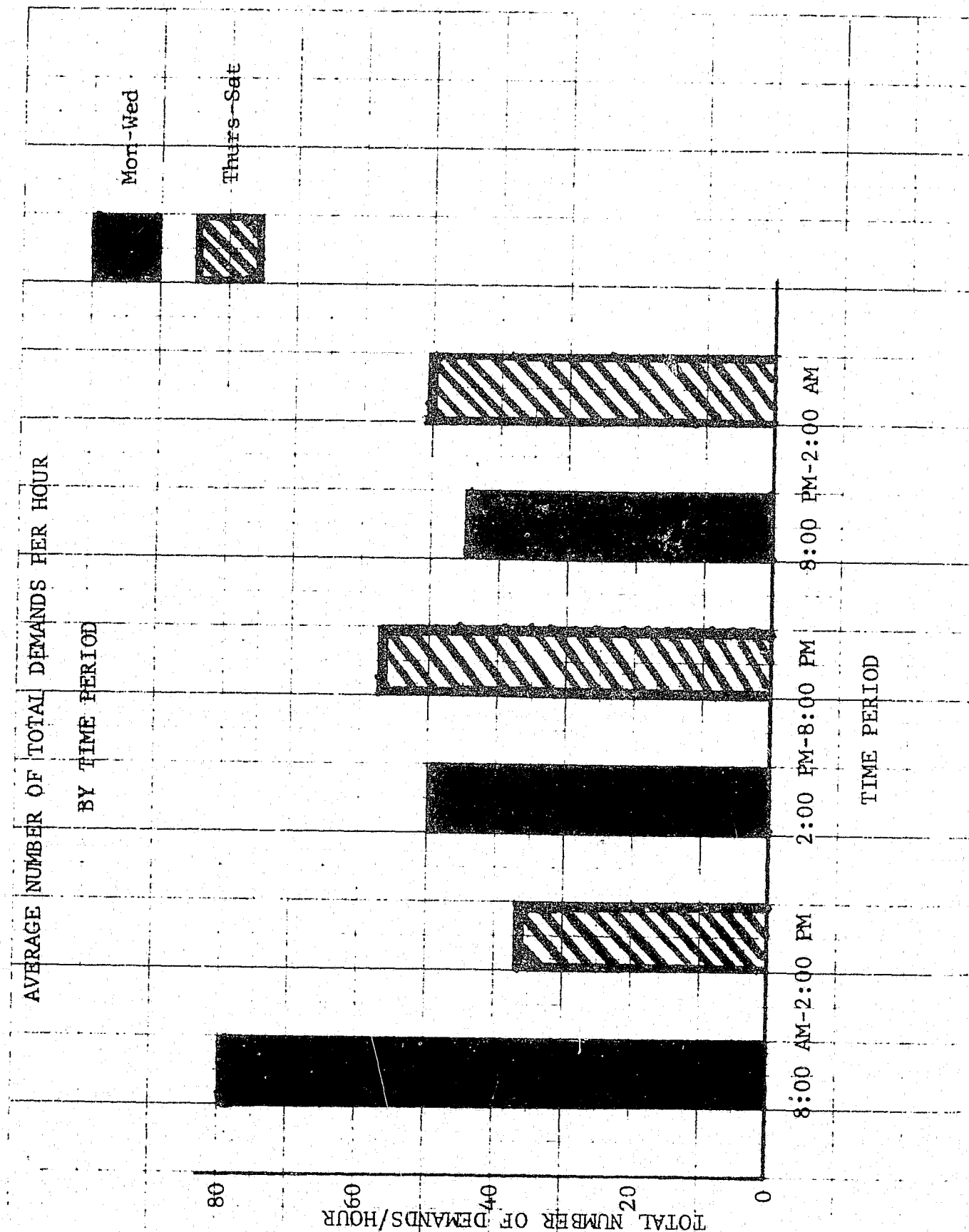
FIGURE 2  
NUMBER OF DEMANDS PER HOUR, MONDAY-WEDNESDAY





For other times of day and parts of the week, the pattern of demands is somewhat different. On Monday-Wednesday evenings and afternoons, own radio calls are much more frequent relative to the other types of demand. On Mon.-Wed. afternoon, almost  $3/5$  (56%) of the demands are from own radio alone, and on Mon.-Wed. evenings, over  $3/5$  (63%) of the demands are from own radio alone. In contrast to the morning hours, information phone calls and walk-ins are not major sources of demand here. On Monday-Wednesday afternoons, 23% of demands are from the information phones and walk-ins, and on Monday-Wednesday evenings, 16% of demands are from these sources.

FIGURE 4



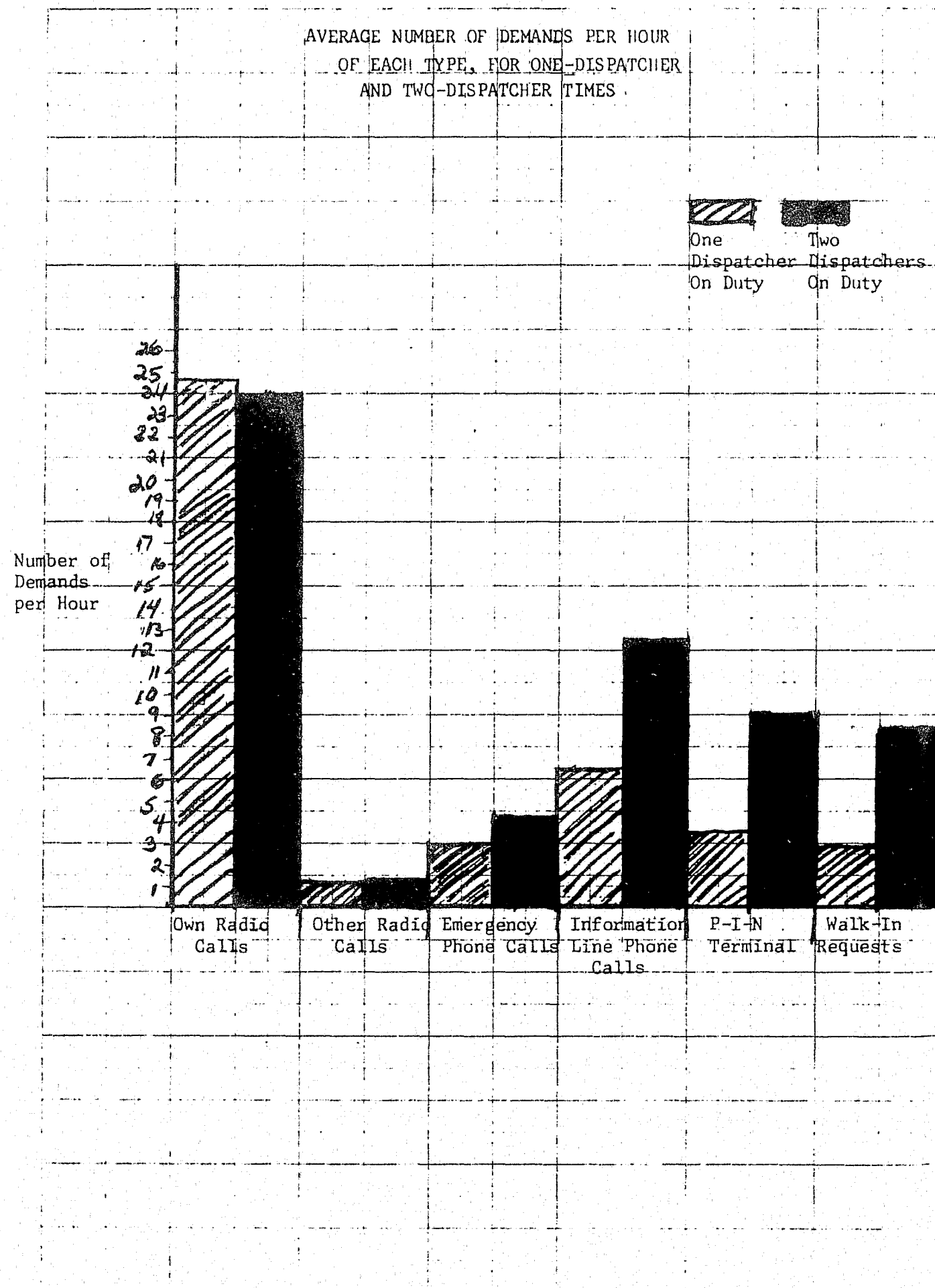
The pattern of demands during afternoon and evening hours for Thursday-Saturday are only slightly different than the Monday-Wednesday pattern. The number of own radio calls is the same Thurs.-Sat. afternoons as on Mon.-Wed. afternoons, and almost the same Thurs.-Sat. evenings as Mon.-Wed. evenings. The only difference is that the other types of demand are by and large heavier for evenings on Thurs.-Sat. than on Mon.-Wed.

On both Thurs.-Sat. afternoons and evenings, the proportion of demands from information lines plus walk-ins is 26%. This is slightly higher than for Mon.-Wed. evenings. Still, all of these are very different from the 43% demand level for information calls and walk-ins in the mornings.

Figure 4 presents an overview of all the demands per hour placed on dispatchers for each time period. Monday-Wednesday morning is clearly the busiest (an average of 80 demands per hour). Thursday-Saturday mornings are the lowest (an average of 37 demands per hour). All other periods are quite similar to each other, falling within a range of 45-58 demands per hour. These figures indicate that only in the 8:00 a.m. - 2:00 p.m. period is there a large variation in the total number of demands made on police dispatchers. If the department desires to allocate personnel by time period, then the morning appears to be the best time for augmenting or reducing manning levels. Thursday-Saturday mornings appear to require less of the dispatchers than do Monday-Wednesday mornings. One point of warning is worth noting, however. Figure 4 represents the summation of all demands regardless of type (radio, phone, PIN, walk-in). To the extent that they are all of equal priority, Figure 4 is instructive. If some demands are of relatively little concern compared to others (for example, walk-ins as opposed to radio calls), then Figures 2 and 3 should be consulted.

One further question to consider about the pattern of demands has to do with the number of dispatchers on duty. The preceding figures have indicated

FIGURE 5



that the number of demands and the kinds of demands coming in varies from one time of day to another and from one part of the week to another. It is important, therefore, to know whether the communications center personnel scheduling is now arranged such that two dispatchers are on duty during the times when demand input is heavier.. Furthermore it is useful to know the types of demands that make up the heavier input and how that relates to the number of dispatchers on duty.

Figure 5 indicates answers to these questions. Generally speaking, the times when two dispatchers are on duty are characterized by more demands coming in. But note which types of demands are making the difference. It is primarily the information phone, the P-I-N terminal, and walk-ins which are the source of greater demand that must be met with two dispatchers rather than one.

#### (b) Analysis of Dispatcher Activities

We now shift the focus of the report from the demands placed on the dispatcher to the dispatchers' activities. In our observations of the dispatch function, we considered 9 different types of activities: (1) own radio (2) other radio (3) emergency phone (4) information phone (5) P-I-N terminal (6) patrol log (7) all other record keeping (8) walk-ins, and (9) other.

- (1) Own radio includes all those occasions when the dispatcher is receiving or sending radio calls to/from Chapel Hill patrol officers or detectives in the field.
- (2) Other radio includes all occasions when the dispatcher is engaged in radio calls with Chapel Hill Fire, ambulance/rescue, public works, UNC campus, Greensboro, Raleigh, or other calls on inter-city or mutual aid frequencies or the CB radio.
- (3) Emergency phone includes those times when the dispatcher is engaged in a call on one of the 4 emergency lines.
- (4) Information phone includes those times when the dispatcher is engaged in a call on one of the 4 information lines or the intercom.
- (5) The P-I-N terminal category includes all those occasions when the dispatcher is dealing with the Police Information Network computer terminal, whether typing in a communication or reading off information received on the screen.

- (6) The patrol log category includes all those occasions when the dispatcher is recording information in the ongoing logbook of patrol car locations/statuses.
- (7) Other record keeping includes all occasions when the dispatcher is filling out complaint cards, filing messages from the P-I-N terminal printout, or typing out the log of complaints.
- (8) Walk-ins includes all occasions when the dispatcher is actively engaged in speaking with or finding information for a citizen or police officer who has asked a question/made a request in person in the communications area.
- (9) The other category includes a variety of miscellaneous activities not covered above, such as looking up numbers in the phone book, or addresses in the address file, or adjusting a piece of equipment.

It is important to note that in collecting this data, we did not code the precise time each of these activities entailed. Rather, we broke each hour of our observation into 30 second intervals. If in a given 30 second interval, the dispatcher was involved with an emergency line phone call, for example, that activity was checked as occurring in that 30 second interval, regardless of how many of the 30 seconds it took. The dispatchers can, and often are, called upon to do a number of different activities in the same 30 second interval. Our data thus tell us how many different activities, and which activities, were going on in each 30 second interval we observed. Thus, the analysis that follows is based upon what activities were occurring in each of the 30 second intervals observed.

One of the basic questions to be answered here is: to what extent are the dispatchers called upon to perform multiple types of activities more or less at the same time. Ideally, one would prefer that the dispatcher be able to devote full attention to each communication, especially if the communication is a citizen calling with an emergency or a patrolman with an important radio call. As Figures 6-8 show, the Chapel Hill dispatchers do not usually enjoy the luxury of such one-at-a-time activities. It should also be stressed that all observations for this study were done during the summer, when fewer students are in town and

many permanent residents are away on vacation as well. In addition, none of the hours we sampled for observation included an occurrence of major incidents or combinations of incidents which required sustained periods of multiple activities from the dispatchers. We observed no "crises" such as multiple injury auto accidents, major fires, or major crimes. Nevertheless, such occasions do occur, and the dispatch office must be prepared to handle these as well. The following analysis should be read as applying to the routine, non-crisis level of dispatcher activity.

Figures 6 through 11 indicate the extent to which multiple types of activity are performed at various times of day and various parts of the week. Most of these Figures include times when 1 dispatcher is on and when 2 dispatchers are on as well, as indicated in the upper right hand corner of each. But the major point of these Figures is the difference in activity according to time of day and day of week. A later Figure will deal specifically with differences between times when 1 dispatcher is on duty and times when 2 dispatchers are on duty.

Figure 6 indicates the multiplicity of types of dispatcher activities in the early week (Monday-Wednesday) mornings. Almost 2/3 of the time, 2 or more types of activities are being carried out. Almost 1/3 of the time, 3 or more types of activities are conducted. In only 13% of the 30-second intervals are no activities being performed. In short, these morning hours require a great deal of dispatcher activity.

Figures 7 and 8 show that in the evenings throughout the week, the dispatcher(s) are less frequently required to perform multiple types of activity at the same time. But there is still a large amount of such activity. On early week nights, almost half (47%) of the time, the dispatcher(s) are engaged in 2 or more types of activities in the same 30-second interval. And, on late week nights, the dispatcher(s) are involved in 2 or more types of activity about 40% of the time.



FIGURE 6

EXTENT OF DISPATCHER PERFORMANCE OF  
MULTIPLE TYPES OF ACTIVITY AT  
SAME TIME,  
EARLY WEEK MORNING

NOTE: For both the hours on which  
this is based, 2 dispatchers were  
on duty.

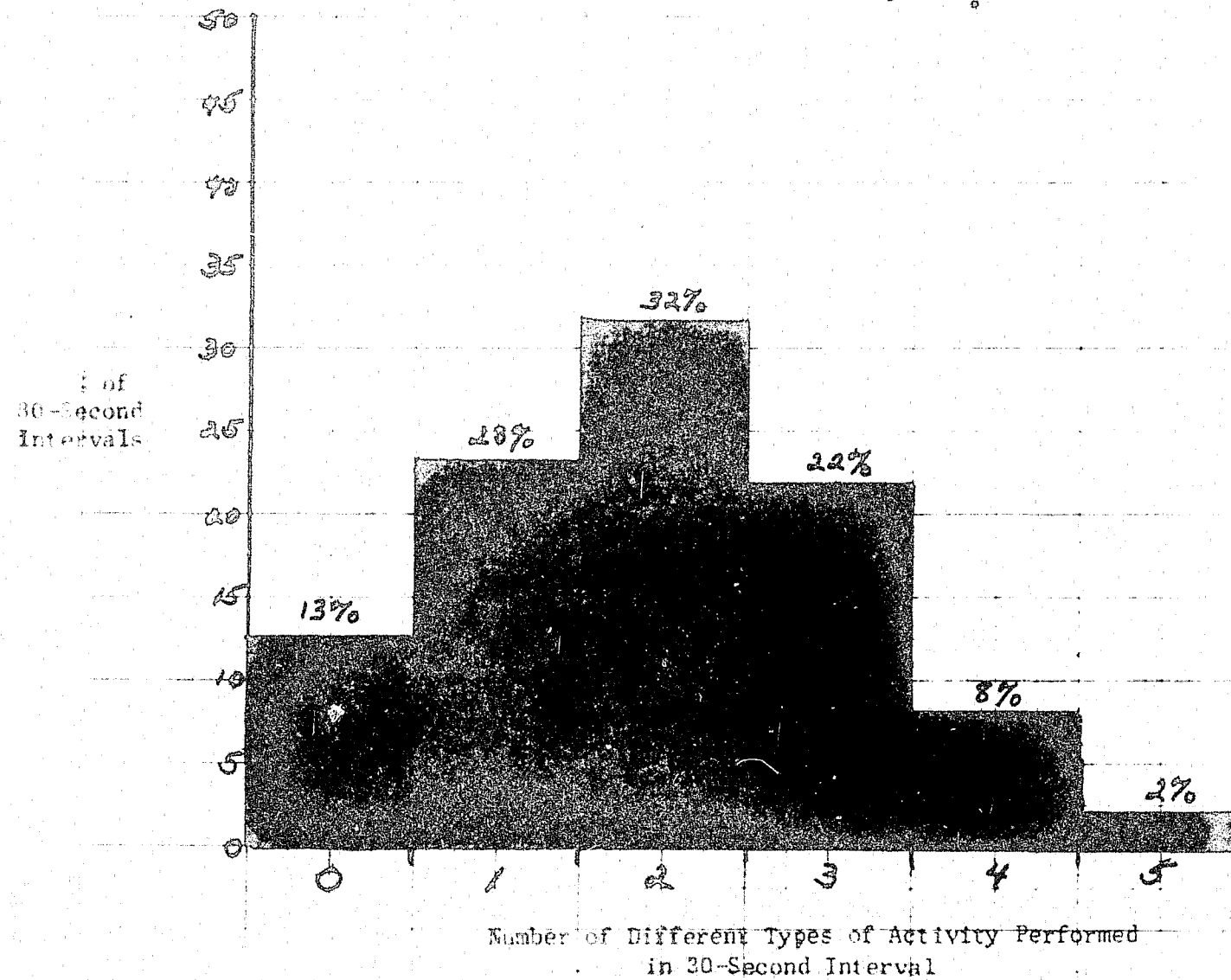


FIGURE 7

EXTENT OF DISPATCHER PERFORMANCE OF  
MULTIPLE TYPES OF ACTIVITY AT  
THE SAME TIME,  
EARLY WEEK NIGHTS

(NOTE: For one of the hours on  
which this is based, 1 dispatcher  
was on duty; for the other  
hour, 2 dispatchers were on duty)

46 0940

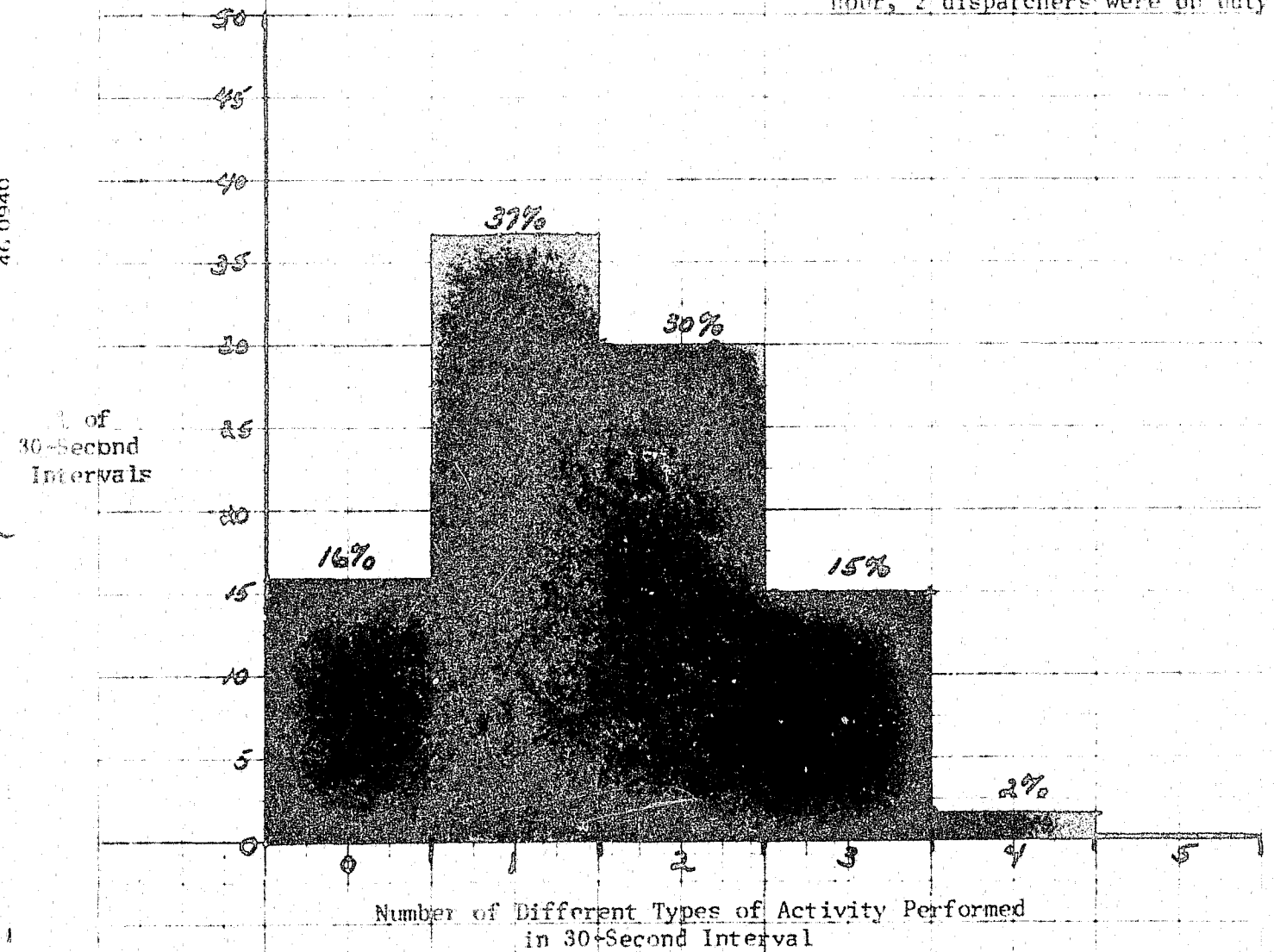


FIGURE 8

EXTENT OF DISPATCHER PERFORMANCE OF  
MULTIPLE TYPES OF ACTIVITY AT  
THE SAME TIME,  
LATE WEEK NIGHTS

(NOTE: For one of the hours on which this is based, 1 dispatcher was on duty; for the other hour, 2 dispatchers were on duty.)

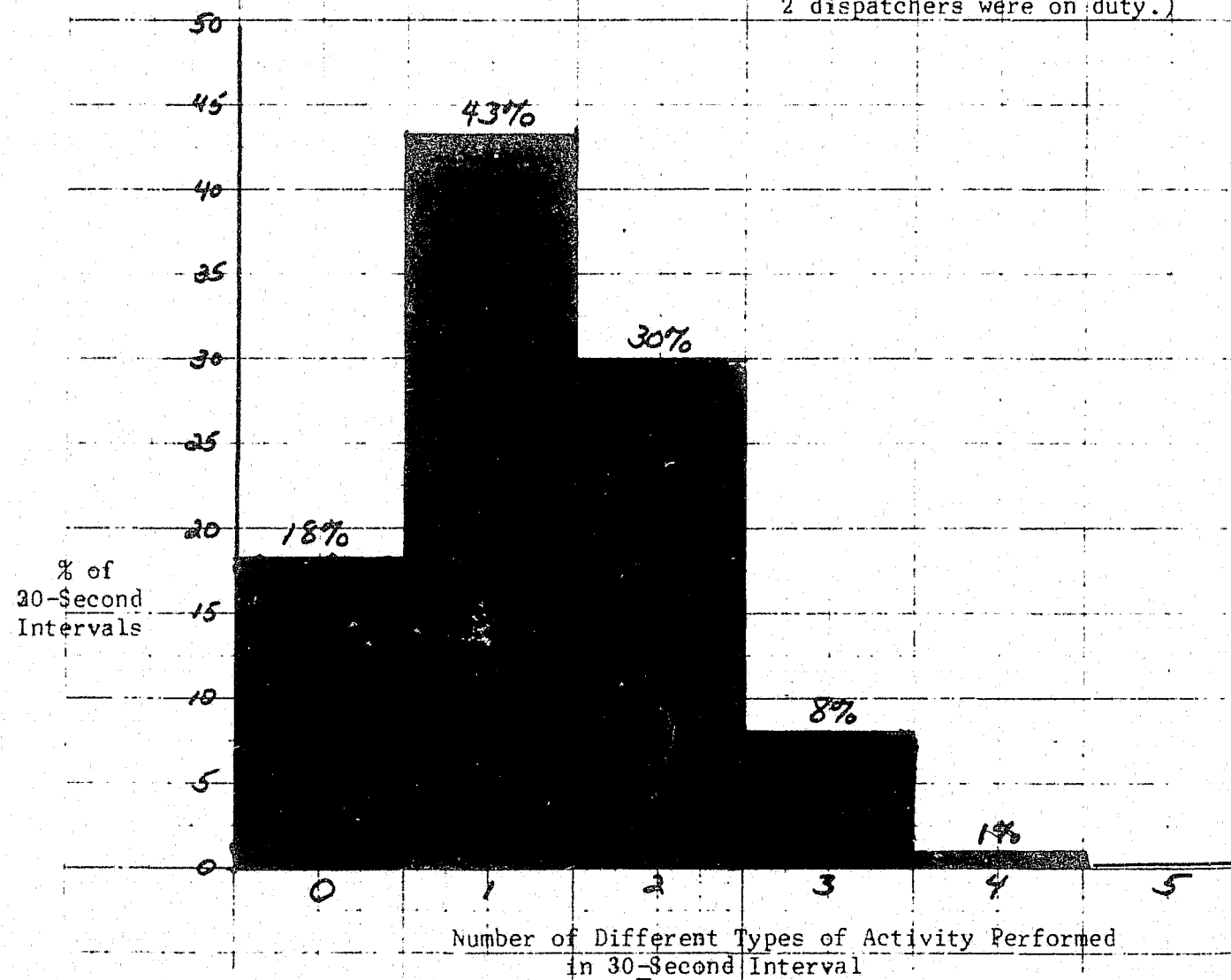


FIGURE 9

EXTENT OF DISPATCHER PERFORMANCE OF  
MULTIPLE TYPES OF ACTIVITY AT  
THE SAME TIME,  
LATE WEEK MORNINGS

(NOTE: For one of the hours on which this is based, 1 dispatcher was on duty; for the other hour, 2 dispatchers were on duty.)

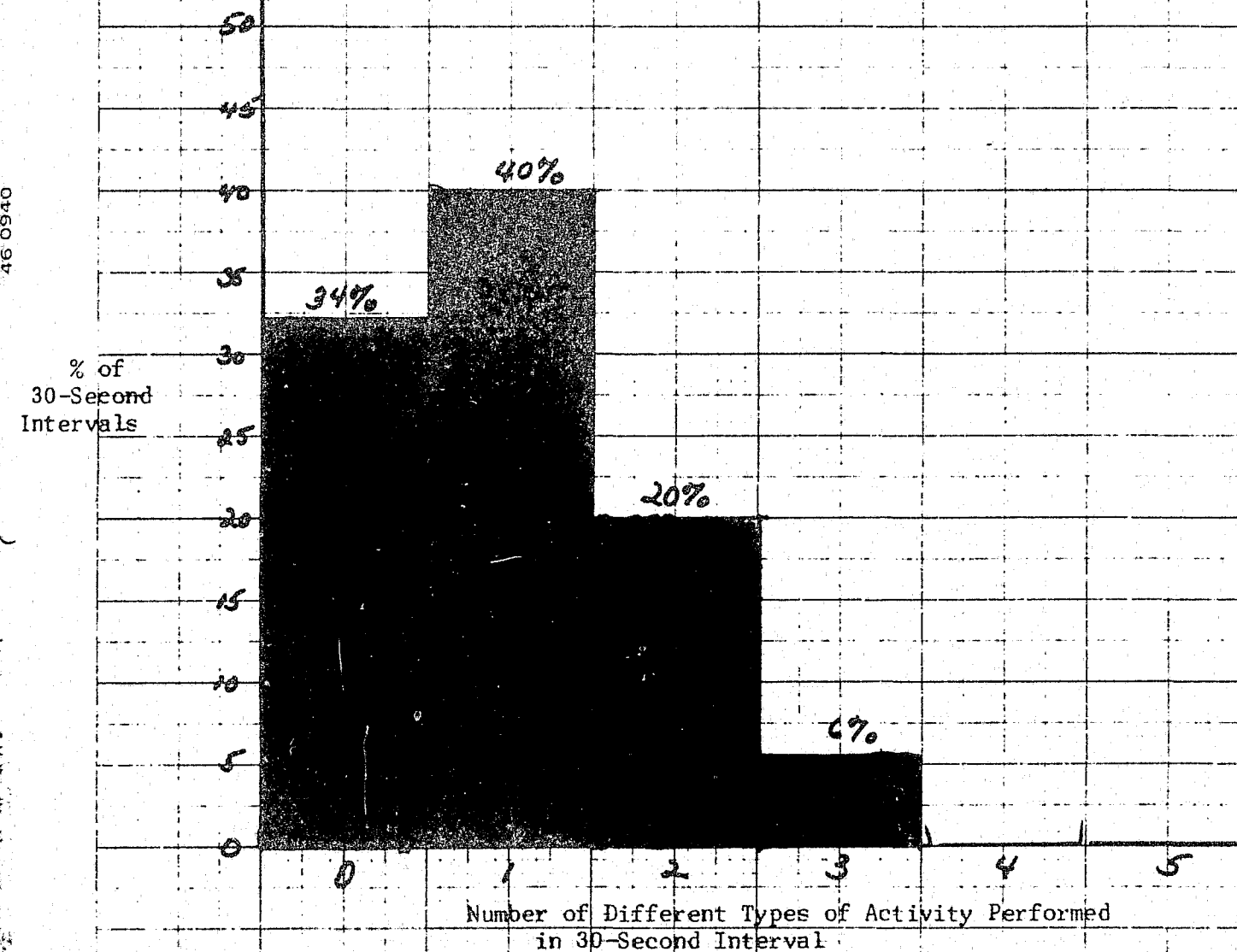




FIGURE 10

EXTENT OF DISPATCHER PERFORMANCE OF  
MULTIPLE TYPES OF ACTIVITY AT  
THE SAME TIME,  
EARLY WEEK AFTERNOONS

(NOTE: For one of the hours on  
which this is based, 1 dispatcher  
was on duty; for the other hour,  
2 dispatchers were on duty.)

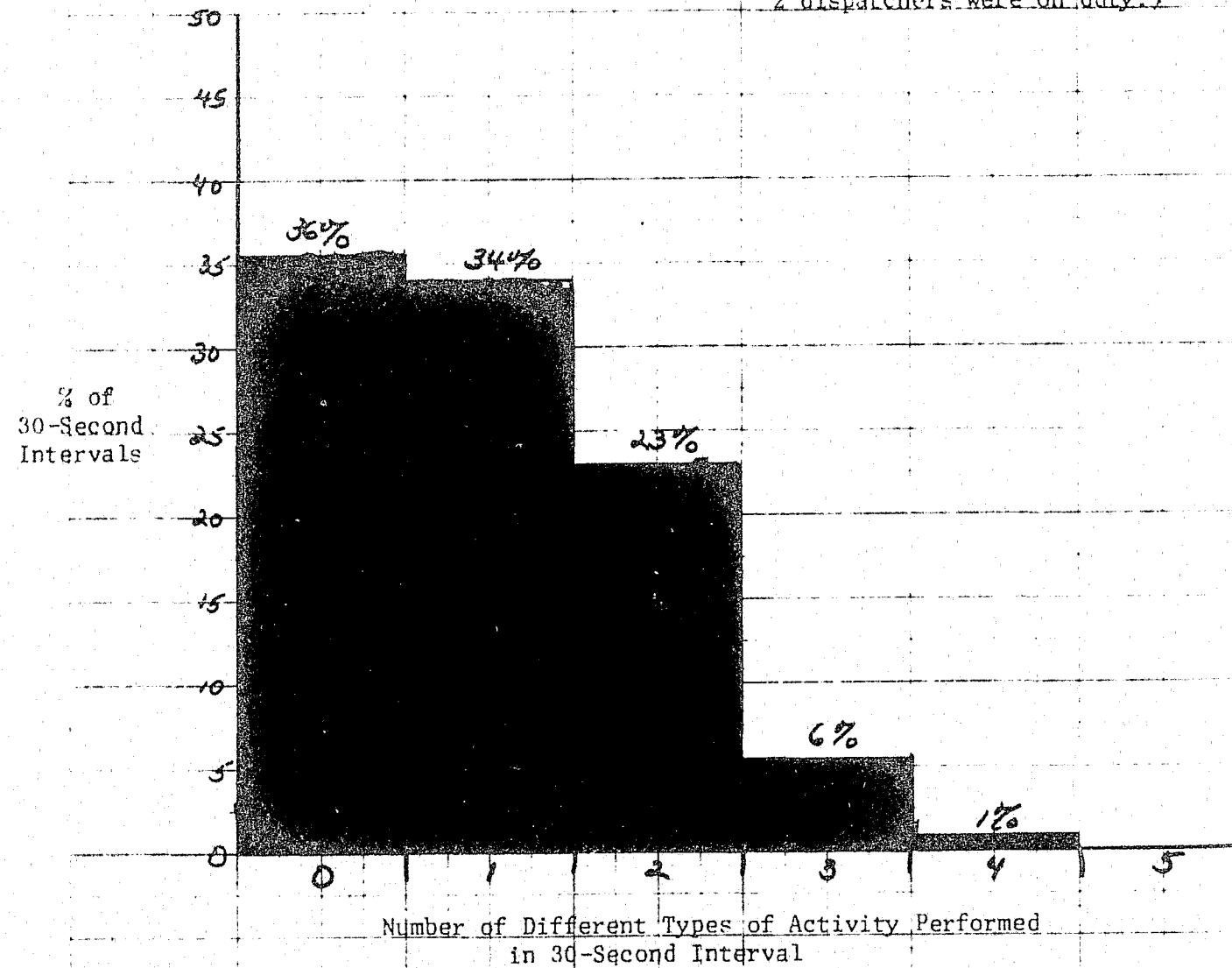


FIGURE 11

EXTENT OF DISPATCHER PERFORMANCE OF  
MULTIPLE TYPES OF ACTIVITY AT  
THE SAME TIME,  
LATE WEEK AFTERNOONS

(NOTE: For one of the hours on  
which this is based, 1 dispatcher  
was on duty; for the other hour,  
2 dispatchers were on duty.)

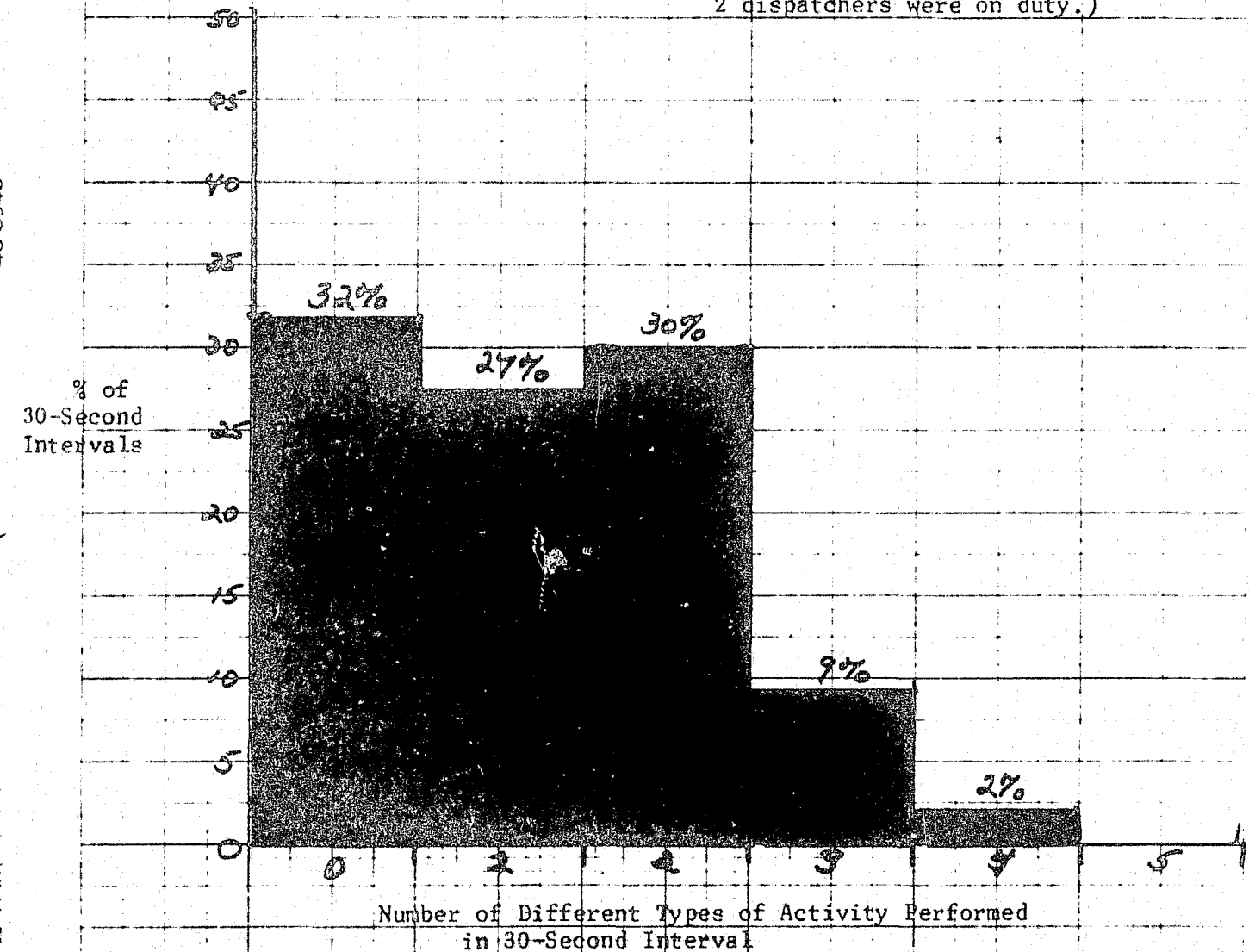


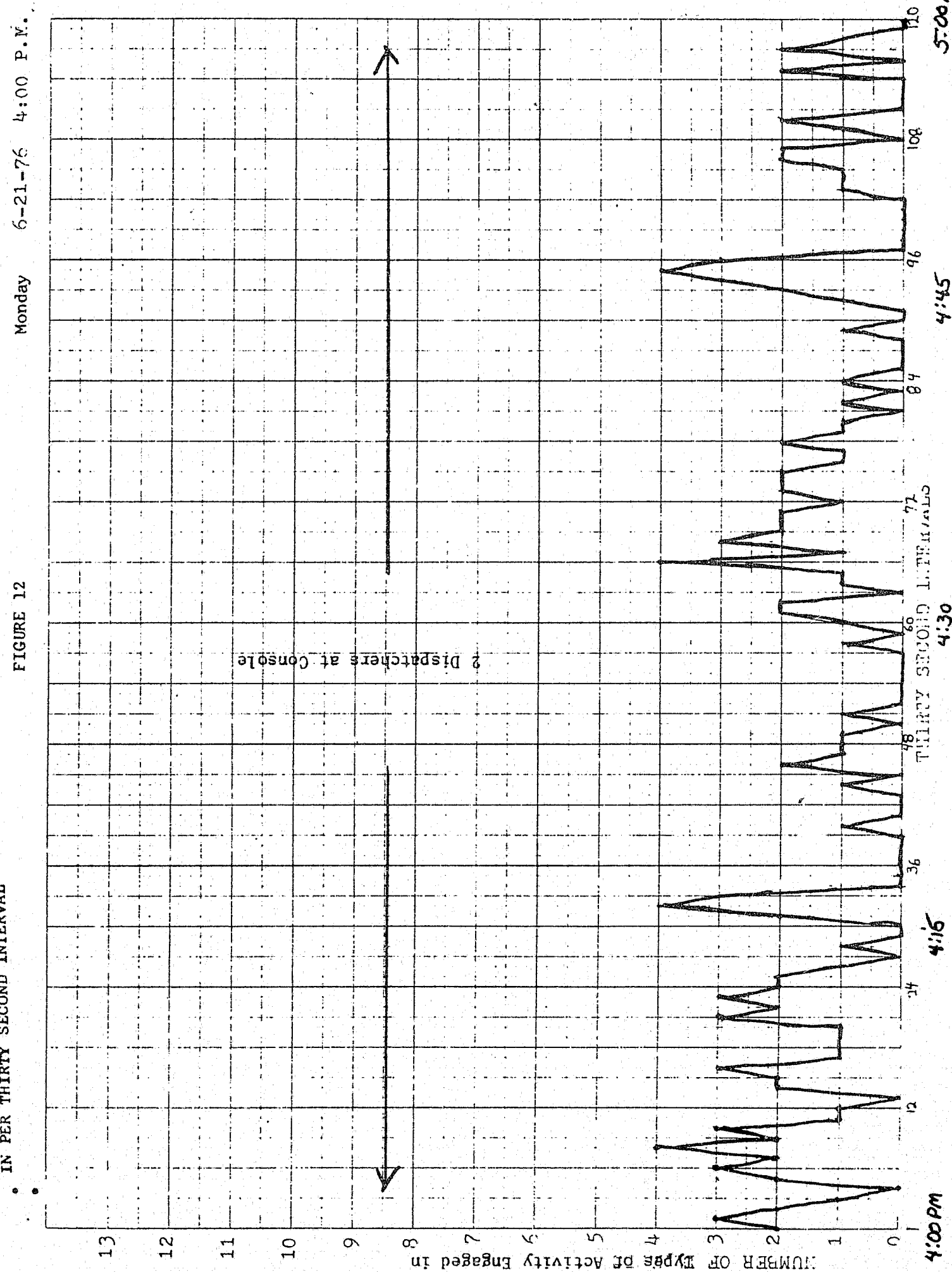
Figure 11 shows that late week afternoons are somewhat "quieter" overall. There is a somewhat larger percentage of "quiet" time in which the dispatcher(s) are not required to perform any type of activity; but still about 41% of the time, 2 or more types of activity are being performed at the same time.

Figures 10 and 9 show that early week afternoons and late week mornings require the least in the way of multiple types of activities performed.

While Figures 6 through 11 give overall summaries of the extent to which dispatchers engage in 0, 1, 2, 3 or more types of activities at the same time, they do not adequately portray the nature of ongoing dispatcher activity. To say that in the weekday-morning hours 23% of the time dispatchers are engaged in only one type of activity, while 32% of the time the dispatchers are involved in 2 types of activities, etc. does not indicate the constant variation from one minute to the next in dispatcher activity. Figures 12 and 13 each show the number of types of activity in each 30-second interval through an entire sample hour. These figures graphically demonstrate the constantly fluctuating nature of dispatcher activity. Even in a very "quiet" hour, such as that in Figure 12, the dispatcher will, for some of the minutes, suddenly be called upon to perform 4 different types of activity. In short, the dispatch service is such that the need to engage in multiple types of activities at the same time is a recurring but unpredictable fact of life.

We also considered the difference that having one or two dispatchers may make upon the level of multiple activities performed. Our earlier analysis of demands showed that 2 dispatchers were assigned to duty during times when there were heavier demands, especially from information phone calls, walk-ins, and the P-I-N terminal. It is not surprising to find in Figure 14 that during times when 2 dispatchers are on duty, the percent of time devoted to 2 or more types of activity at once is higher than it is when 1 dispatcher is

FIGURE 12  
NUMBER OF TYPES OF ACTIVITY ENGAGED  
IN PER THIRTY SECOND INTERVAL



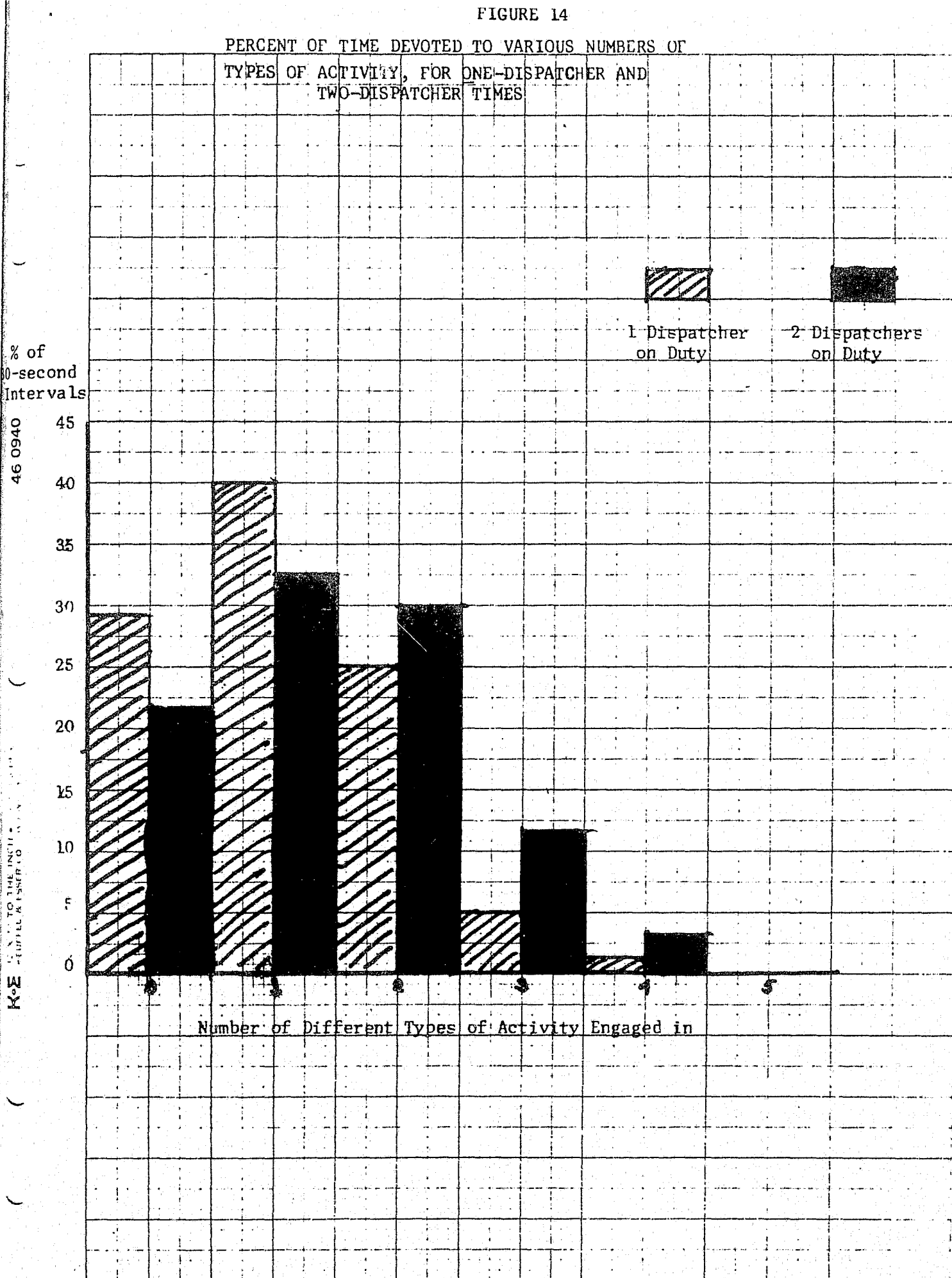
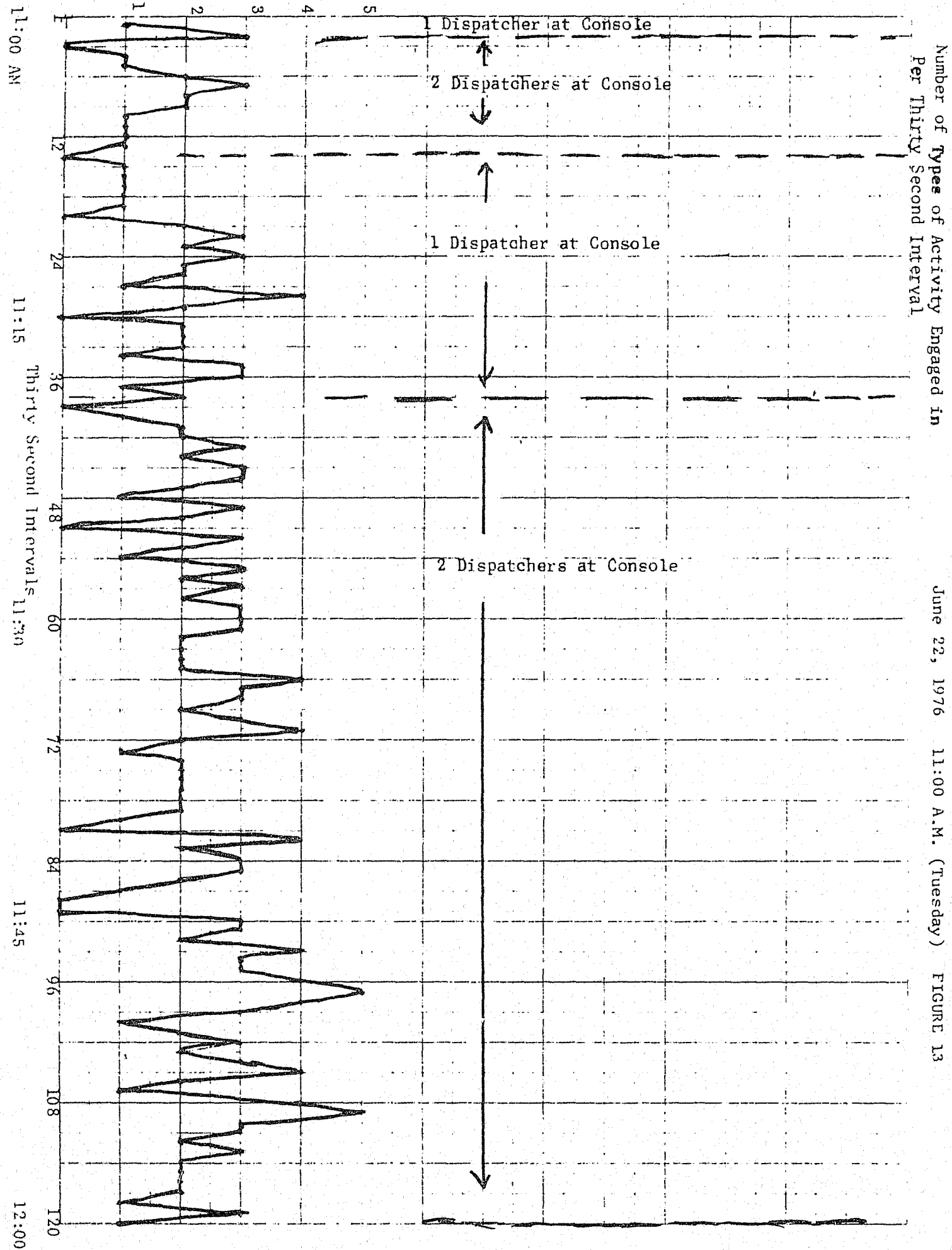
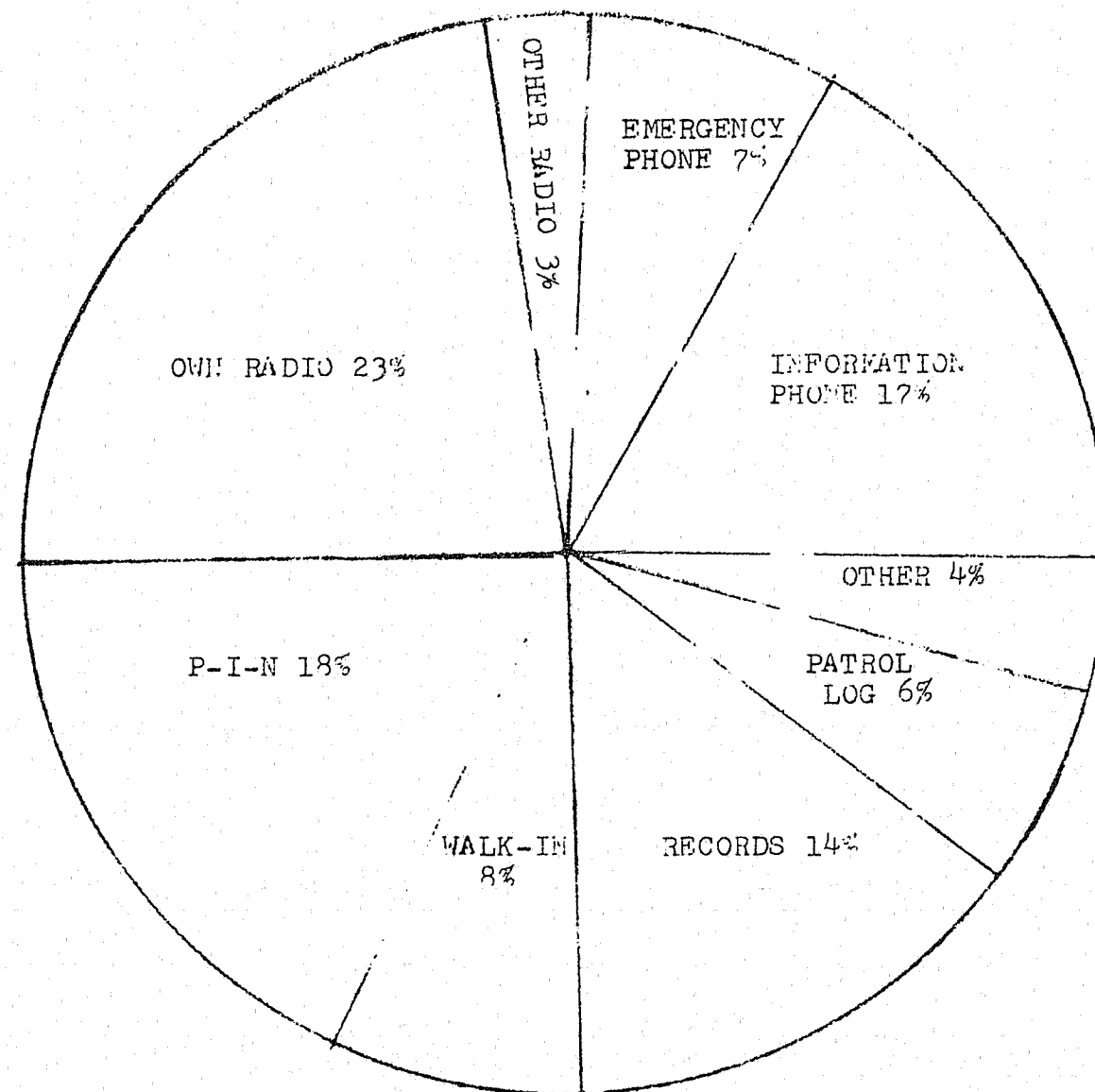


FIGURE 15

BREAKDOWN OF DISPATCHER ACTIVITY



on duty. When one dispatcher is on duty, 31% of the time there are 2 or more types of activities going on at once; when 2 dispatchers are on duty, 45% of the time 2 or more types of activities are being performed.

So far, we have been looking at the number of types of dispatcher activities going on within the total time of our observation. However, it is also important to know which types of activities are most frequent. In other words, if we consider all the times when we checked some activity as occurring, which activities account for most of these times? Figure 15 shows the results.

The most frequent activity is own radio transmission, which accounts for 23% of the dispatchers' activity times. Dealing with the P-I-N terminal accounts for 18% of the activity times.

Telephone calls, and especially calls on the information phone lines, account for a significant proportion of the dispatchers' activity time. Seventeen percent of the activities are information line calls and 7% are emergency line calls, for a total of 24%, which is a larger proportion of the dispatchers' activity than own radio.

The other important thing to note about Figure 15 is that record keeping accounts for a substantial portion of the dispatchers' time. In fact, 20% of the observed activity times involved some sort of record keeping, whether patrol log (6%) or some other (14%).

### III. Introduction to Phone Call Content Analysis Section

So far, our analysis has suggested that there are fairly large numbers of service demands made upon the Chapel Hill Police Department in the form of calls on the 8 telephone lines. For some of these calls, existing departmental records will eventually reflect that a service was provided. For example, when a citizen calls to report a prowler and a car is dispatched to the scene, the complaint card and incident report will reflect the provision of this service. But what about those calls in which services are provided which do not involve the dispatch of a patrol officer or other action that would be reflected in

departmental records? Citizens call requesting information on a variety of matters they call with emergency situations that are not within the jurisdiction of Chapel Hill or its police and must therefore be referred to other departments or agencies; they call asking for particular individuals within the Chapel Hill Police Department, in which case the dispatcher must provide a switchboard function; they call to leave messages or to ask advice; and sometimes citizens call simply because they are lonely or unhappy and want someone to talk to them and listen to their complaints in general. All of these calls are demands for service made upon the Chapel Hill Police Department's dispatchers; all such calls are activities which take up the active time of the dispatcher; and despite their low visibility all are services to the citizens of Chapel Hill.

An analysis of the frequency of these various types of telephone calls will provide a good indication of the pattern of citizen demands for police service in Chapel Hill, and it will indicate the extent to which the department is providing services which are not now credited in existing record-keeping arrangements.

Telephone requests at the Chapel Hill Police Department arrive on any of 4 lines listed under the "emergency" telephone number, or any of the 4 lines listed under the "information" telephone number. In addition to examining the pattern of types of requests for police service which are received from citizens, we also hoped to find out whether in fact citizens do use the different lines for different problems. That is, do emergency calls come in on emergency-designated lines, and information/nonemergency calls on information-designated lines? Unfortunately, our ability to make this latter comparison was limited by technical difficulties with recording the information telephone lines. We were only able to record 1 usable tape for the information phone lines. A brief description of the pattern of information line calls on this tape will be provided

Table 16

Requests/Problems/Reasons for Calling  
Emergency Line Only

		Total	
I. Victimization or Potential Victimization		39	17%
Assault/Fights	7		
Suspicious Person	10		
Prowler	2		
Weapon Discharged	1		
Gambling/Drugs	2		
Vandalism	3		
Larceny/Missing Property	5		
House Broken Into	4		
Store Burglary	2		
Other Property Related	2		
Other Burglary	1		
II. Medical Emergency, Fire, Disaster, Potential of Physical Injury		32	14%
Wreck	14		
Injured/Ill Person	9		
Person Needs Help	3		
Missing Person	6		
III. Disorders, Nuisances, and Traffic Problems		24	10%
Reckless Driver	3		
Improperly Parked Vehicle	1		
Traffic Signal Out/Obstruction	3		
Other Auto Related	5		
Domestic Disturbance	1		
Public Nuisance/Noise	8		
Other Disturbance	3		
IV. Services		41	17%
Store Opening or Closing	5		
Escort	18		
House Check	13		
Animal	2		
Other Service	1		
Person Just Wanted to Talk	2		
V. Information		91	39%
Information on Community Life	8		
Directions	3		
Information on Prior Police Action	12		
Nonservice Related Information	2		
Legal Advice	6		
Request for an Individual	47		
Compliment Police	2		
Other Information	8		
Complaint	3		
VI. Other		9	4%

(Note: This table is based on the 222 calls which were not dispatcher or public official initiated. Several of these calls, however, involved more than one problem/request/reasons for calling, yielding a total of 236 for this table.)

for limited comparison. The bulk of the following analysis is based upon coding of calls from the emergency telephone lines.

The citizens of Chapel Hill demand police services much more varied than the law enforcement and emergency activities that are usually thought to be the mainstay of police activity. Table 16 provides a breakdown of the reasons for calling for the 222 emergency line telephone calls that were not dispatcher or public official initiated.

Only 17% of these calls, in fact, involved some sort of actual or potential victimization. The largest number of these were calls about suspicious persons, followed by calls about fights. Almost half of these victimization calls (17 out of 39) were property related victimizations, such as vandalism, larceny or missing property, house broken into, store burglarized, and so forth.

The proportion of calls that come in because of medical emergency, fire, disaster, or other physical injury situations is also fairly small. Only 14% of the problems involved in these 222 emergency line calls are for such problems. Most calls of this kind that are received involve reported automobile accidents, or injured/ill persons.

Calls for problems relating to public disorders, nuisances, and traffic problems are also not as widespread as might be expected. Only 10% of the problems included in these emergency line calls were in this category. Half of them were auto/traffic related problems, and the other half were calls about public disorder/nuisance type problems, particularly noisy individuals.

Fairly routine services constituted an important proportion of these telephone requests. In fact, the proportion of these emergency line calls that involved requests for routine services (17%) is the same as the proportion involving actual or potential victimization. Several types of services are especially frequent. Services to commercial establishments, such as escorts to

the bank and store opening/closing reports constitute 23 of the 41 service requests in this category; house checks for vacationing residents of Chapel Hill make up another 13 of the 41 reasons for calling in this category.

Despite the fact that this analysis is based upon emergency line calls, however, the largest proportion of calls were calls for information or routine business of some sort. Thirty-nine percent of the 222 emergency line calls were informational. In the majority of these the caller requested to speak to a particular individual in the department. On these occasions the dispatcher served a switchboard function. In fact 20% of all problems/reasons for calling were requests to be switched to speak to an individual.

Most of the remaining calls in this category involve requests for information of some kind. Twelve of these ninety-one calls involved questions about some prior police action (e.g., "Did anything turn up on that stolen car I reported yesterday?"). Eight of the ninety-one were calls for information about the community generally, such as whether city hall is open, who the director of sanitation is, etc.

Out of all 236 problems/requests made in the 222 emergency line calls we coded, we found only 3 instances in which the caller wanted to express a complaint about some police action/inaction. In all 3 of these instances, the complaint was not the primary reason for calling, but was made in conjunction with some other request/problem. In addition, there were 2 instances in which callers specifically complimented the police on some activity.

In summary then, we find that the pattern of service demands/requests/problems directed to the Chapel Hill Police Department's dispatchers is different from that which many might expect. Calls involving problems of victimization or potential victimization and calls involving medical emergency, fire, disaster, or other physical injury together account for less than a third (31%) of the citizen initiated calls received on the emergency lines. Calls for information/routine



business were most frequent, accounting for 39% of the requests. Requests for routine services were also frequent, accounting for another 17% of the call requests.

#### Comparison with Pattern of Requests on Information Line

As noted above, we were only able to record a very limited number of information phone line calls. As a result we cannot make a full comparison of the types of calls coming in on these lines with the above pattern of calls on the emergency lines. Table 17 below, however, indicates the types of calls that were received over the information phone lines during the 6-8 hour period we were able to monitor.

Table 17

#### Distribution of Requests/Reasons for Calling Information Phone Lines Only

- I. Victimization or Potential Victimization  
Minor Sex Offense 1
- II. Medical Emergency, Fire, Disaster, Physical Injury  
none
- III. Disorders, Nuisances, and Traffic Problems  
none
- IV. Services  
House Check 1
- V. Information
  - Information on Prior Police Action 1
  - Nonservice Related Information 1
  - Request for an Individual 2
  - Other Information 2
- VI. Other 1

These figures suggest that, while some requests for services and reports of victimization may occasionally come in over the information phone lines, these lines are primarily used for information/routine business. We must stress, however, that the information phone figures are based upon an extremely limited sample of their use. These results should be verified with more extensive

sampling when the technical difficulties or recording information line calls have been solved.

#### Callers' Demeanor

Knowing what kinds of demands are made upon the Chapel Hill Police Department via the telephone shows only part of the pattern of service demand. It is also important to know how demands are made, and who makes what type of demands.

Most citizens who call are calm, rational, polite, and not agitated or upset. In only 13% of the cases considered here (those emergency line calls not initiated by dispatcher or public officials) was the caller's demeanor clearly different from this norm. Table 18 below indicates the range of unusual citizen demeanors observed in these calls.

Table 18

#### Distribution of Unusual Citizen Demeanors Encountered in the Emergency Line Calls\*

Frightened	7
Not Confident Request is Appropriate	7
Apologetic	4
Demanding	7
Angry	6
Confused	8

(\*Some callers showed more than one of these unusual demeanors.)

It is even more important to know in what types of situations the caller exhibits these types of demeanor. For what kinds of problems do citizens call in angry? What are the types of problems that lead citizens to apologize for bothering the police? What things are citizens overtly demanding about? Table 19 presents some results.

Table 19

Distribution of Problems Involved When the  
Caller's Demeanor is Unusual

Calls where caller is: <u>Frightened</u>	Not Confident of Appropriateness	Apologetic
2 Fights	2 Reckless Driving	1 Wreck
1 Missing Person	2 Suspicious Person	1 Reckless Driving
1 Suspicious Person	1 Prowler	1 Suspicious Person
1 Prowler	1 Missing Property	1 Prowler
1 House Broken Into	1 Request for Individual	
1 Information Needed on Prior Police Action	1 Complaint Against Police	
Calls where caller is: <u>Demanding</u>	Angry	
1 Public Nuisance	2 Public Nuisance	
1 Missing Person	1 Missing Person	
1 Suspicious Person	1 House Broken Into	
1 Vandalism	1 Information on Prior Action	
1 Information on Prior Action	1 Legal Advice	
1 Legal Advice		
2 Request for Individual		
1 House Broken Into		
2 Complaint Against Police		

As Table 19 suggests, the pattern of how citizens are apt to present demands for police services is not always as might be expected. Angry or demanding calls are made about matters that might seem fairly routine; and, on the other hand, some citizens are timid, reluctant, or apologetic when calling about more serious matters. The problem categories, of course, cannot convey the detailed circumstances involved in each of these calls, but one or two examples may suffice.

One of the angry and demanding calls was from an individual who had bought a car and needed to get license tags to use it during the weekend. Despite the fact that the man was informed that this was a matter for the licensing agency, which is not open on weekends, he persisted in asking why the police couldn't provide temporary tags or some official waiver for him, and the call concluded with the citizen obviously dissatisfied.

In contrast, a woman calling because she heard a prowler while home alone was apologetic about bothering the police. In this case, the citizen's expectations of what the police can/should do were lower than what was actually the case.

These examples suggest the extent to which citizen expectations about police service are an important factor in the kinds of demands that are made upon the department and the way in which they are made.

A few final comments regarding Table 19 can also be made.

- (1) Public nuisances are the source of some of the more angry and demanding calls made. The citizen's irritation with the noise/disturbance is apparently carried over into their dealing with the police.
- (2) A significant number of apologetic callers or callers unsure of the appropriateness of their request are citizens (usually women) who see/hear a suspicious person or prowler. There is a likelihood that, were these individuals not so frightened, they would not have called at all, and perhaps they might then have been victimized. The response of the dispatchers in these cases (dispatch a car immediately while keeping the citizen on the line to maintain contact/get directions) is particularly important. In addition to quickly providing assistance for the situation at hand, it also demonstrates that the problem is taken seriously by the Chapel Hill Police Department, thus encouraging the citizen to call if such a potential victimization situation arises again.

One final comment about demeanor is in order. We have noted that in 29 calls, the citizen's demeanor is an added factor for the dispatcher to deal with. An important question then is: what demeanor do the dispatchers maintain in the face of this range of citizen demands and demeanors? We found that in the overwhelming majority of cases, the dispatchers maintained a neutral, professional,



matter-of-fact tone. In a few cases, the dispatchers, when faced with extremely frightened or agitated individuals are called upon to be overtly reassuring as well; and in a handful of cases, the dispatchers are noticeably friendly/cheerful in response to the caller. In only 5 of the 222 calls that were citizen/business initiated could we detect any amount of impatience or hostility in the dispatcher's tone of response.

#### Response to Calls

Finally, we analyzed the various types of responses that the dispatcher makes to the many types of citizen requests/problems. That is, what does the dispatcher do or specifically say will be done about the problem. Table 20 provides an indication of the kinds of responses that were encountered. The most interesting

Table 20

#### Responses to Emergency Line Problems

Dispatch patrolman	71	32%
Send Detective	1	1%
Take Note/Administrative	34	16%
Action		
Call Other Agency	8	4%
Provide Service/Refer	76	35%
Action Not Taken	3	1%
Other	7	3%
Undetermined	14	6%
Not Applicable	5	2%
	219	100%

thing to note about Table 20 is the substantial number of cases in which the dispatchers themselves provide the service (i.e., answer the request for information, etc.) or refer the caller to the appropriate agency. Thirty-five percent of these emergency line calls were handled this way. These are the occasions in which services are being provided to the public that are not reflected in any departmental records. The 32% of the calls which have a patrolman dispatched will presumably generate a complaint card which records the service. House checks and other administrative actions are also usually recorded in one form or another.

The 76 cases in which the dispatchers themselves answer questions, give directions, transfer calls, or refer callers to other agencies are not currently credited in any formal records.

#### Duration of Calls

In the first section of this report we noted that telephone calls are a significant demand upon the dispatchers. Twenty-six percent of incoming demands are phone calls (7% on the emergency lines), and 24% of the dispatchers' observed activities consisted of dealing with telephone calls. Until now we have presented no data on the amount of actual time individual telephone calls take. That important question can be answered here. Table 21 provides a breakdown of the actual time in seconds that the emergency line telephone calls we analyzed consumed. This table, unlike most previous tables, includes dispatcher and public official initiated calls as well as calls from citizens, businesses, etc.

Table 21

#### Duration of Emergency Line Telephone Calls

14 Seconds or Less	112	25%	
15 to 29 Seconds	110	24%	
30 to 60 Seconds	119	27%	Mean 51.4 sec.
60 to 120 Seconds	63	14%	Median 29.8 sec.
More than 120 Seconds	45	10%	

Table 21 indicates that about half (49%) of the calls take less than half a minute. Only about 1/4 of the calls take more than one minute. The average phone call takes 51.4 seconds, but this average is unduly influenced by a few extreme cases of long phone calls. The median phone call is 29.8 seconds.

It is also important to determine what kinds of calls take up more time on the emergency line. Are calls for information or services frequently of long duration, or are calls about victimization or medical emergencies more likely to take up extended minutes of emergency phone line time?

Table 22, which breaks out duration of call according to the broad categories of type of call used previously, answers these questions. (It does not include

dispatcher and public official initiated calls.) The table shows that reports of victimization are typically the lengthiest. Over half of the victimization calls took a minute or more; close to a third (31%) took more than two minutes. In contrast, calls for information or routine services are most often quite brief.

Table 22

Duration of Call by Primary Reason for Call,  
Emergency Line Only

Nature of Call:	Duration of Call					N
	14 Seconds or Less	15-29 Sec.	30-60 Sec.	61-120 Sec.	Over 120 Sec.	
Victimization	3%	14%	31%	22%	31%	36
Medical Emergency, Fire, Phys. Injury	16%	19%	36%	16%	13%	31
Disorders, Nuisances Traffic Problems	0	13%	29%	33%	25%	24
Routine Services	33%	26%	10%	15%	15%	39
Information	25%	29%	29%	13%	4%	83

A quarter of the calls for information and one third of the requests for routine services took only 14 seconds or less of emergency line phone time. Calls about disorders/nuisances/traffic problems however are usually quite time consuming. Over half of these calls (58%) took more than a minute, and 1/4 of them took over two minutes.

In summary, we found in our analysis of phone call content that a great variety of services are demanded by the citizens of Chapel Hill. Furthermore, the aggregate number of phone calls handled by the dispatchers that we reported in Part I can be seen now in a more complete service context. A great number of these calls are relatively time consuming, and involve crucial reports of victimizations or potential victimizations. Still others are equally time consuming, but involve problems of a less urgent nature, such as disturbances or nuisances.

Finally, a large number of fairly brief calls for information or routine services are also handled on the emergency telephone lines.

## APPENDIX A

# INSTRUCTIONS FOR USE OF DISPATCH OPERATIONS TIME-STUDY FORMS

## I. Purpose of the forms

These forms are designed primarily to focus on the behavior of the police dispatcher - how he/she allocates time and how rapidly he/she responds to requests for service. By themselves their value is limited to time-motion and personnel augmentation sorts of policy evaluation. Combined with other data-gathering techniques which permit measurement/assessment of the content and quality of dispatcher demand-response, these forms might well serve broader policy evaluation goals.

## II. Observation Procedure

A one to one ratio of observers to dispatchers is required. In a 2-dispatcher department we have specialized the coding so that one observer is responsible for the INPUT DEMAND form and the other is responsible for the TASK ACTIVITIES form. Each helps the other in identifying dispatch operations, however, and both are responsible for ensuring that their entries are coordinated for the appropriate time periods.

## III. INPUT DEMAND FORM

The numbered rows represent 30 second time periods. The labeled columns represent categories of demands placed upon dispatchers and their responses to them. The dotted line within each column separates the input demands (left side) from responses (right side). Everytime a demand is made upon the dispatcher (radio transmission, phone ringing, PIN beeping, walk-in request for service from police or public) an "X" is placed in the left side of the appropriate column for the corresponding time period in which it occurred. The "X" is continued in subsequent time periods until the demand is responded to (See A in sample form). When the dispatcher responds to the demand (e.g. answers the radio call) an "X" is placed in the response side of the column (for the time period corresponding to when the response was initiated). Even though the demand and response interaction may continue after its initiation, once the demand has been responded to, no further entries are made in the demand or response sides for that interaction. It is therefore crucial to determine when an old interaction ends and a new one begins. It is rather easy to do this with the telephones, but the radios, PIN, and walk-ins require some judgement decisions. The following criteria (in order of importance) are useful in making this decision:

- 1) If the source of the input/demand changes, mark as a new demand.
- 2) If the time between demands is so great that the dispatcher's attention is called to some other demand or he/she performs a different task, code as a new demand.
- 3) If the demand source changes the substance (subject matter) of the demand, and does so by initiating a new transmission (even if it follows directly after a previous request by the same demand source) code as a new demand.

If more than one demand/input occurs during a 30 second period, "X" the appropriate box; likewise for the dispatcher response (See B on sample form for example). If more than one demand of a certain type occurs in a 30 second period, X the appropriate box as many times as there are demands of that type; also X the response box for every time one of the demands is responded to (See C on the sample form).

If a demand occurs at the end of one time period and is immediately responded to, even if the response starts in the next time period, code it as occurring when the demand is initiated.

The numbered rows represent 30 second time periods (identical to those in the INPUT DEMAND form) and the columns represent the various task activities pursued by the dispatchers in each time period. An X placed in any box indicates that that activity was performed at least once by one dispatcher (See A on sample Task Activity form). If two dispatchers perform the same activity in the same time period, then two X's appear in the appropriate box (See B). If a single dispatcher performs the same type of task more than once in a time period, the appropriate box is X'ed only once. Thus in any given box there can never be more X's than there are dispatchers in the room, although boxes in every column may be X'ed.

Each activity is X'ed at the time it is commenced. Boxes for subsequent time periods are X'ed as long as the activity occurs at any time during that period (See C in sample form for example). Thus, this form is a complete record of the job-related activities performed by the dispatchers for the sampled time periods.

Arrive at the dispatcher's desk far enough in advance to obtain information regarding what frequencies are up, how many cars are on patrol, or any other special situations which might affect the quality/quantity of demands placed upon the dispatchers or their ability to respond to the demands. Number forms in advance and check frequently with the other observer to ensure that you are simultaneously coding on the same page and in the same row. Be sure to note the starting time for coding to the left of the first time cell number on the first page (See sample forms). Before turning in your forms for data analysis check to see that all of them are present, initialed, labeled, and stapled. Be sure to note in the time number cells whenever the number of dispatchers available (usually this will mean within the dispatch office) to respond to calls changes. Be sure to indicate the number of dispatchers on duty in the first number cell of the first page (See sample forms).

TIME / SEC	PHONE	PIN	REQUESTS
DISPATCHERS 2:00 pm 1			
2	X		
3 (A)	X		
4	X		
5			
6 (B)	X	X X	
7			
8 (C)	X X		
9			
1 Dispatcher			
11			
2 DISPATCHERS			
13			
14			

APPENDIX B

TIME	CALLS	RADIO CALLS	PHONES	PHONES			(Complaint, EMS, Other)	LOC		
DISPATCHES 10:00 1 PM										
(A)	X						X			
3										
(B)	X X									
5										
(C)			X							
7			X							
8			X							
9										
10										
11										
12										
13										
14										

Observer T.J.L. 08:14:10

MAJOR ACCIDENTS

DATE 08/11/11

# INSTRUCTION FOR THE USE OF PHONE CALL ANALYSIS SHEETS

## I. Purpose of Form:

This form is designed to classify calls which are received by the dispatchers of a police department. This form is designed to describe the interaction between the dispatcher and the caller. As such, it is useful to measure the number of the different types of demands for service which the department receives, the way in which the demand is presented, the dispatcher's demeanor and a subjective evaluation of the age and race of the caller. The possible evaluative uses of this will be expanded if it is possible to also have access to the actions of the dispatcher after he has taken the call.

## II. Observation Procedure:

The method that has been employed for the Chapel Hill P.D. has been to record from the dictaphone which is available to the dispatchers for instant replay of phone calls. If some departments do not have such a facility, it would be necessary to have an observer coding calls as they came in (assuming that it would be possible to patch into this line). For most calls it will be sufficient to have just one observer coding, but it may be advisable to have two or more observers in order to achieve a higher degree of reliability for some of the more subjective coding decisions.

## III. Dispatch Observation--In-Coming Calls

General--The right side of the form is where the information is coded. When a blank is left open, it should be filled with a zero. Coding an eight (8) indicates that the coder was not able to determine from the content of the call a definite response to a category. Coding a nine (9) indicates that given a previous code, this next category is not applicable.

Calls which are either initiated by the dispatcher or calls that come from a public official (other police in own agency and police from other agencies etc.) are not coded on the Police Phone Call Analysis--Service Request form. They, instead, are entered on the Police Phone Call Analysis--Police Communications form. That form follows the same coding conventions as the Service Request form.

### Coding Conventions--variable by variable:

- 1) This variable refers to the month and day when the phone call occurred (not the date of the coding). If the month and day when the phone call occurred does not contain two digits, the empty blanks should be filled with zeros.
- 2) This refers to whether the call was received between the hours of 9 A.M. to 9 P.M. (day--coded as 1) or 9 P.M. to 9 A.M. (night--coded as 2).
- 3) Sequence numbers are assigned by the order the calls come in for the period of the observation. In combination with the first two variables, this allows for positive identification of a call so that it would be possible to return to the tape and recheck the coding. Again, any unfilled blanks should be filled with zeros.



4) Position 4 should be filled with the number which each coder will be assigned

5) This refers to whoever is making the phone call. Businesses will usually identify themselves as such. Public official includes all people who are employed by the government i.e. police, firemen, public works etc. Group would be coded if the caller represents what would usually be thought of as a "non-profit organization." Any call which is coded as 3 or 4 for this variable should be coded on the Police Phone Call Analysis--Police Communications Form.

6) Identified self indicates that during the course of the phone call, the caller told the dispatcher his name. It does not matter whether the person volunteered this information or if he supplied it upon the request of the dispatcher. If question 5 has been coded as a business or group, "identified self" is considered to have occurred when the caller identifies the business or group that he is representing.

7) The coding convention for this question is based upon for whom the service is requested. If the service will mainly be provided to the caller, then self would be coded. If it is unclear whether or not the service being requested is to be provided to the caller, undetermined (8) should be coded.

8) This item has to do with the specificity of the demand made by the caller. One (1) would be coded when the caller does not state specifically what he wants the police to do, but through the description of the problem, it can be assumed that both the caller and the dispatcher implicitly understand what service is being requested i.e. in describing the occurrence of a wreck, a caller may or may not specifically request that a car be sent, but it can be assumed that both the caller and the dispatcher know that this is the service which is being requested. Two (2) is coded when the caller states what he wants the dispatcher to do even if the request is not fulfilled. Three (3) will be coded only when the caller states that he is unclear about what he wants the police to do.

9-11) Coding of 9-11 requires the use of the Problem Categories Form. On this sheet are the various codes for the problems a caller may have. One way to use this sheet is to first scan the left side to locate the general area of the problem and then finding the more specific category to the right. The two number code should then be entered on the Service Request Form. If the caller mentions more than one problem, the same procedure should be followed for the subsequent problems. Most of the codes on the Problem Categories sheet are fairly standard police classifications but note that there is a code 93 which should be entered only if it is obvious that this is the purpose of the caller. If only one problem is mentioned, 10, 10a, 11 and 11a should be left blank. 11 and 11a should be left blank when only two problems are mentioned.

9a,10a,11a) These items have to do with when the problem that has been coded occurred. Only events which the caller indicates are still in progress or imminent at the time of the call should be coded as three (3). Routine (1) should be used for common requests for service of a non-emergency nature (e.g. house check, escort, information on community life).

12) This is simply what the dispatcher states will be done. If the dispatcher is unclear or does not state what will be done this should then be coded 8.

13) This should be coded yes (1) only in the event that the caller's demeanor is very noticeably not matter-of-fact. While it may be tempting to try to capture the nuances in the phone call, the coder should try to only make mention of them if he believes that other people listening to the call would hear the same quality. If 13 is coded as no (2), 13a-13f should be coded as 9. If, however, the coder decides that the caller's demeanor is significantly unusual, the unusual quality should be indicated by marking the appropriate characterization(s) (13a-13f). If that quality was in the citizen's demeanor then a 1 should be coded and 2 should be coded if that quality was not one which the observer found to be unusual.

14) Like 13, this question should only be coded yes (1) if the coder feels that the citizen's demeanor shifted significantly during the course of the call. Again, if the coder has any doubt that another coder would hear the same shift in the citizen's demeanor, this item should not be coded as being yes.

15) These qualities need to be overt on the part of the dispatcher for the coder to mark any other than neutral (2). The coder should not try to capture nuances.

16-18) The coder for these questions is attempting to approximate the estimate of the dispatcher in regards to the race, age and sex of the caller. This can be made more reliable if the observer has an opportunity to ask the dispatcher about a call that the observer has heard. While it can be argued that a person can be young but still sound elderly, be black but sound white etc., the subjective evaluation is of interest here and not necessarily an accurate classification of the caller.

21) Code (1) if the conversation occurred on an emergency phone line and (2) if it occurred on an information (non-emergency) phone line.

22) The coder should try to write a few comments about each call especially if the caller's request seemed peculiar or any part of the call was out of the ordinary. This part will be useful for analysis and for choosing calls to do a follow-up on.



POLICE PHONE CALL ANALYSIS - SERVICE REQUEST FORM  
POLICE SERVICES STUDY

UNC-July 1976

(8 - undetermined )  
(9 - not applicable)

1. Date (month/day)	1	_____ / _____
2. Time: 1 - day 2 - night	5	_____ 1 2
3. Sequence number of call	6	_____
4. Coder #	8	_____
5. Initiator: 1 - citizen 2 - business 3 - public official 4 - dispatcher 5 - group (list) _____	10	1 2 3 4 5
6. Self identification: 1 - identified self 2 - refused 3 - neither asked nor offered	11	1 2 3
7. Call relates to: 1 - self 2 - others	12	1 2 8
8. Caller's request: (describe) _____ 1 - implicitly understood by caller 2 - specifically described by caller 3 - caller unclear about activity wanted	13	1 2 3 8 9
9. First problem: _____	14	_____
9a. Urgency of first problem: 1 - routine 2 - event in past 3 - event in progress or imminent	16	1 2 3
10. Second problem: _____	17	_____
10a. Urgency of second problem	19	1 2 3
11. Third problem: _____	20	_____
11a. Urgency of third problem	22	1 2 3
12. Dispatcher verbal indication of response: 1 - will dispatch patrol officer 2 - will send detective 3 - will take note/admin. action 4 - will contact or dispatch other agency 5 - dispatcher provided service or referred caller to other agency 6 - requested action will not be taken 7 - other	23	1 2 3 4 5 6 7 8 9
13. Caller's demeanor unusual? 1 - yes 2 - no	24	1 2 8 9
If yes, was caller:		
13a. Frightened?	25	1 2 8 9
13b. Not confident of request as appropriate?	26	1 2 8 9

POLICE PHONE CALL ANALYSIS - POLICE COMMUNICATIONS FORM										PHONE	
POLICE SERVICES STUDY										LINE	
				DATE (1)	TIME (5)	SEQ. # (6)	CODER (8)	INITIATOR (10)	DURATION (42)	(45)	
13c. Apologetic?	27	1	2	8	9			3	4	1	2
13d. Demanding?	28	1	2	8	9			3	4	1	2
13e. Angry?	29	1	2	8	9			3	4	1	2
13f. Confused?	30	1	2	8	9			3	4	1	2
14. Caller's demeanor change during call?	31	1	2	8	9			3	4	1	2
1 - yes 2 - no								3	4	1	2
If yes, at the end of the call was caller:								3	4	1	2
14a. Frightened?	32	1	2	8	9			3	4	1	2
14b. Not confident of request?	33	1	2	8	9			3	4	1	2
14c. Apologetic?	34	1	2	8	9			3	4	1	2
14d. Demanding?	35	1	2	8	9			3	4	1	2
14e. Angry?	36	1	2	8	9			3	4	1	2
15. Dispatcher's demeanor:	37	1	2	3	4			3	4	1	2
1 - overtly reassuring								3	4	1	2
2 - neutral, matter-of-fact								3	4	1	2
3 - hostile, impatient, excited								3	4	1	2
4 - personal reaction, friendly								3	4	1	2
16. Sex of caller:	38	1	2	8				3	4	1	2
1 - female 2 - male								3	4	1	2
17. Race of caller:	39	1	2	3	8			3	4	1	2
1 - white 2 - black 3 - other								3	4	1	2
18. Age of caller:	40	1	2	3	8			3	4	1	2
1 - child 2 - adult 3 - elderly								3	4	1	2
19. Any non-call related interruption?	41	1	2	8	9			3	4	1	2
1 - yes 2 - no								3	4	1	2
20. Duration of call (in seconds)	42							3	4	1	2
21. Phone line:	45	1	2					3	4	1	2
1 - emergency 2 - information								3	4	1	2
22. Comments:								3	4	1	2
								3	4	1	2
								3	4	1	2

7/19/76

PROBLEM CATEGORIES

(For Coding #'s 9-11)

AUTOMOBILE: (01) wreck (02) reckless driving (03) improperly parked vehicle  
(04) traffic signals & obstructions (09) other

DISTURBANCE: (10) drunk (11) fight (12) domestic (13) public nuisance/noise  
(14) weapon discharged (15) report of gambling, drugs, alcohol  
(19) other

PERSON: (20) assaulted (21) missing (22) needs assistance (23) suspicious  
(24) prowler (25) minor sex crimes (26) major sex crimes  
(29) other

PROPERTY (30) larceny (31) vandalism (32) missing/lost/damaged property  
(35) house broken into (39) other

BURGLARY: (40) store (41) house (49) other

ROBBERY: (50) private citizen (51) bank (52) store (59) other

EMERGENCY: (60) fire (61) obstetric (62) injured/ill person (69) other

SERVICE: (70) escort (71) opening/closing (72) house check (73) animal  
(79) other

INFORMATION: (80) information on community life (81) directions  
(82) information on prior police action  
(83) information provided for police not directly related to a request  
for service in this phone call  
(84) information relating to legal advice (89) other

MISCELLANEOUS: (90) request for an individual (91) complaint against police  
(92) compliment for police (93) just wanted to talk  
(99) other

END