HUNTINGTON BEACH

LICE COMMAND

D CONTROL:

ASE II

COUNTY NUMERICAL STREETS

Numerical streets used as intersections in the Sunset Beach area are followed by a "CO":

"9th Street - Sunset Beach" is entered as "09CO"

APARTMENT NUMBERS

Apartment numbers may be any combination of alpha and numeric characters left justified:

"Apt 12" is entered "12--"

"Apt 10A" is entered "10A-"

BUILDING AND APARTMENT NUMBERS

Are combined if necessary to identify the location:

"Building 20 Apt. D" is entered as Apt "20D".

HALF (1/2) ADDRESSES

House addresses having a half are handled as apartments using a slash as a character.

"602½ Main" is entered at "602 Main ----APT1/2-

TRANSMIT

To verify an address or location, transmit (XMIT) with the cursor on the first position of the "RD Section".

ERROR MESSAGES

Error messages are displayed on line 1 of the CRT. Appropriate corrections should be made or a manual entry completed.

-STREET NAME INVALID-

The street name is spelled incorrectly or doesn't exist.

-first intersect str- name invalid-
-second intersect str- name invalid- for intersection entries - indicates which entry is invalid.
-100 Block of NNN00-invalid-indicates that the requested 100 block (NNN00) is invalid.
-addr. NNNNN doesn't exist on XXXXX-house number "NNNNN" doesn't exist on street name "XXXXXXX".

-numeric STR-name invalid-invalid numeric street name used.

BASIC ENTRY RULES

HOUSE NUMBERS:

The house number must be 3,4 or 5 numerical digits. The numbers are to be left justified if less than 5 positions are used.

123 is 123--
1234 is 1234-
12345 is 12345

House numbering using halves (½) are handled as apartments. See apartment section. The only exception is for special use under entry Type C. 100 Block verification.

100 BLOCK NUMBERING

When verifying the 100 block, the letters BL must appear in the last two blanks of the street number field and the numbers are left justified as indicated:

12300 Main 123BL
1200 Main 12-BL
100 Main 1--BL

STREET NAMES:

The full alphabetical street name must be entered. No suffixes (ST, PL, CR, LANE, ETC.) are to be used.

MULTIPLE NAME STREETS

Street names consisting of more than one word must be entered as written. Internal spaces must be included. "Vista Del Sol Lane" shall be entered as "VISTA DEL SOL".

FRONTAGE ROADS

An incident reported on a frontage road in order to be distinguished from the primary road is entered with a "-FR'. "ADAMS FRONTAGE" is entered as "ADAMS-FR".

PREFIX "SAINT"

Any street name containing the prefix word "SAINT" is abbreviated as "ST" followed by a space.

"SAINT ANDREWS" is entered "ST ANDREWS". This is the only exception where a space is used in the name.

NUMERICAL STREETS

Numerical streets may be entered either as a number or alphabetically. To avoid spelling errors, the numerical listing is preferred.

"9th STREET" is entered "09" or "NINTH"
"12th STREET" is entered "12" or "TWELFTH"

ADDRESS FILE OPERATION

INPUT FORMAT

The input for address verification and sub-file searches is line 1 of the complaint format up to and including the "Department" section:

```
-----/-------------/-------------/APT ----/DPT -/RD ---/
  1        2             3          4     5     6
```

1. House Number
2. Street Name
3. Intersecting Street Name
4. Apartment or Suite Number
5. Department Code
6. RD Section

When using the address file, all appropriate fields must be filled in and a transmit (XMIT) made from the first character in the RD section.

A. STANDARD STREET ADDRESS:

```
12345/BEACH---------/-------------/APT ----/DPT P/RD  --/
```

B. APARTMENT ADDRESS:

```
12345/BEACH---------/-------------/APT 123A/DPT P/RD  --/
```

C. 100 BLOCK VERIFICATION:

```
123BL/BEACH---------/-------------/APT ----/DPT P/RD  --/
```

D. STREET ADDRESS WITH FIRM NAME:

```
12345/BEACH---------/H.B.PHOTO-----/APT ----/DPT P/RD  --/
```

E. INTERECTING STREETS:

```
-----/BEACH---------/MAIN----------/APT ----/DPT P/RD  --/
```

NOTE: For specific remarks on each format entry refer to Appendix A - Format Remarks.

APPENDIX C

OPERATOR'S MANUAL FOR POLICE COMMUNICATIONS

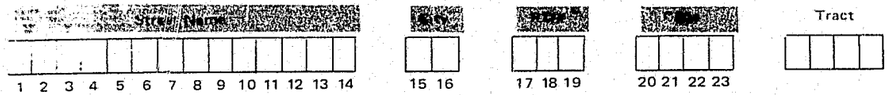
HUNTINGTON BEACH

STREET MASTER INDEX DATA INPUT FORM

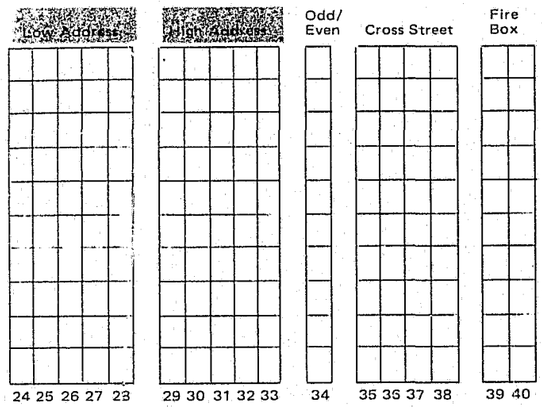
NOTE: Shaded areas must be filled in.

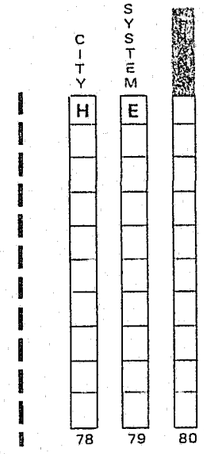
TRANSACTION CODES COL. 80:	FIRE D.	POLICE D.	ACG DIME
ADD	A	B	C
DELETE	1	2	3
CHANGE	D	E	F

COMMON DATA

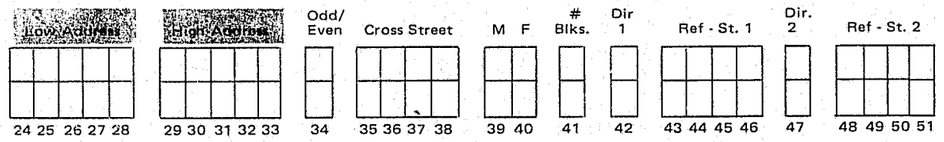


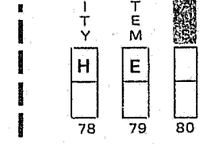
FIRE DATA



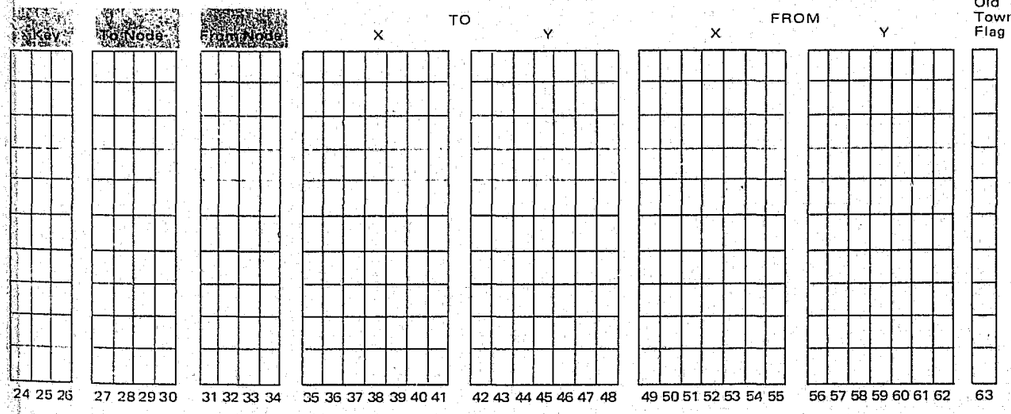


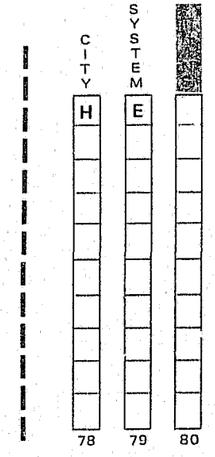
POLICE DATA





ACG - DIME





Prepared by _____ Prepared by _____ Prepared by _____

FIRE Date _____ POLICE Date _____ D.P. Date _____

ENGINEERING COPY

ECC 110 4-1 74

Burroughs MASS STORAGE LAYOUT FORM

FILE NAME	APPLICATION AREA	PREPARED BY	DATE
NUMBER OF RECORDS	RECORD SIZES	SEGMENT SIZE	ADDRESSING TECHNIQUE
STANDARD READ OR UPDATE	NUMBER OF SEGMENTS FOR FILE	FILE ORGANIZATION	
REMARKS	3 — 3		

RE-CORD LEVEL	FIELD LEVEL	DESCRIPTION	COBOL PICTURE	SIZE (BYTES)	FILE CREATION SOURCE	EVENTUAL SOURCE
		Medications	99 Cmp OC 3	3		
		Allergies	99 Cmp OC 3	3	N/A	P/F
		Sensitivities	99 Cmp OC 3	3		
		Ambulatory	9 Cmp	.5		
		Language Spoken	9 Cmp	.5		
		List Element Flags				
		Warrant - Flg	9 Cmp	.5		
		Gun Regist - Flg	9 Cmp	.5		
		Crim. His - Flg	9 Cmp	.5		
		Narc. Regist - Flg	9 Cmp	.5	Automated	Automated
		Medical - Flg	9 Cmp	.5		
		Emer. Data - Flg	9 Cmp	.5		
		Sex Regist - Flg	9 Cmp	.5		
		Haz - Cond - Flg	9 Cmp	.5		
		Assessee's Name	X (25)	25		
		Assessee's Address 1	X (20)	20		
		Assessee's Address 2	X (20)	20	A.T.	A.T.
		Assessee's Address 3	X (20)	20		
		Assessee's Zip Code	9 (5) Cmp	2.5		
		Assessor's Parcel #	9 (8) Cmp	4		
		Sub Parcel #	999 Cmp	1.5		
		Block	999 Cmp	1.5	U.D.	U.D.
		Block Face	9 Cmp	.5		
		Census Tract	9 (6) Cmp	3		
		District Map #	99 Cmp	1		RD File
		Land Area Gross	9 (7) Cmp	3.5		
	*	Land Area Net	9 (7) Cmp	3.5		
		Primary Frontage	9999 Cmp	2		
		Secondary Frontage	9999 Cmp	2		
		General Plan	999 Cmp	1.5		
	*	Zone	9999 Cmp	2		
	*	C.L.U. Code	9 (4) Cmp	2		
		Aux. Code	9 Cmp	.5	U.D.	B.P.
		Tenure Code	9 Cmp	.5		
		Building # (Exclude RI)	99 Cmp	1		
	*	# of Floors (Exclude RI)	99 Cmp	1		
		Floor # (Exclude RI)	99 Cmp	1		U.D.

ADDR. MSTR. · POLICE CRIM. HISTORY · POLICE · POLICE · POLICE WARRANT · POLICE/FIRE · FIRE · COND · PLANNING/BUILDING · MAILING FILE · RD FILE · STREET GUIDE · ACC-DINE

Burroughs MASS STORAGE LAYOUT FORM

FILE NAME	APPLICATION AREA	PREPARED BY	DATE
NUMBER OF RECORDS	RECORD SIZES	SEGMENT SIZE	ADDRESSING TECHNIQUE
STANDARD READ OR UPDATE	NUMBER OF SEGMENTS FOR FILE	FILE ORGANIZATION	
REMARKS	4 — 4		

RE-CORD LEVEL	FIELD LEVEL	DESCRIPTION	COBOL PICTURE	SIZE (BYTES)	FILE CREATION SOURCE	EVENTUAL SOURCE
	*	Floor Area	9 (7) Cmp	3.5		
	*	# of Parking Spaces (Exclude RI)	9999 Cmp	2		R.P.
		# of Employees (Exclude RI)	9 (5) Cmp	2.5		
		Construction Date	9999 Cmp	2	U.D.	
		Structure Condition	9 Cmp	.5		
		Last Update	9999 Cmp	2		
		Entry Date	9999 Cmp	2		
		# of Residential Units	999 Cmp	1.5	W.F.	
		Type of Improvement	9 Cmp	.5		
		Principal Frame (Vertical)	9 Cmp	.5		
		Principal Frame (Horizontal)	9 Cmp	.5		
		# of Basements	9 Cmp	.5	N/A	B.P.
		# of Bedrooms	999 Cmp	1.5		
		Proposed Use (Residential)	99 Cmp	1		
		Proposed Use (Non-Residential)	99 Cmp	1		
		Fire Zone	9 Cmp	.5		
		From NODE	9 (4) Cmp	2	AD	Automated
		From NODE X-4 Coordinates	9 (14) Cmp	7	AD	Automated
		TO NODE	9 (4) Cmp	2	AD	Automated
		TO NODE X-4 Coordinates	9 (14) Cmp	7	AD	Automated
		GEO-DATA-1				
		BLOCKS	9 Cmp	.5	PD	Automated
		DIRECTION	9 Cmp	.5	PD	Automated
		STR-NAME	X (8)	8	PD	Automated
		GEO-DATA-2				
		DIRECTION	9 Cmp	.5	PD	Automated
		STR-NAME	X (8)	8	PD	Automated
						TOTALS

ADDR. MSTR. · POLICE CRIM. HISTORY · POLICE · POLICE · POLICE WARRANT · POLICE/FIRE · FIRE HAZ. COND. · PLANNING/BUILDING · MAILING FILE · RD FILE · STREET GUIDE · ACC-DINE · EMERGENCY NOTIFICATION

48.0 41.5 47.5 62.5 66.5 74.5 33.5 90.5 87.5 42.5

5.0 – 14.0 – USERDATA
16.0 – 2.0 – KCONTROL
31.0 – 24.5 – LIST DATA

Burroughs MASS STORAGE LAYOUT FORM

FILE NAME	APPLICATION AREA	PREPARED BY	DATE
NUMBER OF RECORDS	RECORD SIZES	SEGMENT SIZE	ADDRESSING TECHNIQUE
STANDARD READ OR UPDATE	NUMBER OF SEGMENTS FOR FILE	FILE ORGANIZATION	
REMARKS			

1———1

RECORD LEVEL	FIELD LEVEL	DESCRIPTION	COBOL PICTURE	SIZE (BYTES)	FILE CREATION SOURCE	EVENTUAL SOURCE
		Street Guide I.D.	9 (4) Cmp	2	Automated	S.G.
		Street #	9 (5)	2.5	WF	B.P./ WF
		Apt # - Suite # - Complex # - Street # Suffix	X (4)	4	WF	
		Street Name	X (14)	14	WF	
		Street Name Suffix	XX	2	WF	
		R.D. #	999 Cmp	1.5	P & F	Automated
		Fire Box #	99 Cmp	1		S.G.
		Police M.E. #	99 Cmp	1		Automated
		Police Beat	99 Cmp	1		
		Fire Dept.	99 Cmp	1		
		Street Dedication	9 Cmp	.5	F	F
		Street Activity Code	9 Cmp	.5	F	F
		Census Tract Suffix	9 (3) Cmp	1.5	A/D	Automated
		Beginning Address	9 (5) Cmp	2.5	B	B
		Ending Address	9 (5) Cmp	2.5	B	B
		City Code	9 Cmp	.5	F	F
		Odd- Even Flg (For Rd Boundary)	9 Cmp	.5	P/F	P/F
		Closest Cross Street	X (14)	14	P/F	P/F
		City Code Alpha	AA	2	P/F	P/F
		Emergency Tele # (Business Only)	9 (10) Cmp	5	N/A	P & F
		Emergency Contact Name (Business Only)	X (20)	20	N/A	P & F
		Approx. X - Coordinates	9 (7) Cmp	3.5	A/D	Automated
		Approx. Y - Coordinates	9 (7) Cmp	3.5	A/D	
		1st. In Eng., Eng., Sqd., Trk., Cap	AA Cmp OC 5	10	F	Automated
		2nd. In Eng., Eng., Sqd., Trk., Cap	AA Cmp OC 5	10		
		3rd. In Eng., Eng., Sqd., Trk., Cap	AA Cmp OC 5	10		
		4th. In Eng., Eng., Sqd., Trk., Cap	AA Cmp OC 5	10		
		Name	X (25)	25	N/A	P or F
		Sex	X	1		P or F
		Race	X	1		P.D.
		Date of Birth	9 (6) Cmp	3		P.D.
		Height	999 Cmp	1.5		P or F
		Weight	999 Cmp	1.5		P.D.
		Hair	XX	2		P.D.
		Eyes	XX	2		P or F
		Date of Issue or Entry	9 (6) Cmp	3		

ADDR. MSTR.	POLICE CRIM. HISTORY	POLICE NARC. & SEX	POLICE GUN REGIST.	POLICE WARRANT	POLICE/FIRE MEDICAL	FIRE HAZ. COND.	PLANNING/ BUILDING	MAILING FILE	RD FILE	STREET GUIDE	ACC-DTME	EMERGENCY NOTIFICATION
			2						2			
5			2.5									
4			4									
14									14	14		
2									2			
1.5	1.5	1.5	1.5	1.5	1.5	1.5		1.5	1.5			
1									1			
1									1			
1									1			
1									1			
									.5			
									.5			
										1.5		
									2.5	2.5		
									2.5	2.5		
2									.5			
									.5			
									14			
									2			
												5
												20
3.5												
3.5												
								10				
								10				
								10				
								10				
25	25	25	25	22	25							
1	1	1	1	1	1							
1	1	1	1	1								
3	3	3	3	3	3							
1.5	1.5	1.5	1.5	1.5	1.5							
1.5	1.5	1.5	1.5	1.5	1.5							
2	2	2	2	2								
2	2	2	2	2								
3	3	3	3	3								

25.0 TOTAL THIS LIST ONLY

APPENDIX D

Burroughs MASS STORAGE LAYOUT FORM

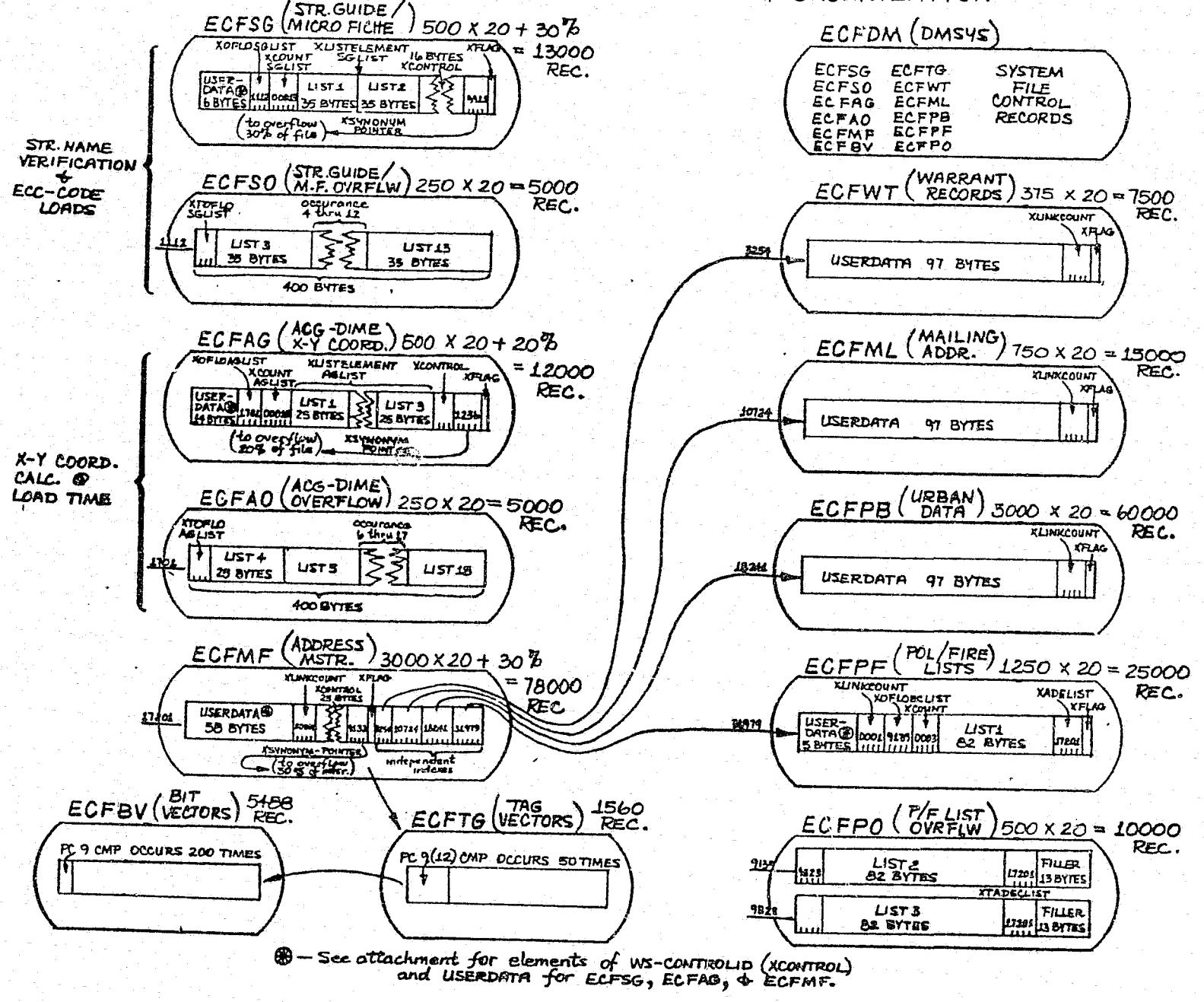
FILE NAME	APPLICATION AREA	PREPARED BY	DATE
NUMBER OF RECORDS	RECORD SIZES	SEGMENT SIZE	ADDRESSING TECHNIQUE
STANDARD READ OR UPDATE	NUMBER OF SEGMENTS FOR FILE	FILE ORGANIZATION	
REMARKS			

2———2

RECORD LEVEL	FIELD LEVEL	DESCRIPTION	COBOL PICTURE	SIZE (BYTES)	FILE CREATION SOURCE	EVENTUAL SOURCE
		H.B.#	9 (5) Cmp	2.5	N/A	P.D.
		D.R. #	9 (7) Cmp	3.5		
		Serial #	X (10)	10		
		Make	XXX	3		
		Caliber	999 Cmp	1.5		
		Type Gun	XXX	3		
		Warrent #	X (13)	13		
		Violation Section	X (8)	8		
		Type Code	XX	2		
		Bail	9 (6)	3		
		Drivers License #	X 9 (6)	4		
		So. Sec. #	9 (9)	4.5		
		Type Construction	XXX	3	N/A	B.P.
		Required Yards	99 Cmp OC 4	4		
		Occupancy	9 (4) Cmp	2		
		Improvement Costs	9 (9) Cmp	4.5		
		Building Permit Issue Date	9 (6) Cmp	3		
		Land Value	9 (10) Cmp	5	A.T.	A.T.
		Building Value	9 (10) Cmp	5		
		Other Values (Other, Household, Inv-1, Inv-2)	9 (12) Cmp	6		
		Exempt Values	9 (10) Cmp	5		
		Sprinkled	9 Cmp	.5	N/A	P & F
		Standpipe	9 Cmp	.5		
		Special Systems and Where	99 Cmp and 99 Cmp	2		
		Hazardous Processes (UFIRS CODING SYSTEM)	99 Cmp	1		
		Inspection Frequency	9 Cmp	.5		
		Fire Inspection Date	9 (6) Cmp	3		
		Dentures	9 Cmp	.5		
		Contact Lenses	9 Cmp	.5		
		Hearing Aid	9 Cmp	.5		
		Birth Defects	99 Cmp	1		
		Blood Type	XXX	3		
		Illness and Year	9999 Cmp OC 3	6		
		Injuries and Year	9999 Cmp OC 3	6		
		Operations and Year	9999 Cmp OC 3	6		

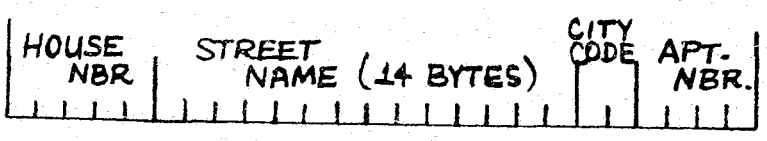
ADDR. MSTR.	POLICE CRIM. HISTORY	POLICE NARC. & SEX	POLICE GUN REGIST.	POLICE WARRANT	POLICE/FIRE MEDICAL	FIRE HAZ. COND.	PLANNING/ BUILDING	MAILING FILE	RD FILE	STREET GUIDE	ACC-DTME
	2.5										
	3.5	3.5									
		10									
		3									
		1.5									
		3									
			13								
			8								
			2								
			3								
			4								
			4.5	4.5							
					3	3					
					4	4					
						2					
						4.5					
						3					
						5					
					5	5					
						6					
						5					
						.5					
						.5					
						2					
						1					
						.5					
						3					
			.5								
			.5								
			.5								
			1								
			3								
			6								
			6								
			6								

E.C.C. ADDRESS MASTER FILE ORGANIZATION



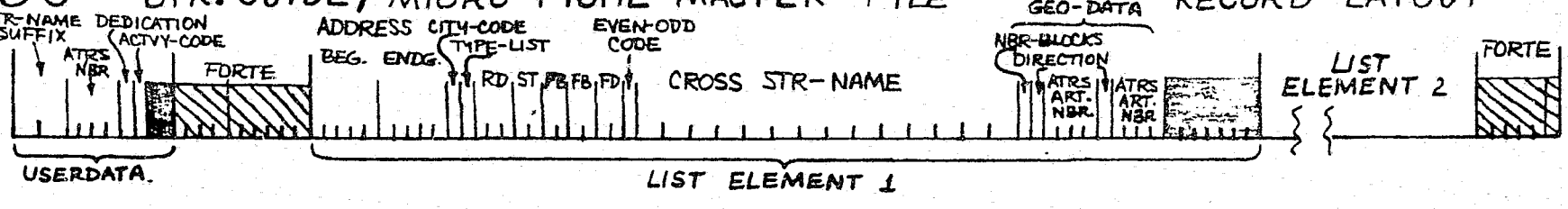
@ — See attachment for elements of WS-CONTROLID (XCONTROL) and USERDATA for ECFSG, ECFAG, & ECFMF.

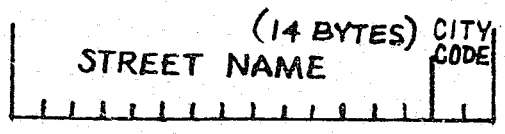
ECFMF ADDRESS FORTE MASTER FILE, WS-CONTROLID-ECFMF & XCONTROL-ECFMF



each character is byte oriented (25 bytes)

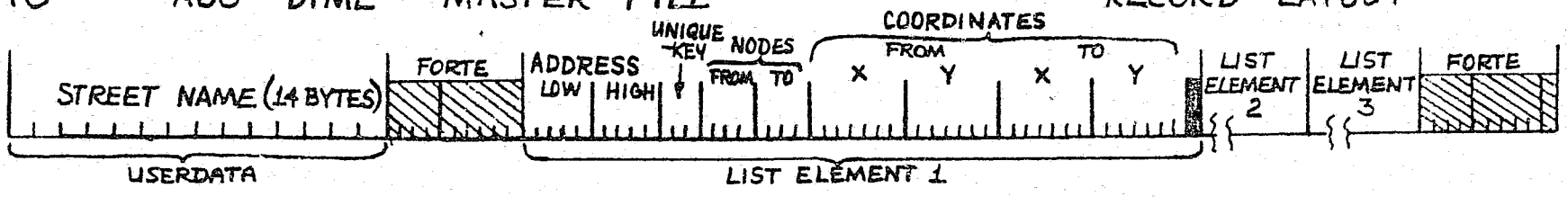
ECFSG STR. GUIDE / MICRO-FICHE MASTER FILE RECORD LAYOUT

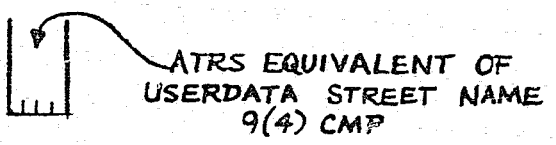




WS-CONTROLID-ECFSG & XCONTROL-ECFSG

ECFAG ACG-DIME MASTER FILE RECORD LAYOUT





WS-CONTROLID-ECFAG & XCONTROL-ECFAG

Updating and inquiry capabilities will be available to each record clerk [illegible] (Fire and Police) as depicted by the "Responsibility Table". Updating is defined mean the changing, deleting or adding of a list element and subject to prior auth tication. Change and add capabilities will include editing on all fields of a gi list element when at all possible.

In addition, the Police records clerk will have the option to search the warrant l by warrant number or last name and first initial. No initial capabilities exist fo either Police or Fire to search any other list element on any field. This option w be available at some later date following Phase II becoming fully operational.

The adding of a list element will not occur for any type of list element if an addi record does not exist with which to link from. It will be necessary to create a va address record in batch mode if an attempt to add a list element fails due to no hom address record and then subsequently the list element may be added.

The one exception to the above paragraph will be in the case of an add to the warran file which will not necessarily require an accompanying address record.

Management Reports

All management report requirements for both Police and Fire will have second priorit to the Phase II implementation. No commitment to management reports exists until aft April 1, 1974, although early completion of the B2500 programming effort may move up the April 1 date.

Restart Procedures

Largely because restart procedures require an audit trail function and because audit

trails require peripheral use and I/O time, the updating of list elements will be ble only during specific hours during any given day; e.g. for sixteen hours a day seven days a week. This schedule will be subject to mutual negotiations between Fire and Police. It should be understood that the updating functions of records will not exist around the clock - seven days a week.

Conclusion

It is mutually agreed that each of the thirteen major categories described above has been reviewed in detail by the communication staff of both Fire and Police and that this narrative now serves as a document of final acceptance. It is further agreed that no further changes will be implemented into the Phase II effort until after the projected implementation date of April 1, 1974.

Director of Finance	Date
Chief of Police	Date
Fire Chief	Date

all involved users.

RESPONSIBILITY TABLE

Phase II Files	Responsibilities			
	Collection	Entry	Method	Inte
- address	D.P.	D.P.	Automated	D
- str-guide/microfiche	F & P	D.P.	Card	F
- mailing	D.P.	D.P.	Automated	D
- warrant	P	P	Rec. Clk	P
- planning/building	PLAN	D.P.	OP SCAN	PLA
- list elements				
medical	P	P	Rec. Clk	P
gun	P	P	Rec. Clk	P
criminal history	P	P	Rec. Clk	
sex	P	P	Rec. Clk	P
narcotic	P	P	Rec. Clk	P
hazardous matl	F	F	Rec. Clk	F
emergency	P	P	Rec. Clk	P
- tag and bit vectors	D.P.	D.P.	Automated	D

Four items not apparent in the above table are worthy of further discussion.

1. A discussion in the first paragraph under Street Name Verification defi... the need for a comprehensive street guide/microfiche index file method t... meet the needs of both Fire and Police. Fire will be responsible for al... items on both microfiche indexes except for the entry of the "ST" and Gu... CODES which will be Police responsibility and BEG & ENDG ADDR which will be Building responsibility. The input form has just been created by ... (see Appendix A & B). An input transaction will be routed and approv... by Fire, Building, and Police before arriving in Finance to update the ...

2. The only Phase II file which can be updated by a new load and yet not req... the presence of a home address file record will be the Police warrant fi...

3. No user will have the capability to update any data which resides in the address file itself except a batch transaction from Planning.

4. It has been agreed that the geographic definition of a "BT" will be changed

to conform to RD boundaries if they presently do not, which will ... programmatic assignment of "BT" to a given address record at load time

Security Considerations

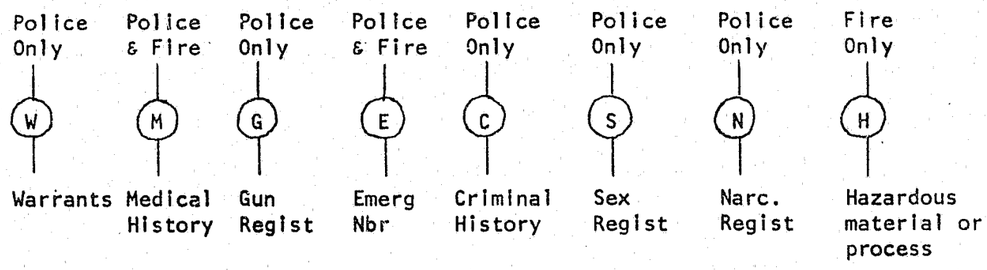
The security procedures within the B2500 object code will not permit display of an... Police list element data to any terminals other than shown below.

1. Police communication center's complaint CRTs in summary flag format
2. Police communication center's Burroughs dedicated hard-copy list ele... printer in full formatted text.
3. Police Record Clerk's station in full formatted text. The D.P. staff will program a record clerk's authentication routine which will pass ... day's calendar date through an algorithm and thereby assure that only authorized personnel can request inquiries or update list element data. The capabilities of inquiring or update list elements will not commence unless the authentication procedure is successfully satisfied by the records clerk. Phase II B2500 object code will notify the communicati... sergeant, through the dispatcher, via the Burroughs dedicated hard-copy printer, in the communications center, of any records clerk station at... at authentication which fail.

Obligations for Records Terminal Capabilities

The records clerk station will have the B2500 object code capabilities to update any existing list element considering that responsibility is deemed to that records clerk (Fire or Police) by the "Responsibility Table" discussed previously; e.g. Police record clerk station will not have the capabilities to load-to or update a Fire hazardous mater... element.

The eight alphabetic flags designate the existence of detailed list data for the list elements below.



e.g. WbbbCSbb would indicate that at the incident address an individual, or some individual living there, has a warrant for his arrest, has criminal history and is a sex registant. In the case of a fire incident the representation of bMbEbbbH would indicate that at the incident address someone has a medical history record, an emergency telephone number and a record of hazard material or processes.

X-Y Coordinates - a fourteen digit numeric field of the approximate X-Y coordinates which will be essentially ignored by the PDP-11-15 object code for the purposes of Phase II.

Fire Assignments - for fire incidents only, a forty character field containing four * occurrences of a ten character assignment phrase -- one for each * of four alarms. *

Negotiations with Motorola for the Phase II coding of the PDP-11-15 should assure that the contents of the "summary Phase II data" character string is handled correctly since not all fields apply solely to Fire or solely to Police. PDP-11-15 object code will have to separate and display this character string from the B2500 to its proper terminal e.g. proper logic must exist to move the B2500 "ST" field to the old "FB" area of the Police-complaint CRT and move the new B2500 "FB" to the "FB" of the Fire-complaint CRT etc.

B2500 Return Transmission - Objective Two

Assuming that at the successful completion of Objective One of the full address verification, there were appropriate alphabetic values in the list-hit-flag field and immediatley following the B2500 transmission of the "summary Phase II data" to the PDP-11-15, the B2500 will search all list element data to satisfy Objective Two. When an appropriate hit of a list element is encountered, the text of that element will be field-separated, decoded and passed to the appropriate Fire or Police (or both) hard copy printer which is solely dedicated to list element displays. The list will be accompanied by a type-header (narc, sex, medical, etc.) and the transaction number described on Page 2A without individual field titles. The specific individual formats will be supplied to the user prior to implementation. Appendix D will define the list element, individual field; Appendix C will visually illustrate the system file organization and the relationship of files to the Address master.

Summary of Address Verification - Error Messages

Message	Definition discussed under-
- STREET NAME INVALID	Standard entry, Page 4
- SECOND INTERSECT STR-NAME INVALID	Intersection entry, Page 5
- FIRST INTERSECT STR-NAME INVALID	Intersection entry, Page 5
- 100 BLOCK OF nnn00 - INVALID	Optional entry, Page 5
- ADDR. nnnnn DOESNT EXIST ON XXXXXXXXXXXX	Full Address Verification, Page 7
- NUMERIC STR-NAME INVALID	Optional entry, Page 5

Shown above are the six possible error messages from the B2500 for Line 1 for the complaint CRT.

Data Creation Responsibility

The D.P. staff will be responsible for the design and creation of all initialized Phase II files. The following table will depict additional responsibilities for

definition of successful intersection and optional entries, to "summary Phase II data" which will be itemized below.

The function of full address verification can be divided into two separate objectives and will be discussed as such. Objective One will verify the existence of a specific address and determine from list element flags, within the address record, what list elements (sub-file) data is on file. This objective will create a character string of "summary Phase II data" and subsequently transmit it to the PDP-11-15 along with the appropriate LOCATOR. Objective Two will access any specific list element data depending upon the "DPT" (service-required code) in the initial PDP-11-15 address transmission and pass that data to a direct connect hard-copy printer in the Police or Fire Communication Centers.

Objectives One and Two above assume that a valid hit has been encountered following a successful passage of control from the Street Name Verification function and the Full Address Verification. Following a successful hit against the street name, an attempt will be made to access an actual address file record. If the incident address does not exist on the address file itself, the B2500 will send back to the PDP-11-15 the appropriate LOCATOR field and the Line-1 canned error message "ADDR. NNNNN DOESNT EXIST ON XXXXXXXXXXXXXX" (where XX--XX is the street name). Control will then switch to neutral as if no PDP-11-15 transmission had occurred.

B2500 Return Transmission - Objective One

The specific definition of the character string defined as "summary Phase II data" will be a 94-character string as shown below. *

X X	X X X	X X	X X	X X	X X	X	X	X X X X X X X X	X	X X X X X X X X	—	*
Locator	RD	ST	BT	FB	FD			GEO - DATA				

| W M G E C S N H | X X X X X X | X X X X X X | X X -- 40 char. -- X X | *
|---|---|---|---|
| List Hit Flags | X Coor. | Y Coor. | Fire Assignments |

Locator - (Originating Terminal Address)- a field sent initially by the PDP-11-15 and returned by the B2500 for the PDP-11-15 to locate the terminal originating the address inquiry.

RD - a three digit numeric field for the reporting district of the incident address.

ST - a two digit numeric field for a Police or combined services incident only for use in the Police microfiche index access control-ID. This field will be blank for Fire incidents.

BT - a two digit numeric field for a Police or combined services incident only. This field will be blank for a Fire incident. *

FB - a two digit numeric field for a Fire or combined services incident only for use in the identification of the closest fire box. This field will be blank for Police incidents.

FD - a two digit numeric field for Fire only to define the city where the incident is occurring. Valid values will be 80, 81, 82, or 87. * *

GEO-DATA - a nineteen character alphanumeric field used for directional information for a Police or combined service incident only.

LIST-HIT-FLAG - an eight character alphabetic field used for both Fire and Police incidents. A character will only appear in its appropriate position of the eight character field if a list element hit exists.

Police or Fire complaint CRT screens when handling street names of an incident where multiple words are involved. (Keeping in mind that the street name fiel are all 14 positions in length and are entered excluding the suffix LN, CR, DR, etc.).

1. Street names consisting of more than one word must be entered as one word. Internal spaces must be removed, e.g. "VISTA␣DEL␣SOL␣LANE" shal be entered as "VISTADELSOL".

Three special variations of multiple-word names also follow:

1. An incident reported on a frontage road must be entered to distinguish it from its primary by following the street name with a dash and the letters "FR"; e.g. ADAMS-FR.

2. A county numeric street name within Huntington Beach which conflicts with an identical numeric street name under the city number scheme must be made unique by following the street name with a dash and the letters "CO"; e.g. EIGHTH-CO or 8-CO (depending upon chosen convention as discussed on Page 7).

3. Any street name containing the prefix word "SAINT" will be abbreviated as "ST" followed by a space; e.g. "ST␣ANDREWS." This will be the only exception to the "VISTADELSOL" convention discussed above.

Full Address Verification

This step only applies to the standard entry and only after successful passage of control from the standard entry edit. The nature of the intersection and option entry do not facilitate the need for specific address verification and criminal/medical/hazardous list file searches. Previous reference has been made, in the

separate cities and by default will attempt to handle it as a Huntington Beach address. If should be further noted and understood that only Huntington Beach addresses will exist on the address file. A fire incident for other than Huntington Beach will not access the list element for list flags (sub-file flags) at the initial implementation of Phase II. Only the "RD, FB, and FD" will be provided for non-Huntington Beach cities.

Numeric Street Name Handling

Conventions of the Phase II, street guide/microfiche, on-line file must treat all street names in alphabetic form, the B2500 will automatically equate the numerical street names to its alphabetic representation. Consequently when complaints are entered in the PDP-11-15 for numeric street names (e.g. 1st street), the street name numbers must be left-justified in the (B) and (C) fields of the character string. If the street name number is a numeric value of other than 1 through 27, the PDP-11-15 will receive a Line-1 canned error message as follows: "NUMERIC STR-NAME INVALID" accompanied by the appropriate LOCATOR. Control will then switch to neutral as if no PDP-11-15 transmission had occurred.

This possible error message can be bypassed altogether by the complaint writer using the alphabetic equivalent of a street name, e.g. instead of using "9", the entry "NINTH" may be used. The complaint writer has the option of using either format, although it should be understood that the alphabetic representation of "twelve" versus "twelfth" etc., open an array of possible error conditions in terms of alphabetic equivalents because of spelling conventions.

Multiple-Word Street Names

The following conventions will apply when filling in the street names on either

hundred block exists within the address ranges of any of the possible road segments on the street defined by field (B).

-if a hundred block figure does not exist, the B2500 will send back to the PDP-11-15 the appropriate LOCATOR field and the Line-1 canned error message "100-BLOCK OF NNN00 -- INVALID." Control will then switch to neutral as if no PDP-11-15 transmission had occurred.

-if a valid hit had also occurred on a valid 100-block for field (A), then "summary Phase II data" will be transmitted to the PDP-11-15 along with its appropriate LOCATOR.

B. if the street name is invalid, the B2500 will send back to the PDP-11-15 the appropriate LOCATOR field and the Line-1 canned error message "STREET NAME INVALID." Control will then switch to neutral as if no PDP-11-15 transmission had occurred. This error message will return to the PDP-11-15 in less than one second from the initial address transmission and while an informant is still on the telephone, assuming that the PDP-11-15 object code is not in interrupt mode and immediately places the error text on Line 1 of the appropriate CRT. Negotiation with Motorola should assure that this B2500 error message does not sit in a que for an untimely period before ultimate display on the initiating complaint CRT.

The joint-powers fire entry applies only to Fire incidents and defines the only use of field (E) of the complaint entry. Due to the fact that identical street names physically exist within more than one joint-power city, it will be necessary for the fire complaint writers to treat other cities in the net (not Huntington Beach) in a special manner. It will be necessary to place a two-character city code in field (E) of the complaint entry text. If this procedure is not followed, the B2500 will have no way to distinguish a possible identical address of two

separate cities and by default will attempt to handle it as a Huntington Beach address. If should be further noted and understood that only Huntington Beach addresses will exist on the address file. A fire incident for other than Huntington Beach will not access the list element for list flags (sub-file flags) at the initial implementation of Phase II. Only the "RD, FB, and FD" will be provided for non-Huntington Beach cities.

Numeric Street Name Handling

Conventions of the Phase II, street guide/microfiche, on-line file must treat all street names in alphabetic form, the B2500 will automatically equate the numerical street names to its alphabetic representation. Consequently when complaints are entered in the PDP-11-15 for numeric street names (e.g. 1st street), the street name numbers must be left-justified in the (B) and (C) fields of the character string. If the street name number is a numeric value of other than 1 through 27, the PDP-11-15 will receive a Line-1 canned error message as follows: "NUMERIC STR-NAME INVALID" accompanied by the appropriate LOCATOR. Control will then switch to neutral as if no PDP-11-15 transmission had occurred.

This possible error message can be bypassed altogether by the complaint writer using the alphabetic equivalent of a street name, e.g. instead of using "9", the entry "NINTH" may be used. The complaint writer has the option of using either format, although it should be understood that the alphabetic representation of "twelve" versus "twelfth" etc., open an array of possible error conditions in terms of alphabetic equivalents because of spelling conventions.

Multiple-Word Street Names

The following conventions will apply when filling in the street names on either

The intersection entry, (2) above, fields (A) and (D), should not contain any pertinent data; both fields will be ignored by the B2500 when field (A) is blank. Field (B) will be passed against the on-line street guide/microfiche file for validity:

A. if the street name in field (B) is valid, then a subsequent microfiche list element search will begin to verify the validity of Field (C).

-if a valid hit is not encountered for field (C), then the B2500 will send back to the PDP-11-15 the appropriate LOCATOR field and the Line-1 canned error message "SECOND INTERSECT STR-NAME INVALID." Control will then switch to neutral as if no PDP-11-15 transmission had occurred.

-if a valid hit had also occurred on the street name in field (C), then "summary Phase II data" will be transmitted to the PDP-11-15 along with its appropriate LOCATOR. The detailed discussion of "summary Phase II data" is itemized under Full Address Verification.

B. if the street name in field (B) is invalid, the B2500 will send back to the PDP-11-15 the appropriate LOCATOR field and the Line-1 canned error message "FIRST INTERSECT STR-NAME INVALID." Control will then switch to neutral as if no PDP-11-15 transmission had occurred.

The optional entry, (3) above, fields (C) and (D), should not contain any pertinent data; Field (C) and (D) will be ignored by the B2500 when field (A) is numeric in the hundredths position and the letters "BL" are present in the tens and units position of the address (left justified if less than five numeric positions). Field (B) will be passed against the on-line street guide/microfiche file for validity.

A. if the street name in field (B) is valid, then a subsequent microfiche list element search will begin to verify the validity of the 100-block, e.g. if field (A) = "123BL", the search will verify whether the 12300

hundred block exists within the address ranges of any of the possible road segments on the street defined by field (B).

-if a hundred block figure does not exist, the B2500 will send back to the PDP-11-15 the appropriate LOCATOR field and the Line-1 canned error message "100-BLOCK OF NNN00 -- INVALID." Control will then switch to neutral as if no PDP-11-15 transmission had occurred.

-if a valid hit had also occurred on a valid 100-block for field (A), then "summary Phase II data" will be transmitted to the PDP-11-15 along with its appropriate LOCATOR.

B. if the street name is invalid, the B2500 will send back to the PDP-11-15 the appropriate LOCATOR field and the Line-1 canned error message "STREET NAME INVALID." Control will then switch to neutral as if no PDP-11-15 transmission had occurred. This error message will return to the PDP-11-15 in less than one second from the initial address transmission and while an informant is still on the telephone, assuming that the PDP-11-15 object code is not in interrupt mode and immediately places the error text on Line 1 of the appropriate CRT. Negotiation with Motorola should assure that this B2500 error message does not sit in a que for an untimely period before ultimate display on the initiating complaint CRT.

The joint-powers fire entry applies only to Fire Incidents and defines the only use of field (E) of the complaint entry. Due to the fact that identical street names physically exist within more than one joint-power city, it will be necessary for the fire complaint writers to treat other cities in the net (not Huntington Beach) in a special manner. It will be necessary to place a two-character city code in field (E) of the complaint entry text. If this procedure is not followed, the B2500 will have no way to distinguish a possible identical address of two

Street Name Verification

Recent requirements for address handling by the B2500 have dictated some necessary changes in file handling and PDP-11-15 (Line 1) error message formats. Primarily due to the difference between Fire and Police microfiche access criteria and to the need for uniformity between these microfiche files and an automated street guide, a new file organization technique has been devised to better meet the needs of all groups concerned. This will automate the updating of both microfiche index files and also provide flexible intersection-incident handling and 100-block address verification where a specific address is not given by an informant.

Each of the items previously mentioned will be discussed individually below with the basic internal handling performed by the B2500 and the resulting data transmission back to the PDP-11-15.

Four separate variations of the format discussed previously under Complaint Entry Format will be allowed.

(1) `1 2 3 4 5 | C O L U M B U S | | 1 0 1 A |`

standard entry for a specific incident address

(2) `| C O L U M B U S | I N D I A N | | | |`

intersection entry for an incident occurring at a given intersection

(3) `1 2 3 B L | C O L U M B U S | | | |`

optional entry for incidents at other than a specific address but defined by a 100-block

(4) `1 2 3 4 5 | O A K - F V | | | W`

joint-powers fire entry for duplicate street names uniqueness

Subsequent discussion of the variations above will reference fields of the [illegible] address string from the PDP-11-15 by the letter designation shown below.

`XX | XXXXX | XXXXXXXXXXXXXX | XXXXXXXXXXXXXX | XXXX | XX | X | XXX`

Locator	(A) House #	(B) Street Name or Intersect Street-1	(C) Intersect Street-2 if at intersection	(D) Apt or Suite #	(E) City Code	(F) Serv Reqd	(G) Trans. Nbr.

The standard entry, (1) above, field (C), should not contain any pertinent data. Field (C) will be ignored by the B2500 when Field (A) is numeric and without the letters "BL" in the tens and units position of the address (left justified if less than five numeric positions). Field (B) will be passed against the on-line street guide/microfiche file for validity:

A. if the street name is valid, control will pass to Full Address Verification

B. if the street name is invalid, the B2500 will send back to the PDP-11 [illegible] the appropriate LOCATOR field and the Line-1 canned error message "STREET NAME INVALID." Control will then switch to neutral as if no PDP-11-15 transmission had occurred. This error message will return to the PDP-11-15 in less than one second from the initial address transmission and while an informant is still on the telephone, assuming that the PDP-11 object code is not in interrupt mode and immediately places the error text on Line 1 of the appropriate CRT. Negotiation with Motorola should assure that this B2500 error message does not sit in a que for an untimely period before ultimate display on the initiating complaint CRT.

discipline, to include the complete data-com character construct associa[illegible] text.

[illegible] primarily to the high number of object program exception demands, inhe[illegible]nt to t[illegible] processing, the "Line transaction number" has been added to the standard line text [illegible] be received by the B2500 while in slave mode. The "Line transaction number" will be a three position numeric number, incremented by one, by successive transactions until equal to 999, then 000, then 001.

This field will be the last three positions of the 45-character text and will have been generated by the PDP-11-15.

This transaction number will serve as the synchronizing key to flag any logic or hard ware system malfunctions. The fact that a transaction number has not been incremented by one from the previous transmission will indicate a sequence problem. The transaction number will then serve as a key to re-synchronize the PDP-11-15 and the B2500. Should a synchronizing error occur the PDP-11-15 operator must be provided with the capability to inquire into the PDP-11-15 core memory (probably via the console typewriter) for the value of the last transaction number sent and then voice communicate that value to the B2500 operator for re-initializing, assuming the cause of the line failure has been eliminated. This requirement is of paramount importance and a must for negotiations with Motorola.

1 = Locator (Originating Terminal Addr.)

2 = House #

3 = STR-Name or Intersect Street-1

4 = Intersect Street-2 if at an intersection

5 = Apt. or Suite #

6 = City code for "FIRE INCIDENTS ONLY" and only used for other than Huntington Beach incidents.

7 = Service Reqd. (DPT) F = Fire P = Police C = Combined

8 = Line transaction number

The value entered on the complaint CRT's for "DPT" will dictate to the B2500, the list element (sub file) searches necessary, if applicable.

Negotiations with Motorola should assure that proper object code in the PDP-11-15 will allow transmission of the "DPT" code in conjunction with the address complaint text.

The 45-character text above is shown supplemented with a small, identifying field for return use by the PDP-11-15 queing routine to aid in the relocating of the message source. This field will henceforth be identified as the "LOCATOR" field. *

Computer Line Discipline

The handling of transactions between the PDP-11-15 and the B2500 will be handled in a "Point-to-Point Dedicated Contention" mode. Each central processor will essentially treat each other as a terminal, with each central processor assuming the master-slave relationship by contention. Different timeout and wait intervals will be used by each processor to insure staggered reattempts to gain the master status should an initial simultaneous attempt not have broken contention.

Motorola will be furnished with a detailed schematic and narrative defining the line

City of Huntington Beach
P.O. BOX 190 CALIFORNIA 92648

October 23, 1973

DATA PROCESSING SYSTEMS RESPONSIBILITIES FOR ECC PHASE II

The purpose of this memorandum is to document, in procedural details, the system responsibilities of the City Data Processing division for the implementation of ECC Phase II and to use this memorandum as a document of final acceptance. Effective immediately, it is understood that no functions or options will be requested or deleted until after the system defined below is fully operational.

It should be understood that this memorandum will only deal with the Fire and Police requirements of ECC Phase II; all other automated potentials, as they apply for other City uses, will be implemented after ECC Phase II becomes fully operational. The only system's effort devoted to other City departments prior to Phase II becoming operational are those related to the integrity of the address file data-base and its address file updating functions.

The following discussion will divide the ECC Phase II D.P. staff effort into thirtee major items. The Phase II requirements of Fire and Police as they relate to the B2500 are very similar and therefore, unless specifically stated otherwise, all discussions below can be assumed to be of joint concern.

Complaint Entry Format

The format of all incidents passed across the data-com line between the PDP-11-15 and the B2500 will be a 45-character string formatted as shown below.

X X	X X X X	X X X X X X X X X X X X X	X X X X X X X X X X X X X	X X X	X X	X
1	2	3	4	5	6	7

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DATA PROCESSING SYSTEMS RESPONSIBILITIES FOR ECC PHASE II

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Additionally, the complaint writer must interrupt his manipulation of the computer terminal, enter the manual files to extract the information and return to the computer terminal. This interruption causes undesirable delays which distracts from the efficiency of a computerized system.

The third problem exists in the inability to effectively provide the officer with information included in police records files such as known police hazards, warrants, selected criminal histories, and investigative information. The time involved in making manual searches of remote files makes it impossible to supply this information to the field officer prior to his arrival to the scene of a complaint.

The fourth problem is the inability to verify the existance of a specific address which results in the dispatchers accepting false or erroneous addresses at face value. This results in confusion and delays in arriving at the scene of a reported incident.

APPENDIX B

DATA PROCESSING SYSTEMS

RESPONSIBILITIES FOR ECC PHASE II

Specific Problem

The first problem is that of requiring the dispatcher to enter the dispositional data into the system this is time consuming and disrupts the Command and Control function..

The second problem is the impracticability of using a manual system for identifying and entering location information such as reporting districts, geographical locations and police beats. This system requires maintaining files which are slow to access and are subject to operator error.

Dispatcher Access and Computer Interface

The dispatchers compaint CRT has an action area which is used by the dispatcher to assign complaints, send teleprinter messages, and access the Orange County Automated Telecommunications System (OCATS), California Law Enforcement Telecommunications System (CLETS), and National Crime Information Center (NCIC) Criminal Justice Systems. To dispatch a complaint, the dispatcher must evaluate the priority and location of unassigned complaints with the availability of Police field units. The dispatcher brings the complaint to be dispatched into the action area of the CRT by typing the 3 digit case number. The corresponding complaint text is automatically displayed to the dispatcher. The selected units' call numbers are entered into the complaint format and sent through the computer system. The computer immediately transmits the complaint text via teleprinter to all field units assigned.

At the completion of a complaint, the field officer must contact the dispatcher by radio or telephone and provide information to update the complaint with adding statistical data and a dispositional synopsis of action taken. The statistical data shall include a sequential report number for cases requiring a permanent file number, a crime classification number compatable for compiling the State Bureau of Criminal Statistics reports and M.O. Classification data. The disposition synopsis is to include a verbal account of the circumstances which occurred and the action that was taken. The final complaint text is then entered onto magnetic tape for data reduction and is printed onto a hard copy printer as the formal police department activity log.

Additional cash outlay by the City of Huntington Beach has been in the form of a project study (Public Safety Systems, Inc.) for $30,000, the construction of the communications site for $89,000 and the Command and Control Motorla contract for $358,349 for a total cash outlay of $578,949.

The phase one grant designed, developed and implemented a nucleous command and control system which can be refined and expanded by the addition of selected sub-systems. This projected system will provide expanded use of the command and control system with upward compatibility for additional sub-systems and uses. The entire system will be a model for similar police systems in medium sized cities.

Each vehicle will have a teleprinter and digital status entry unit. The status entry unit will provide instant status update from the field unit to the computer. When assigned a complaint, the officer enters his status as (1) acknowledged-enroute, (2) arrived, and (3) complete - available for service. Status not complaint orientated include, (1) available for service, (2) out for investigation, (3) at the station, (4) out of service. In addition, the status entry unit can transmit 4 canned messages to the dispatcher. These include, (1) request radio contact, (2) acknowledge voice message, (3) car stop/record check request, (4) emergency-help requested.

The command center consists of 2 complaint writing stations and 2 dispatching stations. The complaint writing station has a computer terminal and (1) CRT display. The complaint writer enters an incoming complaint onto the pre-formated complaint CRT Display. <u>As no location or address data base is now provided, the complaint writer must manually identify the response location</u> entering the correct data into the complaint format. The completed complaint is then entered into the computer.

The dispatching station has a computer terminal and (2) CRT Displays. One for vehicle status and one for complaint handling. The vehicle status CRT maintains a display of all current vehicle status, canned messages from the vehicle and voice radio use by all police field units. Where the status is complaint orientated, the associated complaint case number is shown in reference to the police unit number.

PROBLEM BACKGROUND

The City of Huntington Beach in the past decade has experienced a population explosion of staggering proportion. During the years 1960 through 1970 the population moved from 10,600 to in excess of 116,000. The estimated population July 1, 1972, has risen to 139,200. In addition to the burdens placed upon the City's Police Department by the increased population, the Department's job is further complicated by over ten million beach visitors who flock to the City each year.

The growth of the Police Department which necessarily followed has caused a rapid outmoding of the Department's facilities and procedures. One of the areas most critically affected has been the Department's ability to maintain an efficient Command and Control System. The increased crowding of radio frequencies and increased work loads have resulted in a breakdown of the Communication Center's efficiency. This lowered efficiency has manifested itself in undesirable delays in response time, confusion in radio assignments and increased hazards to the police officer whose ability to communicate with the base station has been restricted.

Huntington Beach has committed in excess of four million dollars to develop and improve its public safety facilities. Three million dollars of this amount is dedicated to the design and development of the police facility with the remainder used to procure communications equipment and develop the new Command and Control Center which includes security devices for the facility and jail area.

The Police Command and Control System was augmented with federal funds under two grants. The development of a UHF digital communication system using encoders and mobil teleprinters through Orange County's Grant #A-291-71 offered digital radio transmission which was ideally suited to the utilization of computer assisted police communications. The project total for Huntington Beach was $259,000 of which the city funded $103,600 cash with $155,400 being granted by federal funds.

APPENDIX A

PROJECT BACKGROUND

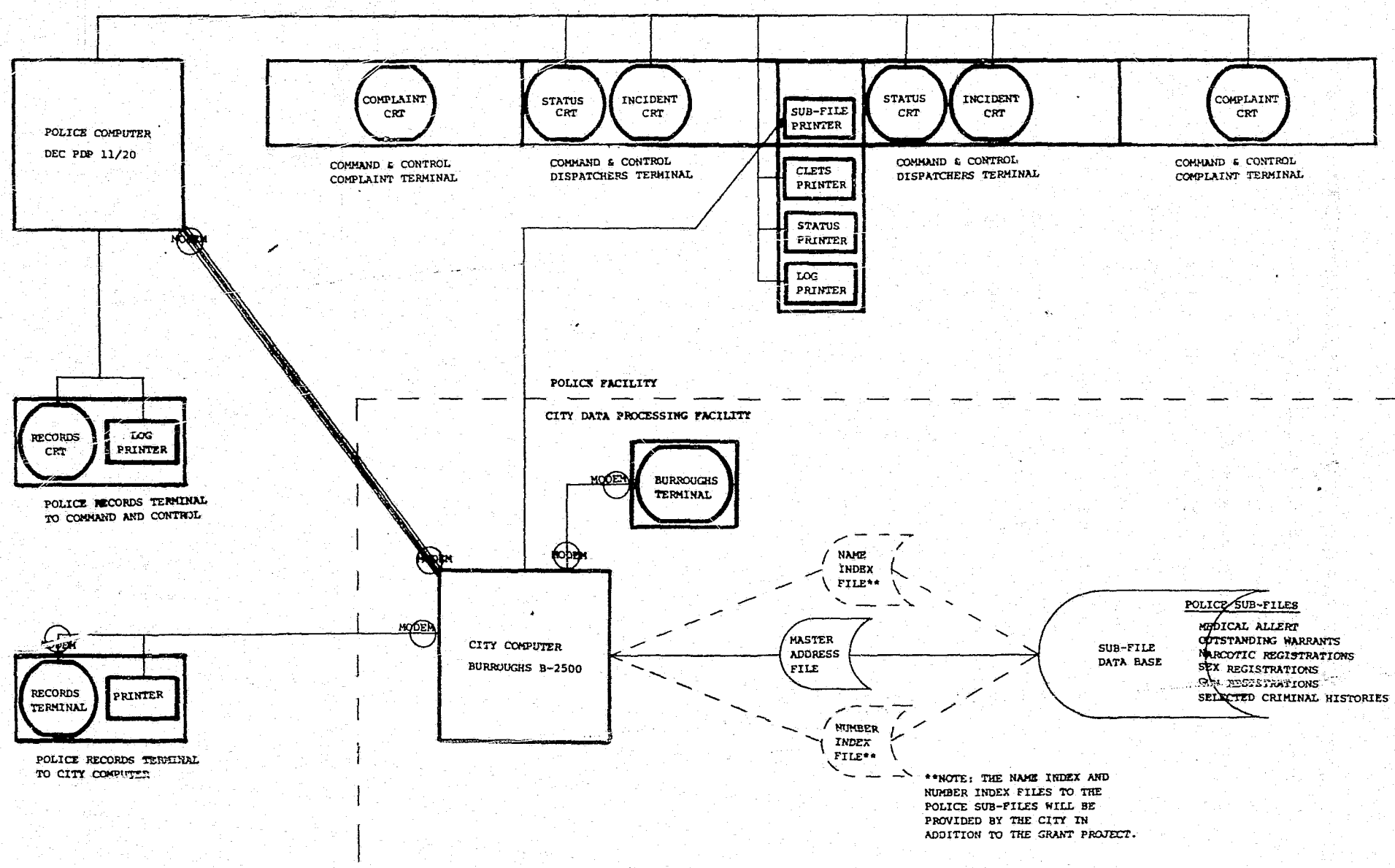
SECTION VII: PROJECT STAFF

PROJECT DIRECTOR: Earle W. Robitaille,
Chief of Police

PROJECT STAFF: Michael C. Burkenfield, Police Captain
Gary E. Davis, Police Lieutenant
Robert E. Fickle, Police Sergeant
Edward McLaughlin, Police Officer
Ronald Kellogg, Police Officer
Frank Morrelli, Police Officer
Philip Oliver, Police Officer

Florence Lang, Secretary to the Chief
Marti Kirk, Secretary to Captain Burkenfield

SECTION VII


POLICE COMPUTER
DEC PDP 11/20
MODEM
COMPLAINT CRT
STATUS CRT
INCIDENT CRT
SUB-FILE PRINTER
CLETS PRINTER
STATUS PRINTER
LOG PRINTER
STATUS CRT
INCIDENT CRT
COMPLAINT CRT
COMMAND & CONTROL COMPLAINT TERMINAL
COMMAND & CONTROL DISPATCHERS TERMINAL
COMMAND & CONTROL DISPATCHERS TERMINAL
COMMAND & CONTROL COMPLAINT TERMINAL
RECORDS CRT
LOG PRINTER
POLICE RECORDS TERMINAL TO COMMAND AND CONTROL
POLICE FACILITY
CITY DATA PROCESSING FACILITY
MODEM
BURROUGHS TERMINAL
MODEM
MODEM
MODEM
RECORDS TERMINAL
PRINTER
POLICE RECORDS TERMINAL TO CITY COMPUTER
CITY COMPUTER
BURROUGHS B-2500
NAME INDEX FILE**
MASTER ADDRESS FILE
NUMBER INDEX FILE**
SUB-FILE DATA BASE
POLICE SUB-FILES
MEDICAL ALLERT
OUTSTANDING WARRANTS
NARCOTIC REGISTRATIONS
SEX REGISTRATIONS
GUN REGISTRATIONS
SELECTED CRIMINAL HISTORIES
**NOTE: THE NAME INDEX AND NUMBER INDEX FILES TO THE POLICE SUB-FILES WILL BE PROVIDED BY THE CITY IN ADDITION TO THE GRANT PROJECT.

$5,254.00 from the projected costs of this project. The equipment projected for this grant listed in four categories in the Grant Document. The following is a final equipment list by category:

6.4.1 PAP INTERFACE EQUIPMENT

1 Each: Digital Equipment Corporation
Model DL11-E
Asynchronous Line Interface $481.40

* Note: The Grant Document listed four separate items at $1,360.00 which were replaced by this single item.

6.4.2 BURROUGHS INTERFACE AND FILE EQUIPMENT

All items purchased from Burroughs Corporation.

Qty	Item	Description	Cost
1	B-2009	30KB Core Memory	$49,140.00
1	B-9374-3	20 x 10^6 BYTES Disc Storage S/N #11946-006	37,800.00
1	B-2353	Multi-line Control	17,760.00
1	B-2665-1	Line Adapter	1,920.00
1	B-2665-5	Line Adapter	2,400.00
1	B-2711	I/O Channel	2,400.00

6.4.3 RECORDS BUREAU TERMINAL TO BURROUGHS COMPUTER

1 Each: Burroughs Corporation
Model TD-700
Video Terminal
Video Display S/N #T13228-045
Keyboard S/N #T14601-045 $4,257.32

7 Each: Collins
Model TE-1200
Data Set
S/N #s 332, 329, 333, 334, 335, and 337 $3,307.50

* Note: The Grant Document projected 4 Data Sets at $790.00 each. Since the Data Transmission Line is so critical to this project, 3 spares were purchased. The 7 Data Sets purchased cost $472.50 which maintained an equity in the budget.

6.4.4 RECORDS BUREAU TERMINAL TO POLICE COMMAND AND CONTROL

1 Each: Complete Terminal consisting of:
1 - TEC Model 415
1920 Character CRT
Display with Controls and Keyboard
S/N #3276
1 - NCR Model EMT3/260
30 Character per second
Line Printer
S/N #02-10429769 $10,822.60

SECTION VI

FISCAL REPORT

6. INTRODUCTION

This section will evaluate the fiscal affairs of this project. The basis of this section is the Grant Contract and the final CCCJ Form 601 Report. (The final 601 Report appears as the last page of this section.)

6.1 PERSONAL SERVICES

The allotment for matching funds was $94,188.00. This allotment was met and exceeded by $2,073.00. All personal services hours were accounted for and reported according to CCCJ regulations contained in the Fiscal Affairs Manual.

6.2 CONSULTANT SERVICES

Although the Grant Contract contained no allotment for consultant services, it became necessary to support consultant services from city funds not claimed against the Grant Funds.

6.2.1 SOFTWARE MODIFICATION

Phase one of this project developed the initial software for the computer aided dispatch system. Under phase two of this project, it became necessary to modify the initial software. The original software was written under contract by Motorola Communications and Electronics. The same programming staff was contracted to perform the modification. This provided the most effective and efficient procedure of obtaining functional software. The direct cost for the consultant services was $15,000.00 plus $750.00 tax. This $15,750.00 is not listed on the CCCJ Form 601 Report.

6.3 OPERATING EXPENSES

The $9,868.00 allotment for operating expenses was met and exceeded by $208.00. This placed the total expenditure at $10,076.00.

6.4 EQUIPMENT

The equipment procured for this project totaled $133,909.00 where the projected allotment was $139,163.00. This is a reduction of

SECTION VI
FISCAL REPORT

Reduced response times will result in higher apprehension in arrival prior to the completion of the crime, or before the suspect has an opportunity to leave the scene. Increased use of the project's information systems (warrant files, etc.) will also influence this objective.

5.2.9.1 REPRESSIVE EFFORTS

Possibly the greatest influence this project will have on crime rate will be repressive. Through publicity and demonstrated operational achievements, the criminal will become aware of the decreased capability in successfully perpetrating a crime without detection and apprehension.

5.3 OPERATIONAL EVALUATION

The operational evaluation assesses the degree to which the operational objectives have been met. Such an evaluation requires the analysis of data collected at various times during the project. Of prime necessity is data collected prior to the project and data collected during normal operation of the project.
The project work schedule, as listed in the grant, provided for completion of the project in the eleventh month. This allowed the twelfth month for testing, evaluation, and data collection. Due to the delays detailed in Section 5.1, the twelfth month was used for completion of the project work tasks of installation and de-bugging. The evaluation was, therefore, shifted to the first month after the completion of the grant.
The initial operational evaluation was included with the functional evaluation (Section 5.2). As a larger data base is collected during normal operation, a more comprehensive operational evaluation will be developed.

5.4 REGIONAL APPLICATION

Having been proven functionally and operationally, this concept could be adapted on a regional basis, using a central data base. This would solve many regional "address" problems, such as out of jurisdiction requests for service and emergency reporting (911).

The Orange County Criminal Justice Council has included in its master plan, a regional or county Command and Control System. In referring to the Huntington Beach system, the Council has sent RFP's to all other county law enforcement agencies to engage in developing or expanding this system to the county.

5.5 FUNCTIONAL MODEL

The objectives of this grant also stated "to provide a functional model...which will have impact and application beyond the local level". This project, in its operation, has proven to be a functional model. As the operational objectives are demonstrated, its impact and application to the law enforcement community will become more evident. Many law enforcement agencies have adopted this system conceptually and operationally. Such direct adoption of this system has resulted in direct cost savings to thos agencies as well as time savings in the system design stages of such a project. Police agencies in San Diego, California, Virginia Beach, Virginia, Atlantic City, Florida, and Newport Beach, California, will have similar operational systems in the near future, due to this project.

5.6 UPWARD COMPATABILITY

Along with all other data returned with the address search, exact X-Y coordinates are also provided. These X-Y coordinates are necessary for the data base in the vehicle locator system.
Being an expandable modular system, the next module to be added is the vehicle locator system. This system has been approved for funding under LEAA/CCCJ as Phase III for the 1974-1975 year. The vehicle locator system requires for accuracy, a valid X-Y coordinate data base. This data base has been provided as a spin-off of the Phase II system (address file) in a most economical method.

Although the development of management reports is not part of this project, some report programs have been written, and others designed or proposed.

Existing:

1. State BCS reports on criminal activity.
2. Crimes specific (burglary) by Reporting District.
3. Crime and activity by Reporting District.

Proposed:

1. UCR for FBI (criminal activity).
2. Index cards on victims and informants.
3. Crime trends by Reporting District, patrol beat, time of occurance, type of location, and M.O.
4. Officers' daily logs.
5. Officer activity trends.
6. Manpower requirements by location and time of day (selective enforcement).

5.2.7 OFFICER SAFETY

With considerations towards improved officer safety, the following project objectives were set forth:

Improve Officer Safety By:

1. Better preparedness for hazardous situations:
   (a) Warrants associated to the location.
   (b) Guns registered at the location.
   (c) Narcotic registrants residing at the location.
   (d) Known dangerous criminals residing at the location.
2. Detailed location information to assure rapid follow-up by assigned units.

5.2.7.1 BETTER PREPAREDNESS FOR HAZARDOUS SITUATIONS

Of constant concern is the safety of an officer responding to an incident with a lack of information; the family disturbance where a gun is available or a neighborhood disturbance where officers were previously assaulted. Much information available to the police department has not been available to the patrol officer. Gun registrations, outstanding warrants, narcotic and sex registrations, have, as part of this project, been computerized and are immediately available to the field officer when responding to a location.

Officer safety, as an evaluation criteria, is very subjective and cannot be measured in cost savings, labor savings, or in lives saved. An assumption can only be made that more adequate information immediately available will provide more safety to the officer.

5.2.8 COMMUNITY RELATIONS

Improvement of community relations is a direct product of improvement in the quality of services rendered. This project, in increasing the level of police services, will increase this relationship. The achieving of the operational objectives, such as decreased response time, is directly viewed by the citizen as a quality of service. This influence, however, will be achieved only to the degree of citizen contact and awareness. With the project now in full operation, and the operational objectives being demonstrated, publicity will be solicited in order to promulgate the advantages and objectives of the project.

5.2.8.1 MEDICAL ALERT INFORMATION

A major part of this project which will improve community relations is the medical alert file.

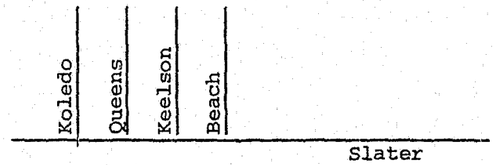
A. MEDICAL ALERT INFORMATION

This file, not maintained prior to this system, provides the officer with voluntary information about a resident's medical condition. When responding to a medical aid call, this information will be invaluable in rendering proper aid and treatment. The officer will have information as to birth defects, blood type, type and year of illnesses, injuries and operations, medication, allergies, sensitivities, ambulatory status, and language spoken. This file, not available prior to this project, has met the objective in that it provides necessary and valuable information.

5.2.9 CRIME RATE

The project objectives directly addressed the reversal of an accelerating crime rate to be achieved. This is the main objective of every program and project undertaken by law enforcement. The direct relationship of crime rate and this project may never be absolutely isolated and determined, however, such a relationship does exist.

This project also provides geo-reference information which was heretofore impossible to provide. The geo-reference locates the call to the specific street segment and provides the distance and direction from the nearest two major intersecting streets. The following is an example entry for Queens Street:



Geo-reference: 2 W-Beach N-Slater
Definition: 2 blocks west of Beach; North of Slater

This information, along with the reporting district, street segment number, and police beat number, reduces the officer's search time in finding the street on a map. Often, a map search is not necessary when the geo-reference is definitive enough to aid the officer in mental recall of the street's location.
Under this system, the field officer will not become frustrated and confused, attempting to map search or recall the exact location of a street, while in response to an emergency-type call.
An officer receiving an emergency call to a location requiring a map search must stop the vehicle, search the map location, analyze the response path, and resume the response. Depending upon his position in traffic, traffic conditions, and ease of finding the street on the map, the officer might delay his response 30 to 60 seconds. The original response time of 4 minutes, 41 seconds, reduced to 4 minutes, 17 seconds at the dispatcher level, can now conceivably be reduced to 3 minutes, 17 seconds.

5.2.4 HIGHER APPREHENSION RATE

An evaluation of this objective will require further study in that this is a direct product of the operation of the system, i.e. reduce response time, increase information, etc. Assumption can only be made at this time which, based upon previous studies, conclusively indicate increased apprehension rates when response time is reduced, and when the officer is provided greater information.

5.2.5 INVESTIGATIVE INFORMATION

Prior to this project, much of the investigative information gathered by this department was not immediately available to the field officer. The filing of duplicate documents by various search criteria is time-consuming and costly. Such procedures adversely affect the integrity of such files. Warrants and Registrations (guns, narcotics, and sex) were filed by name. No address file was maintained.
This system provides computerized files whereby searches can be made on all pertinent data elements. Upon verifying an address, the files referenced to address are printed at the dispatcher's location. By providing the field officer with this information prior to responding to a call, the field investigations performed will become more meaningful and productive.

5.2.6 UTILIZATION OF MANPOWER RESOURCES

The Command and Control System captures many elements of data which, when reduced to meaningful management reports, provides invaluable information for the more efficient utilization of manpower. The data elements collected are:

1. Date and time occured.
2. Date and time reported.
3. Response location and geographical references.
4. Informant's name, address, and phone.
5. Nature of call and priority.
6. Responding officers.
7. Response times.
8. Dispositional text.
9. Type of activity or crime.
10. Location type.
11. Entry code.
12. Weapon code.
13. Vehicle description.
14. Type and value of property stolen.
15. Type and value of property recoverd.
16. M.O. code.
17. Clearance code.

A. Increased communications accuracy.
B. Increased communications reliability.
C. Rapid transmission of information.
D. Reduced response times.
E. Higher apprehension rates.
F. Rapid dissemination of information.
G. Increased quantity and quality of investigative information.
H. Provide better utilization of manpower resources.

5.2.1 ACCURACY AND RELIABILITY

In verifying every address or location of a call-for-service, inaccurate and unreliable information has been greatly reduced. An address or location passing through the validity checks becomes a reliable reference for the patrol officer. No longer is an officer dispatched to a call which is inaccurate due to unverified information; a vacant lot, the street numbers out of range, the apartment number invalid, or the streets not intersecting. When an address search reveals invalid information, Error Codes are displayed to the complaint writer. This occurs approximately four seconds after the search request. The informant is still on the telephone. The complaint writer can verbally verify the location and re-submit for validation. This totally eliminates a re-call to the informant when an erroneous address is given.

5.2.2 RAPID TRANSMISSION AND DISSEMINATION OF INFORMATION

Rapid transmission of information infers the availability of information in a form capable of being transferred rapidly. In verifying a location, the system automatically returns information references to the location:

A. Reporting District: A numbered grid section one quarter of a square mile in area.
B. Street Segment: A numbered reference to a street segment within a reporting district.
C. Police Beat: A numbered area comprised of several reporting districts assigned to a patrol beat responsibility.
D. Geographical Reference: A reference indicating the direction and distance from the nearest intersection of two major arterial streets.

This information is returned and added to the complaint writer's format within four seconds. When the call is dispatched to a field officer, the text of the call is transmitted to the officer via teleprinter, providing rapid dissemination of information. In addition to this information, the full text of all sub-files (medical alerts, gun registrations, narcotic registrations, sex registrations, warrants outstanding, criminal hazards, and emergency notification file) listed for that address will be returned to the dispatcher in printed form. This information, if pertinent to the call, will be provided to the officer. This provides information rapidly, which heretofore would have been impossible to provide.

5.2.3 Response time is an important criteria in the service of emergency calls. Under the previous manual system, only the essential address verification was made:

A. Verify street existence and spelling.
B. Obtain Reporting District.
C. Obtain Police Beat.

This search required an average of 24 seconds. This represents a direct delay of 24 seconds in response. The response time for an emergency call in 1973 averaged 4 minutes, 41 seconds. A direct reduction of 24 seconds would reduce this to 4 minutes, 17 seconds, or 8.6%. To produce the same time reduction without the aid of a computerized file, one additional person would be required to perform the search independent of the complaint operator. This would result in approximately five additional employees, or $68,199.95 yearly.

The above calculations were made on the normal or best-case data. Often, the complaint operators' response time for an address search is much greater than 24 seconds. Often, during this 24 second search time, the complaint operator is distracted by another emergency call delaying the completion of the original call. If the nature of the call is an emergency, the pressure and excitement generated causes confusion and delay. This project has deleted this task, allowing the complaint writer to devote full attention to the informant, and the proper entry of important facts concerning the call.

April 19, 1973:

The completed Grant Contract was returned to the City Administrator and the Project Director.

Other on-site inspections included the City Homeowner's Association Advisory Committee, and a separate visit by the Orange County Grand Jury.

All of the above events in some degree influenced and created an unnecessary delay in the grant project schedule.

5.1.2 SOLE SOURCE PURCHASE AND EDP EQUIPMENT PURCHASE AUTHORITY

In anticipation of the hardware requirements of this project, and the procurement delays associated with delivery and installation, a request for EDP equipment purchase approval and sole source purchase approval was submitted To CCCJ on December 5, 1972. These approvals were required prior to the issuance of the purchase orders. The purchase order task was scheduled to be completed at the end of the first grant month or three and one half months after submission of the sole source and purchase request.
On March 1, 1973, LEAA Burlingame requested of CCCJ additional information relating to the request. This request for additional information was re-directed to the Huntington Beach Police Department by CCCJ in a correspondence on April 18, 1973. A full response to the LEAA request was prepared and submitted on May 11, 1973.
On August 10, 1973, four and one half months into the project, the approval had not yet been received. The first quarter report submitted on that date contained the following reference:

Equipment Procurement:

The equipment procurement task has progressed only to the point of issuing purchase orders. Meetings between agents of both computer firms (Digital Equipment Corporation and Burroughs Corporation), Motorola Communications, Inc., and the City Police and Finance Departments have been held to identify the equipment requirements for the system. The final list will be submitted to CCCJ upon approval of sole source. The tentative equipment list does not vary to any substantial degree from the list in the request for EDP equipment purchase and sole source, or the original grant application.

The only delay at this time is that of obtaining LEAA and CCCJ approval on both sole source and purchase of EDP equipment. To facilitate this approval, a copy of our letter of request is also attached to this report.

On October 4, 1973, the Second Quarter Report was submitted. As the approval had not been issued as of that date, the following notation was entered:

Problems Encountered:

The only problem encountered to date on the project is that of equipment procurement. In summary, the Project Director submitted a request for CCCJ and LEAA approval of sole source and purchase of specific EDP equipment necessary for the grant project on December 5, 1972. On March 1, 1973, a memorandum was sent to CCCJ requesting that further information be submitted in order to evaluate the request. This memorandum was directed to the project director by CCCJ on April 18, 1973. The additional information was supplied to CCCJ in a letter on May 11, 1973. With no action having been taken as of the end of the First Quarter Period, several copies of all letters were delivered to the Regional CCCJ office and also attached to the First Quarter Report.
The further delay of such approval at this time will seriously hamper the completion of the project upon schedule.

The approval was granted on November 17, 1973, approximately one year after the initial request for approval was submitted. This reduced the actual procurement and installation time from ten months to three and one half months. The actual delivery of the hardware was during the end of the eleventh grant month.

5.2 FUNCTIONAL EVALUATION

The evaluation of this system must be based upon the criteria set forth in the project objectives. Although this evaluation includes many operational objectives, the full operational evaluation is discussed in Section 5.3. The operational objectives of this project were set forth in the grant, as follows:

Adverse publicity, although undocumented and incorrect, became the agitating force which caused the many investigations. The original news release by Capitol News Service, Sacramento, written by Mr. Pat Michaels, was sent to all subscribing news services. The news release was accepted at face value and re-printed or re-written by many newspapers, which included the Los Angeles Daily Journal, 3-26-73; the Los Angeles Times, 4-6-73; the Orange County Daily Pilot, 3-19-73 and 4-5-73; the Washington Post, 3-28-73; the Capitol Journal, 4-7-73; and the Santa Ana Register, 3-18-73.

The actual delaying action caused can most explicitly be described in chronological form.

1972:

The grant application for Phase II of Command and Control was approved by City Council and submitted to CCCJ.

January 29, 1973:

The City Council hired the firm of Telos Computing to perform a complete study of all City EDP processes and future needs. This included an evaluation of the Police Department's Phase III Project.

February 19, 1973:

Telos submitted their final report to the City Council. The report generated differences of opinion on the City Council. The Council directed the City Finance Director to "prepare a goals and objectives plan in reasonable detail".

March 13, 1973:

The Grant contracts were signed by the City Mayor; received by CCCJ on March 15, 1973.

March 22, 1973:

The City Finance Department submitted their final report on computer projects to the City Council. The City Council selected a citizen's ad hoc advisory committee on computers to review both the report submitted by Telos, and the report submitted by the City Finance Department.

March 29, 1973:

The Citizen's Advisory Committee made an on-site inspection of Command and Control.

April 1, 1973:

Start of project period for this project.

April 2, 1973:

The Citizen's Advisory Committee submitted an interim report to the City Council. The Committee recommended the concept of the Phase II project, but reserved opinions on the methodology to be used in both the hardware and software approach to the project.

April 3, 1973:

The Huntington Beach Police Department was advised that the project was cancelled until further notice, pending an LEAA investigation.

April 5, 1973:

The on-site inspection was conducted by the Orange County Council on Criminal Justice task force committee, and members of the County Grand Jury. A special meeting of the OCCCJ task force was called in the County hearing room to discuss the future of the project.

April 6, 1973:

An on-site inspection by CCCJ and LEAA, Burlingame, was conducted. Mr. Cornelius Cooper of LEAA called Washington, D.C., re-instating the grant.

April 11, 1973:

An on-site inspection by an ad hoc LEAA Committee from Washington, D.C. was conducted.

April 13, 1973:

The Citizen's Advisory Committee submitted their final report to the City Council. Full recommendation of the project as conceptually designed was confirmed.

SECTION V

PROJECT EVALUATION

5. PROJECT EVALUATION

The project evaluation encompasses both the functional and operational aspects of the project. This evaluation will be divided into these two aspects. The functional evaluation will set forth the system performance as it relates to the functions of the system design. The operational evaluation will determine the degree to which the operational objectives of the grant were achieved.

5.1 PROBLEMS ENCOUNTERED

Certain delays were encountered which are pertinent to this report. These delays in the initial work tasks caused a bulking or stacking of work tasks in the latter part of the project. The work schedule, as submitted in the grant document, indicated the completion of the project to be in the ninth month. This would allow a two-month period for post-project work tasks, such as system testing and evaluation, training, and document preparation. Due to the project delays, the actual project was completed in the latter part of the twelfth month.

5.1.1 INVESTIGATORY DELAYS

Of serious consequence were the delays caused by various investigations and inquiries into the feasibility, methology, and integrity of the project. The following is an excerpt from the First Quarter Report, which details the nature of the delays.

> The first three months of this project produced a substantial amount of progress even when considering the many obstacles which arose during the initial stages of the grant period. Two separate City Council-requested outside evaluation groups were formed to research the feasibility of the project and the methodology to be used. Many politically-oriented studies and investigations were made, whcih included the Orange County Criminal Justice Council, California Council on Criminal Justice, Law Enforcement Assistance Administration, a Federal Ad Hoc Committee, and a Citizen's Homeowners Association.

SECTION V

PROJECT EVALUATION

A computer terminal will be installed in the police Records Bureau. The Records Bureau currently has full time steno/clerks on duty for the purpose of transcribing crime reports dictated by field officers. The proposed computer terminal will enable the steno/clerk to relieve the dispatcher of the disposition function as well as many other non-priority tasks not directly associated with Command and Control. The following more clearly describes the Records clerk function:

4.3.1 CASE DISPOSITION

(a) A permanent file number is assigned to cases which will become written reports retained by the police Records Bureau. All others will utilize the dispatch number as a reference number.

(b) The complaint disposition text is entered, providing additional information not recorded by either the complaint writer or the dispatcher, containing a summary of the police officer's course of action.

(c) A final classification code number will be entered, which will be compatible with uniform crime reporting standards. This data when updated by the follow-up investigations, will be the basis for all uniform crime reports.

(d) Special M.O. information will be entered in the form of M.O. codes for later data for later data reduction. From this data base, we will evaluate crime trends and special enforcement needs. When overlaid with our location information files, it will direct us in our manpower distribution efforts.

4.3.2 MISCELLANEOUS COMPLAINTS

Certain complaints do not require the dispatching of field units. These complaints are generally processed by station personnel, such as Records clerks and investigators. It will be the duty of the Records Bureau personnel to enter the complaint into the Command and Control Computer. These complaints include, but are not limited to:

(a) Impounded or abandoned vehicles

(b) Repossessions

(c) Late Traffic Accident Reports

(d) Mail-in reports

(e) Check fraud reports filed by the investigator

(f) Reports taken at the station

4.4 SECURITY CONSIDERATIONS

Proper consideration must be taken to maintain file integrity and security. This pertains to both the physical and the operational aspects. These security considerations were developed along the guidelines of U.S. Senate Bill S.2546, as introduced by Senator Hruska.

4.4.1 PHYSICAL SECURITY

The address files and police sub-files will reside on disk storage connected to the City Burroughs B-2500 computer. The computer facility is located in the basement of the Civic Center, which is secured directly by the Police Department, via closed circuit television cameras, remote controlled access door locks, and police personnel.

4.4.2 OPERATIONAL SECURITY

Police files and file access will be directly under police control. Only police terminals located within the police facility will be programmed so as to permit access to police files. No other city terminals will have access capability. A numerical identification code will be required for file access by police personnel. The system program would record all file access activity as to when the access was made, what files were accessed or edited, and the operator initiating the action. Without proper police authorization, file dumps would be restricted to non-police files. Procedural restrictions will be established to regulate the access, edit, and update functions.

4.1.2 PARCEL FILE

The parcel file will include location reference information, i.e.:

1. Reporting district (quarter-mile section).
2. Street segment number.
3. Police patrol beat.
4. Microfiche map access number.

4.1.3 POLICE SUB-FILES

The file will also include the following sub-files, which will assist the responding police units by providing information relating to the address.

1. Medical alert files for the address.
2. Warrants issued to persons using that address.
3. Gun registrations at the address.
4. Selected criminal activity at the address.
5. Sex registration at the address.
6. Narcotics registrations at the address.

4.1.4 POLICE ACCESS TO SUB-FILES

By interfacing this address file to the Command and Control System, all data maintained by the file will be available to the police system. When the complaint writer has completed entering the address information of the complaint, the address inquiry is sent into the computer system. The computer system completes all file searches immediately displaying all geographical data in the complaint format. During this search, the complaint writer completes the entry of the complaint information, such as informant's name, address, phone number, and type of crime.

4.2 SYSTEM OPERATION

The basic system operation consists of address verification, sub-file listings of both police and inter-agency files and sub-file update procedures.

4.2.1 ADDRESS VERIFICATION

The address file is searched, determining the validity of the street address. If the address is invalid, the error message is displayed on the complaint writer's CRT until such time as the error is corrected, or the system is manually over-ridden. This error message is returned

while the informant is still on the telephone, allowing for immediate correction.

4.2.2 LOCATION INFORMATION

If the address is valid, the computer furnishes all information as previously described, displaying it on the dispatcher's CRT.

4.2.3 POLICE SUB-FILE

A search is automatically made of all police sub-files. If any possible information resides in any of the files, a tab indication appears on the complaint format to alert the dispatcher that information exists in that sub-file. The text of the sub-file is then printed on the dispatcher's hard copy printer for evaluation and transmission to the field units.

4.2.4 METHOD OF UPDATING FILES

Although all command and control functions are automatically processed through the police computer, update, editing, and special searches of the address file and sub-files will be accomplished through a dedicated terminal in the police Records Bureau. This terminal will have direct access to the City Burroughs Computer, and will not burden the Police Command and Control Computer. This terminal also provides police security to the police files, as will be discussed in a separate section.

4.3 RECORDS CLERK TERMINAL ACCESS

The dispatcher's prime duty is to maintain control of complaints unassigned, in progress, and assigned, but not yet resolved. Once a complaint has been handled to completion by the field officer, the complaint disposition must be added to the complaint text. This process is not part of the dispatcher's primary command function. The filing of such dispositions by the dispatcher consumes an excess of radio air-time and distracts the dispatcher from her primary command function. With the present computer terminal, the dispatcher is required to perform this function, which reduces the real-time effectiveness of the entire Command and Control System.

SECTION IV

SYSTEM DESIGN

4. INTRODUCTION

Phase II of the Command and Control project, which is represented by this 1973 Grant Project, was directed towards relieving the complaint writer and dispatcher of time-consuming manual tasks. This will allow the complaint writer and dispatcher to be immediately available to process an emergency call. The elements to be established and utilized by this project are set out below in the form of files and terminals and their related functions.

4.1 INFORMATION REQUIREMENTS

Before the complaint writer can send a complaint to the dispatch station, he must manually search a street index guide and identify pertinent response data. Such data include:

1. Numbered quarter-mile square reporting district.
2. Street segment (numbered street segment within each reporting district).
3. Police patrol beat.
4. Direction and number of streets from the nearest intersection main arterial streets.

The complaint writer has the ability to verify only address ranges. There is no capability to verify specific address existence or search out pertinent criminal data regarding the address. The manual search of this data causes a delay in transferring the complaint to the dispatcher. The lack of this data causes further delays by the dispatcher and field officer, requiring them to manually locate the necessary information.

4.1.1 STREET ADDRESS DATA BASE FILE

The first approach of this project will be to provide a street address data base file. This file will interface directly with the computerized Command and Control System. The file will be established by indexing every property parcel within the city by street address. Each parcel will be identified as to use and type of structure located on the parcel.

SECTION IV

SYSTEM DESIGN

III. Improve Community Relations By:

A. Improved response time.

B. More efficient use of police resources.

C. Better use of tax money through improved efficiency.

D. Publicity received through implementation of the system.

IV. Reversal of Accelerating Crime Rate By:

A. Reduced response times.

B. Higher apprehension rates.

C. Increased use of want/warrant files.

D. Repressive effect on the criminal due to his awareness of technological advancements in the criminal justice systems.

3.3 MODEL SYSTEM

Also, of prime concern is the capability to provide a functional model of a total police communications system, which will have impact and application beyond the local level.

3.3.1 REGIONAL CONCEPT

In advancing towards the regional concept, the County of Orange has established a county-wide multi-channel UHF system. This UHF system provides digital communications to each Orange County police agency on a coordinated basis. The Huntington Beach Command and Control is based on the use of digital communications. It is therefore feasible that this system can be adapted and utilized on a local or regional basis by those agencies using or anticipating the use of digital communications.

3.3.2 INTER-AGENCY ASSISTANCE

Huntington Beach will provide for demonstrations, informal consultation, and all documentation produced as a result of this grant, to those agencies interested.

SECTION III

PROJECT OBJECTIVES

3. THE ULTIMATE OBJECTIVE

The ultimate objective or goal of this program is to discourage criminal activity and thereby to reduce the incident of crime. One way this can be achieved is by reducing the response time to a location of a reported incident and provide the responding officers with all pertinent location reference and police investigative and hazard information.

3.1 FEASIBILITY

Another objective of this program is to investigate the feasibility of using computerized data processing in the police departments of small and medium sized cities, or groups of cities, with populations ranging from 100,000 to 250,000. For example, to what degree will it be possible to transfer system designs (hardware and software) between similarly structured law enforcement agencies.

3.2 SPECIFIC OBJECTIVES

More specifically, the following objectives should be achieved:

I. Improve Operational Effectiveness By:

- A. Increased communication accuracy.
- B. Increased communication reliability.
- C. Rapid transmission of information
- D. Reduced response times.
- E. Higher apprehension rates.
- F. Rapid dissemination of information.
- G. Increased quantity and quality of investigative information.
- H. Provide better utilization of manpower resources.

II. Improve Officer Safety By:

- A. Better preparredness for hazardous situations:
  - (a) Warrants associated to the location.
  - (b) Guns registered at the location.
  - (c) Narcotic registrants residing at the location.
  - (d) Known dangerous criminals residing at the location.
- B. Detailed location information to assure rapid follow-up by assisting units.

H. Personnel File

A disk file is maintained on all police personnel, including personnel I.D. number, name, division and unit of assignment, shift and days off, and comment section for administrative purposes.

3.2.2 PHASE II - ADDRESS FILE

With the basic system (Phase I) complete, additional modules could be added to refine the system. The master plan identified several of these modules. After a review of the Phase I system, priorities were set for the expansion and addition of support modules. The address file with address verification and sub-file listings was selected for the Phase II project. The Phase II project began on April 1, 1973. Completion of the project was on schedule on March 31, 1974. The selection of these objectives was in keeping with the master plan proposed in Phase I.

SECTION III

PROJECT OBJECTIVES

was contracted to perform a full evaluation of the future communications needs. This study was to include projected space and use requirements, technological trends, and future innovative advancements. The final documented report for this study provided a suggested master plan for system design and implementation.

2.1.4 SYSTEM DESIGN AND DEVELOPMENT

At the completion of all planning phases and after review of the PSSI report, the Police Department administrators formulated a general systems approach master plan. This master plan provided for a building block approach. Module by module would be added, until the full system would be built, insuring upward compatibility. The plan allowed for acceleration, dependent upon the technical state of the art, and financial capability.

2.2 FEDERAL FUNDING - GRANT PROJECT #0648

In 1969, the Huntington Beach Police Department applied for federal funds as administered for L.E.A.A. by the California Council on Criminal Justice. This grant was a three year/three phase project to develop a Communications/Command and Control System. The subject of this report is the second year of Phase II of this system.

2.2.1 PHASE I - COMPUTER AIDED DISPATCH

The Phase I project designed and implemented a basic computer-aided dispatch system. This system was modularly designed to allow for ease of expansion and/or change to further develop the total system and keep pace with he state of the art. This Phase I project began on January 1, 1972 and was completed on March 31, 1973.

The basic system under Phase I contains the following sub-systems or modules:

A. Case Entry

On-line case entry of all calls for service on video terminal fixed formats.

B. Case Dispatching

Video terminal access to calls for service with update capability as to time assigned, units assigned, time unit's enroute, at scene and completed, and additional comments regarding the nature of the call.

C. Case Disposition and Logging

Video terminal access to calls for service permitting the entry of twelve uniquely coded elements of data, describing the nature and type of incident:

1. Time of occurance
2. Location
3. Entry or initial contact
4. Weapon or instrument
5. Vehicle description
6. Property stolen and property recovered description and value.
7. Method of operation
8. Special attributes
9. Clearance
10. Description of the incident
11. Action taken
12. Description of suspect.

The entire case history from entry to disposition is logged on printers located at various areas in the police station and on a magnetic tape recorder.

D. Mobile Teleprinting

Every police vehicle is equipped with a mobile teleprinter. The dispatcher can, via the video terminal, enter an open formatted message or call up a case and transmit the full text to the teleprinter system.

E. CLETS Inquiry (OCATS)

Video terminal access to CLETS with fixed formats is provided for direct dispatcher inquiry of all criminal justice files. This access is directed through the Orange County message switcher (OCATS) providing inquiry to all county, state, and federal levels.

F. Automatic Status and Display

Every police vehicle is equipped with a digital encoder for the purpose of reporting status and selected messages. These status and messages are displayed to the dispatcher on video terminals.

G. Mobile Availability File

A disk file is maintained on all police vehicles, which includes the vehicle number, condition code, description of malfunction, if any, license, color, division of assignment, and special equipment.

SECTION II

PROJECT IMPLEMENTATION

2. INTRODUCTION

This section will deal with those events attributed to the conception, design, and implementation of this project. In its proper perspective, this project is a singular module within a total integrated system.

2.1 ADVANCE PLANNING

The advance planning for this system was developed in the systems approach concept. A new police facility was to be designed, a new communications system to be incorporated.

2.1.1 NEW POLICE FACILITY

In the late 1960's, the City administrators began to plan a completely new civic center. This civic center was to include a separate police facility. The advance planning included both space and use projections to the year 1990. In developing the structural layout of the communications section, advance planning became extremely important. The projected communications room was to be located in the center of the basement in the new facility. Prior to construction, all possible future technological developments were considered and allowances made for future expansion and inclusion of these advance systems.

2.1.2 ORANGE COUNTY COMMUNICATIONS

Concurrently with the planning of the new police facility, the Orange County Communications Department began to study future law enforcement communications needs. The result of this study was the development of the County UHF-digital communications system. The development of this system provided the basic foundation for a computer assisted command and control system. Patrol cars would be equipped with mobile digital encoder/decoders and teleprinters under implementation of this project.

2.1.3 MASTER PLAN - PSSI STUDY

Faced with the advance planning for a new police facility, and a progressive communications system, the Police Department administrators sought outside expert advice. The firm of Public Safety Systems, Inc.,

SECTION II
PROJECT IMPLEMENTATION

1.4 MANAGEMENT REPORTS

This file will also provide accurate and consistent location data required for the management systems, such as manpower allocation and deployment.

1.5 RECORDS TERMINAL

The secondary objective of this project is to provide a computer terminal in the Police Records Bureau. The function of this terminal will be to up-date the complaint text, adding the disposition summary furnished by the assigned field officer. This function is a necessary time consuming task. Requiring the dispatcher to enter this data from her terminal forces an unnecessary deviation from her prime duty of emergency command and control. Under a newly developed reporting system, the field officer will phone the Records Bureau to file a report by dictation. This terminal will allow us to centralize the tasks of case dispositions and report filing in the Police Records Bureau.

SECTION I

PROJECT DESCRIPTION

1. PURPOSE

The purpose of this project is to further develop and refine the Huntington Beach Police Department Command and Control System along the guidelines of the Master Plan Proposal #0648. The first phase of this system was completed March 31, 1973 under the C.C.C.J. Grant #465-71. To fully describe the impact of this project, it is necessary to describe the functional capability of the current Command and Control System as developed. (Refer Appendix A, Project Background).

1.1 STREET ADDRESS DATA BASE

The primary objective of this project is to provide a street address data base file. The data base file will provide the officer with detailed location references (such as beat, reporting district, and geographical references), as well as address verification. The use of the data base file will reduce the dispatcher's delay time caused by manually obtaining street location information and placing such data into the computerized complaint text. The field officers' response time will also be reduced by furnishing the field officer with more detailed and accurate location information. This will eliminate the necessity for visual map inspection to identify the response location, thereby allowing the officer to devote his full attention to driving.

1.2 ADDRESS SUB-FILES

The address file will also index sub-files which indicate warrants, police hazards, gun registrations, selected criminal histories, and other investigative files associated with the specific address. The immediate availability of this type of information will provide an immeasurable safety factor for the responding officer and will increase his efficiency.

1.3 EXPANSION CAPABILITIES

This address data base file is a pre-requisite for future expansion to an automated vehicle locating and dispatching system, which is also part of the Master Plan.

SECTION I

PROJECT DESCRIPTION

INDEX

END