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APPENDICES

FOR

HUMAN FACTORS IN MESSAGE ACQUISITION FOR A COMPUTER BASED
POLICE COMMAND AND CONTROL SYSTEM

A thesis presented to
THE UNIVERSITY OF ASTON IN BIRMINGHAM
for
THE DEGREE OF DOCTOR OF PHILOSOPHY
by
JOHN HULBERT B.A., M.Sc.

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LIST OF APPENDICES

<u>Number</u>	<u>Description</u>
I	Interview Schedule (for Chapter 7)
II	Control Room Survey Existing Design and Operating Problems
III	Judgement Schedule (for Chapter 12)
IV	Examples of Verbal Protocols obtained from a Police Control Room
V	Example of Operator Comments and Experimentor's Notes and Evaluation
VI	(Simplified Explanation of Kelly's Construct Theory (Fundamental Postulate and Elaborative Corollaries
VII	Times on Message Logs - Surface Structure Errors

APPENDIX I

...description of the data
which are encompassed by
your particular job

Interview Schedule

Chapter 7

OBJECTIVES

1. In your opinion what are
the objectives of a

OPERATORS

STATION

NAME

JOB

GENERAL DESCRIPTION

Can you give me a general description of the duties which are encompassed by your particular job?

OBJECTIVES

1. In your opinion what are the objectives of a communications room?

2. What are the objectives for your particular job (what are you trying to achieve?)

3. Has anybody ever given you a statement of the objectives of your job (in writing?)

INCOMING CALLS

1. What percentage of calls received by you come directly from members of the public.

2. What percentage of ALL CALLS are recorded (how is this broken down)

3. Of those which are recorded what percentage are started on scrap notes and transferred.

4. Do you find it difficult to complete directly onto the message form.

- 4a. Do you complete them in narrative form (why)

5. What information do you consider a patrol officer requires in respect of an incident to which you are directing him.

6. Do you always direct a unit by name (or ask for volunteers)

ALLOCATION SYSTEMS

1. At any one time what is the
average and maximum number
of resources under your command

2. What details do you know
about each resource

3. How do you obtain this
information

4. How do you allocate
resources to the various
incidents

5. Do you classify the degree
of urgency of each incident
(and how)

ALLOCATION SYSTEMS

1. At any one time what is the average and maximum number of resources under your command
2. What details do you know about each resource
3. How do you obtain this information
4. How do you allocate resources to the various incidents
5. Do you classify the degree of urgency of each incident (and how)

6. How do you maintain an equitable allocation between resources of varying workloads .

7. Are you always aware of each resources status, e.g.
position
capability
current workload

8. How do you become aware of this information

9. Do you engage in any directed patrol instructions to your resources

10. How frequently is this done?

RECOMMENDATIONS

1. Have you any recommendations
for improving the service
provided by communications
rooms.

EQUIPMENT

Are you satisfied

Computers - what do you feel

Voice input - keyboard, other etc.

11. How do you decide on the areas which require special attention (what information is available to you)

12. Are you always able to send an appropriate resource when required.

(Appropriate = right man and reasonable distance)

incident which has led to a significant failure in the system and if

13. If not how frequently does this deficiency occur and what is usually the problem?

What problems do you find with
running the control room.

for best efficiency, how can
communications room.

2. Should this be improved in

what types of

incidents

CRITICAL INCIDENTS

1. Can you think of any
incident which has led
to a significant failure
in the system and if
possible can you isolate
the cause.

SERVICE SYSTEMS

1. What information is available for beat officers from the communications room.

Control Room Survey

Existing Design and Operating Problems

2. Should this be augmented in any way (what types of information).

APPENDIX II

Control Room Survey

Existing Design and Operating Problems

Existing Design and Operating Problems -
Discussion Document - June 1979

	Page
<u>INTRODUCTION</u>	1
<u>DESIGN</u>	
ROOM LAYOUT	2
COMMUNICATIONS WITHIN THE COMMUNICATIONS ROOMS	2
<u>LIGHTING</u>	4
CONSOLE DESIGN	4
<u>NOISE</u>	
DESIGN EFFECTS	5
<u>DISTRACTIONS</u>	
VISITORS	7
ANCILLARY JOBS	7
<u>EQUIPMENT</u>	
RADIO	8
UHF	8
VHF	9

RADIO CO-ORDINATION	9
MASCOT	11
HEADSETS	12
INFORMATION SOURCES	13
GENERAL SOURCES	13
MAPS AND MICROFICHE ETC.	14
<u>PROCEDURAL</u>	
DUPLICATION	15
ALARMS AND REPORTS	15
P.N.C. RECORDS	16
TELEPHONE MESSAGE BOOK	16
VEHICLE AVAILABILITY BOARD	17
BRIEFING BOARDS	17
KEYHOLDERS	18
POLICY AND PRACTICE	20
NARRATIVE FORM OF MESSAGE	20
OBJECTIVES OF OPERATORS - CONTROL OF RELAY	21
TRAFFIC LOGGING POLICY	23

DISCIPLINE	24
RADIO	24
CONTROL	25
ALLOCATION OF RESOURCES	26
PRESENT PRACTICE (MARCH 1979)	26
EFFECTS OF NEW FORCE POLICY	27
PATROL SUPERVISION	29
HUMAN FACTORS	29
ACOUSTIC CONFUSIONS	29
INFORMATION DISTORTION	30
H.Q. OPERATORS VIGILANCE TASK - DICHOTOMOUS LISTENING	30
<u>STAFFING</u>	
SUPERVISION	35
GENERAL	35
PLYMOUTH	36
EXETER	36
CIVILIAN OPERATORS	37
CIVILIAN STATUS	38
POLICE PRESENCE	38

ALLOCATION OF JOBS	39
<u>CAREER PLANNING</u>	
CIVILIANS	40
SUCCESSION PLANNING AND TRAINING	40
POLICE OFFICERS	41
SUCCESSION PLANNING AND TRAINING	41
SENIOR SUPERVISORS - COMMUNICATIONS DEPARTMENT	42
SUCCESSION PLANNING AND TRAINING	42
<u>OVERVIEW</u>	43

INTRODUCTION

This is intended to be a non-technical description of human factor problems which have been noted in Devon and Cornwall Control Rooms during this research. The type of problems described was not part of the focus of this research and therefore no further investigations have been carried out, unless the mal-operation of any system seriously affected the data being gathered for this thesis's major theoretic objectives.

In the main I have employed the format of making a general comment regarding the facility under consideration, and then referred to specific control rooms where this seemed necessary.

The main point to make in this introduction is that the problems are essentially simple ergonomic design failures. No new research discoveries are needed to remedy the faults, simply the application of some competent and consistent design knowledge. It is probable that the inclusion of a modicum of expertise at the design and implementation stages of control room development would be very cost effective, in terms of both efficiency and financial savings.

In the course of this research 25% of all communications staff were interviewed and numerous periods of observation and experimentation were conducted. Detailed findings can be made available to assist line and departmental management if required.

DESIGN

ROOM LAYOUT

The layout of equipment in the majority of control rooms has a tendency to cause operators to move to use the various facilities. This is especially true when they have to retrieve ancillary information such as keyholders registers or to look at maps or have access to the various files etc. In most control rooms the location of the operators vis a vis each other seems to be other than optimal and this is frequently particularly true of the location of the PNC operator. It is very often necessary for one operator to talk over the head of another in order to communicate a request or receive a reply.

A number of the communications rooms are decidedly oblong in shape, which often reflects their past ancestry when they have been converted from corridors, cell passages or a number of small rooms. This shape tends to restrict the redesign possibilities and also increased the distance over which necessary communication must take place.

COMMUNICATIONS WITHIN COMMUNICATIONS ROOMS

There is a need for operators to communication with one another within the control room. This is particularly true of telephone operators who need to communicate with W/T operators and this fact accounts for a large percentage of the total traffic. The other major route of communication is between the radio and the PNC operators where these are separate. At many stations, the only form

of communication is by voice and this tends to raise the ambient noise level within the communications room. In a number of stations, intercom facilities have been installed but they do not generally allow for the transfer of calls between operators.

It is frequently necessary for PNC operators to have the facility of communicating with a mobile patrol and to service this requirement, most PNC operators can patch into the radio system. It is, however, often difficult for operators to gain a PNC operator's attention when he is engaged on another activity. In the Crownhill Station a buzzer has been provided towards this end but unfortunately no feedback is available with this device, and it can become a source of irritation if a radio operator keeps buzzing the PNC operator when he is already engaged.

It is obvious that a very detailed and thorough design study of communications within control rooms should be undertaken in order to provide adequate inter-communications facilities. The aim must be to provide adequate communication without necessary distraction of persons not involved in that communication.

The positioning of operators within the room where voice communication is unavoidable is of paramount importance. For instance, in the 'J' Division Control Room, the fact that the PNC operator is positioned between the 999 emergency telephone operator and the W/T operator means that he has to be disturbed every time a message is relayed from the 999 reception position to the despatch position.

LIGHTINGS

The lighting conditions in a number of the control rooms tend to cause difficulties with respect to glare. The majority of rooms are equipped with high intensity and ambient lighting provided by banks of fluorescent tubes. Many of the work surfaces have glossy finishes and the combined effect of high light intensity with the reflective surfaces, provides an environment which can tend to cause eye strain.

It was noted that in the majority of control rooms the large banks of overhead lights are turned off during late night operation.

The provision of lower ambient light, preferably with some adjustment and individual work space illumination is likely to quite simply alleviate these difficulties. It should, however, be realised that the colour and finish of decorations within the room and also any large articles of furniture will affect the character of illumination within the room. Advice can be given on these factors and it is sensible to design the decor of the control rooms in conjunction with the lighting systems.

CONSOLE DESIGN

The consoles throughout the Force tend to follow the linear pattern. There does not seem to be any particular design reason for this. It has been found that this layout can have a distracting effect in so far as operators sitting beside each other interfere with each other's activities. This is particularly true when one considers the acoustic environment.

Most of the consoles have been made by local craftsmen who have no previous knowledge of console design, and apparently they have made a number of miscalculations concerning the general anthropometric dimensions. Certainly the Paignton Control Room consoles allow insufficient leg room and a very much less than optimal amount of working space.

Whilst it is likely that wrap-around consoles may marginally increase the isolation of operators, they do tend to provide them with a large percentage of the facilities that they require within arms reach. I think that it would be useful to experiment with some various designs possibly in a simulation situation at the Police Training College to ascertain the various preferences of operational communications officers.

Radio and computer equipment is now becoming more compact and it may be sensible to experiment with flat surface consoles and free standing equipment as this will give greater design flexibility.

NOISE

DESIGN EFFECTS

Many operators commented on the difficulties caused by the high noise levels often experienced in these control rooms. There seems to be a number of reasons for this.

1. A fairly indiscriminate use of buzzers, bells etc., often without fully considering their competing effects.
2. The fact that many operators need to communicate with each other, often across extended distances (within the room).
3. The fact that headsets are not used. This means that loud speakers are used for radio output which naturally increases general noise levels.

Noise in the Plymouth Control Room

When any telephone call comes into the control room a flashing light is set off both on the mascots and on a wall mounted display which is accompanied by audible tones. There are different audible tones for 999 calls, telephone calls from members of the public and internal telephone calls. This system has an excellent attention getting potential but unfortunately its effectiveness in this respect is equally potent when the operator is quite legitimately attending to some other task. In which case it becomes a distracting affect. I consider that it could well be of great use to have a graded delay on these three types of call so that the flashing lights should flash marginally before the onset of the tone. This would allow an alert officer to answer the call and reduce the transient noise levels within the room, whilst not seriously impairing the attention-getting requirement of the emergency call. I would suggest that something like a 5 second delay for 999 calls, a 20 second delay for public telephone calls and a 30 second delay for internal calls. This does not of course

mean that it would take those times to answer the call, merely that if a call was unanswered for that period of time then the persistent ringing of the tone should bring rapid attention.

Noise in the 'J' Division Control Room

As found in most other control rooms, headsets are not worn, loud speakers are used, and layout of the room is such that cross talk over the heads of various operators is necessary and general noise levels are quite high.

DISTRACTIONS

VISITORS

One of the major distractions of all control rooms seems to be the number of unauthorised (and potentially unnecessary) callers. One section carried out an ad hoc survey and they inform me that in a period of 3 hours the office received 70 unauthorised physical interruptions. This seems to be a very high figure but other surveys do suggest that the number of distractions of this nature are quite high.

ANCILLARY JOBS

The amount of ancillary jobs which fall on officers on the communications rooms vary both between stations and within stations for the time of day. There is a tendency to rely on the communications officers for all manner of minor tasks after the cessation of normal working hours. The most normal is to take over

the switchboard facilities but they also include opening and locking of station doors, servicing enquiries etc.

EQUIPMENT

RADIO

UHF

UHF radio system forms the major link to officers on the beat. Reception using these frequencies is found to be variable and patchy throughout the Force. The Department of Telecommunications at the Home Office answer criticisms of the system by saying that it was not intended to have a wide range and it is generally being stretched beyond its technical limits. This may be true, but if it is, it suggests that it is an apposite time for the U.K. Police Forces to consider equipping themselves with a form of telecommunications which can provide effective communication to men on the beat.

Even the best area for UHF reception which is in Plymouth suffers from serious black spots and considerable fluctuations in reception capability.

This has the dual effect of:

1. Causing difficulties at the time of a certain specific incident,

2. The long term effect of reducing the confidence of operators and officers in their communications system.

Complaints regarding the radio equipment and problems with reception were probably the most single and universal complaint which I noted during my visits to all of the control rooms in the Force. It must however be stated that this Force is not alone in suffering these difficulties.

VHF

VHF reception throughout the Force although not always good is generally very much more reliable than UHF reception. Unfortunately in the main VHF receivers are large and bulky and are only normally carried in vehicles. There is a half way house between UHF and VHF radio which is known as a back-to-back or repeater set which allows a VHF transmission to be made over a large distance and then repeated over a shorter distance, usually less than a mile to a police officer carrying a light-weight UHF set. This does mitigate the difficulties of UHF/VHF communications but reception is still variable.

Radio Co-ordination

It was noted that there can be co-ordination problems due to the multiplicity of UHF and VHF systems. On one incident which occurred within the 'F' area a vehicle was despatched to deal with an incident. The air traffic then became extremely busy owing to the serious incident and the vehicle which was despatched to the incident replied requesting various services and assistance using

the VHF radio (this was therefore received by a different operator in a different part of the room).

During the course of a subsequent milieu the UHF radio carried by one of the police officers was depressed and the 'F' UHF operator was able to hear a serious disturbance going on. She therefore felt some officers under her command were in need of urgent assistance and immediately despatched other vehicles using the UHF system, being totally unaware of the fact that a VHF transmission was already being received in the control room and which explained the circumstances of the disturbance and indicated that they were not dangerous to the persons of the officers themselves. (Background - a girl had been thrown through window and was suffering from serious arterial bleeding, during the course of a domestic dispute).

Generally the patchy reception of the UHF system, and in some areas even the VHF system, tends to cause police officers who are on patrol with two radio sets, to communicate with both systems. Frequently a call received on the UHF system will be answered on the VHF system. The reason for this is that UHF reception by pocket phones is superior to their transmission capabilities. In addition there is a gradual drift by operators and officers alike towards the use of VHF because this is generally found to be more reliable. This in turn causes keen beat officers to stay in or near their vehicles because this is where the VHF sets are located.

MASCOT

The Home Office approved mascot radio consoles seem to make considerable if not excessive demands on their operators. In the case of the Paignton system there are ten channels coming into a single operator (although there are two operator consoles available, mascot set No. 2 is generally not used for reasons explained later). The system is that the operator can select any one of those channels most of which are UHF with one VHF channel and then listen to the transmission coming from that particular channel. At the same time all other channels come through to his set but with the output muted. The major difficulty is that the officer on the ground has no way of knowing that the operator is engaged on another channel. In addition, many police officers using UHF have experienced a long history of mechanical breakdown. Therefore when they fail to receive a response from the operator they are not at all sure whether it is a mechanical defect with their equipment, a poor reception area or the operator being either engaged or for some other reason unable to respond. In these circumstances they tend to repeat their request. (There are no pip tones on this UHF system).

At the other end of this communication system the operator may well be talking to an officer and engaged on a complicated interaction. During this communication he can receive a number of interrupts from officers on other channels. The only way he can service these interrupts is to cease his present communication, release his present channel, depress the calling channel, ask that officer to stand by, and then return to his original channel. It

can be imagined that when 10 channels, all capable of generating interrupts, in some cases more than one beat officer on each channel can interrupt at the same time, the system can become somewhat confused and extremely stressful for the operator. He has a decision; either he ignores the interrupts and continues his communication or he breaks the communication and services the interrupts. There seems to be a very great fear both amongst police officers (the users) and operators that a serious (10/9) call could easily go undetected in these circumstances.

The Exeter Divisional Control Room has a mascot 70. They have two UHF channels and one VHF channel. The difficulty evinced with other mascot systems in so far as there are interruptions of the operator from the two distinct channels is also to be found on this system but is not as serious as in other stations as there is a very much heavier load on one of the UHF channels (around the City Centre) than on the other channels. There are, however, numerous complaints in the Exmouth Division which rely on the 'J' Division Control Room for PNC checks that they are never acknowledged. This causes the 'L' Division personnel to transfer their transmission to H.Q. monitoring stations.

Headsets

The difficulty here is two-fold.

1. The GPO headsets which are supplied are very uncomfortable to wear, and over 90% of the operators found them to be inconvenient to use. This is exacerbated to some extent by the

fact that these headsets are plugged into the console and the movement difficulties caused by poor layout are increased by the umbilical cord of the headset.

2. The supervisory officers in charge of control rooms say (all of them so far interviewed) that they cannot adequately supervise the control room when all of the operators are wearing headsets. This is particularly true of the Plymouth Control Room where the supervisor is not provided with any monitoring apparatus. (This seems very peculiar). The consequence of this is that radio operators tend to use a tulip mike and leave the loud speaker sets on. This very seriously increases the noise levels in the control room and the resultant cross chat makes the comprehension of incoming calls very difficult. Mention of this particular difficulty is also made under the section entitled "Supervision".

INFORMATION SOURCES

General Sources

Complaints were received from operators that they had difficulties in obtaining general sources of information but were at the same time expected to be able to provide an information service to the beat officers. Items such as Kellys Street Index (unfortunately now discontinued) and similar systems, up-to-date copies of the voters register, an adequate map reference system particularly for rural areas, seems to be generally missing.

In addition the new move towards large numbers of residents being allocated to rural and urban "community" areas will mean that in many cases it will be more difficult to ascertain in whose area a particular incident is occurring. In many cases the incident will be none urgent and it will be possible to pass it over to the Section Sergeant who should know the exact boundaries of the men within his own area. However, it is frequently useful for the control room officers to know which resident constable is responsible for some particular premises and some generalised system which could quickly give them this information would be most useful. Presumably it will be available on the computer system when that is operational.

Maps and Microfiche etc.

Most of the control room operators complained about the quality and positioning of their maps. In many cases these items are inaccessible (often behind the operator) and they are frequently obsolete, not including new roads, caravan sites, building projects, estates etc.

One potential solution seemed to be the microfiche projectors which have been made available at Plymouth and Exeter. It would, however, seem that these were introduced with an insufficient evaluation. I was surprised to find that the microfiche projectors in both the Crownhill and the Exeter Control Rooms had not been used by any of the operators to whom I spoke (either personally or to their knowledge). The same seems to be true of an overhead projector which has been provided at Crownhill with a similar objective.

In many cases I think that the fact that these items of equipment have not been used is due to their location, they are out of reach of most of the radio operators. The out of date nature of the microfiche maps and the amount of time taken to set up a map and run it also mitigates against frequent use. Operators stated that they were not able to make marks on the map to indicate the location of vehicles and other relevant information during the course of an incident. In their present form these particular systems do not seem to provide any advantage over an ordinary paper map and the provision of up-to-date ordinary map facilities would probably be preferable.

PROCEDURAL

DUPLICATION

Alarm and Reports

When an automatic alarm is received a form known as a CP.10 (Crime Prevention 10) is made out for the information of the Crime Prevention Department. In the main this contains duplicate information to that which is held already on the message log and it seems to be an unnecessary addition to the clerical work undertaken by operational officers.

PNC Records

There seems to be a duplication of records, in respect of the PNC. In certain circumstances the same information can be incorporated on an incident log, a radio log and a PNC log. I can see no good reason (other than the fact that there has been a mandate from the Home Office) why logs of transactions on the PNC should be maintained. This is the sort of information which computer systems are designed to deal with easily, and it is a poor methodology to ask an operator to enter information on to a keyboard and then write the same information down on a PNC log. In addition there seems to be a large number of routine (non urgent) PNC enquiries being carried out in all of the communications rooms. These involved an enormous load of non urgent written work by the PNC operator. This is particularly true of the names index because the information output is much greater in most cases than that received in response to the previous PNC applications. The amount of operator work could be greatly diminished by the use of hardcopy devices. If this is not possible due to the Home Office policy limiting PNC terminals, then a procedure of routing of non-urgent PNC enquiries via the HQ Hardcopy terminals should be considered.

Telephone Message Book

It was noted that a separate telephone message book was used in one station for messages received or passed to the ambulance and fire brigades. This seems to be an unnecessary duplication and, could cause confusion when attempts are made to evaluate the incident logs.

Vehicle Availability Board

Most of the control rooms kept a vehicle availability board usually by using a chinagraph pencil on a perspex board. Invariably the board was not made up on a moment to moment basis but merely at the beginning of each shift with perhaps minor modifications during meal breaks etc. In other words the vehicle availability board only gave a rough approximation of the resources available and the operator generally had to make his own mental adjustments when vehicles went off the air at incidents or for some other reason.

It was noted that these vehicle availability boards still took a considerable time to make up. In the Crownhill Communications Room three separate vehicle availability systems are used. The 'E' and 'F' radio operators each maintain a chinagraph VAS system for vehicles under their control and the sergeant on his separate console makes an identical but composite VAS system for the whole area. (Incidentally the Crownhill area is still referred to as the 'F' area, as a hang-over from past history when it was a separate Division.)

Briefing Boards

Most control rooms keep a briefing board which contains itinerate notes, kept to alert the communications officers of any unusual events occurring within their area of responsibility. The typical note would say "workmen at Barclays Bank between 3 a.m. and 4 a.m.". There is no particularly coherent way of presenting this information, and on occasions, items are pinned on the board on top of each other. It would seem that a slightly more ordered method

for the presentation of this, often very important, information should be employed. The design of some relatively simple briefing board would alleviate the potential danger of lost or overlooked items.

Of course once again with the advent of the computer it is likely that a general information file could be maintained which could include this sort of information.

Keyholders

On every occasion when lock-up premises are attacked it is necessary for the police to call out a keyholder. In order to do this the control rooms maintain comprehensive lists of the keyholders for each premises. Usually each of these premises has a number of keyholders, a primary one and a number of ancillaries. The total number rather depends on the size of the premises.

The difficulties which are evinced with keyholders are that the file is extremely large and difficult to keep up-to-date. In addition many occupiers of premises, because they do not frequently suffer a burglary, tend to be somewhat lax in their notification of the new staff who hold the key. The difficulties therefore are generally found to be -

1. Staff who are genuinely keyholders are absent when a telephone or personal call is made to their home.

2. The keyholder register is out-of-date and the member of staff is either no longer employed or has moved or for some other reason is not available.
3. It is a genuine keyholder but they are not on the telephone and therefore another unit from that attending the scene has to be despatched to obtain a keyholder.
4. The keyholder can be obtained on the telephone but lives a long way away from the premises and therefore a considerable amount of travelling time is involved in him attending. This means that the police officers surrounding a building have to stay in situ until he arrives with -
 - a) a considerable waste of police manpower time
 - b) a potential that if there is an intruder he has a better chance of planning his escape.

Naturally, of course, if there is an easily accessible broken entrance then it is likely that the police officers will enter the premises even before the keyholder arrives. However, this is a procedure which is not without its legal complications.

One suggestion that I have is that the name and address of the major keyholder could be included on audio alarms so that after they have dialled the police station and informed the police officer of the nature of the call and the location of the premises they could

also pass to the controller the name and address of the keyholder. This would have the twin advantages of allowing him to obtain the information without moving from his seat and also laying the onus of keeping up-to-date information squarely with the keeper of the property. This system, of course, would only work with those audio alarms which allow the alarm keeper to change the form of the announcement.

I consider that the computer based control room systems should include a keyholders register. Such a system would be much easier to keep in an up to date state than a manual system.

POLICY AND PRACTICE

Narrative Form of Message

The justification put forward by operators, particularly police officers, for the narrative form of the message logs was that they on occasion had to form the basis of evidence to be presented at a court and therefore the actual words used by the caller should be recorded. I am not sure whether the operators believe this to be true but if they do it is an extremely dangerous statement. I have evaluated many hundreds of messages and their consequent message logs. The vast majority of these message logs are written in narrative form and yet in not one were the words of the caller taken down verbatim. In the majority of cases the message transcribed on to the message log bore no recognisable correspondence with the surface structure of the words used by the caller.

This is not intended in any way to be a criticism of the operators. The human being is not a tape recorder and he performs rather badly in this role. He is, however, supremely good at deducing meaning from ambiguous stimuli, and in the majority of cases the main points made by the caller were successfully and accurately recorded by the operator, but in different form.

Therefore I suggest that any pretensions that the narrative form is useful as an indicant of exactly what the caller said (surface structure) should be abandoned immediately.

The fact that courts often place great reliance on the verbatim notes of police officers, and on a few occasions, whole cases can 'turn' on the 'exact' words used by a witness, must give some cause for concern. It is probable that this emphasis on verbatim reporting by police officers in these circumstances is misplaced when the unaided human operator is required to repeat the message. If verbatim reports are required, and they are generally not necessary for the normal functions of the message log, then the use of tape recorders should be considered.

Objectives of Operators - Control or Relay

There are a number of competing power centres within this police force, all concerned with the control of the man on the beat. These are the Information Room, the communications centres and the ground supervisory cover officers. The situation vis a vis the Information Room and communications centres is gradually being de facto resolved by the curtailment of the information room facilities. Up to this

point there has been a duplicity of control in so far as certain vehicles were legally controlled from Information Room but effectively controlled by communications rooms. It is understood that the Information Room will now relinquish all control over traffic vehicles with the exception of force channel vehicles on the motorway. This duplicity of control should therefore be gradually abated.

A more serious and continuing conflict is between communications rooms and the supervisory ground cover. Communications rooms are responsible for sending units to incidents and presumably for maintaining an adequate allocation of resources to service potential future incidents. Ground cover officers are responsible (one must presume) for the less immediate policing of their locality. Unfortunately a ground cover supervisor may designate certain of his patrols to various areas to cover contingencies about which he is aware. Immediately his patrols leave the station they come under the radio control of communications centre and may then be legitimately despatched to deal with incidents. The communications officers interviewed all indicated that on occasion conflict does arise in this area.

The problem is that there is no Force policy concerning the function of communications rooms. No officer so far spoken to was aware of any policy either verbal, and certainly not written, therefore each individual officer whether he be supervising communications, or ground cover has in the light of a lack of objective policy decided on his own particular job objectives.

Naturally these will differ from individual to individual, but basically as far as the objectives for the communications rooms are concerned they fall into two main camps.

- a) The supervisor considers that his task is merely to relay messages received from the emergency telephone system. OR
- b) The communications rooms should exert a considerable amount of control particularly in the allocation of resources and that ground control officers should only in fact control situations at the scene of a specific incident.

There is no guidance on this matter and it is likely to be an area of contention until some effective policy is made clear. The nearest official statement as to the requirements of communications rooms is incapsulated in the job description of civilian operators. This is a very poor document and only gives their duties in terms of the type of equipment that they must operate, offering no guidance on the objectives of their tasks. Similarly the communications manuals prepared by the police force have the same mechanistic tendency and no guide lines as to responsibility and duty are included.

Traffic Logging Policy

There seems to have been a considerable fluctuation in the procedure adopted for traffic cars to book on and off duty. Initially they booked on and off duty with Headquarters, as that was supposedly the Divisional Control. This situation was then changed

for a short period to the Territorial Divisions (control rooms) but now certain areas have reverted to booking off with Headquarters. This tends to leave the Divisional control rooms in some confusion. It has been argued that the reason why traffic personnel often prefer to book on and off with the Headquarters staff is that the Divisional Controls are very frequently busy with their own local radio traffic. It would seem, however, that despite potential difficulties for traffic personnel it would be preferable that they book on and off with Divisional control rooms in order that those control rooms, which have responsibility for policing a geographical area can maintain an up-to-date picture of the available resources within their areas of responsibility.

DISCIPLINE

Radio

I noted during my observations that the radio discipline within the Force varies considerably from station to station, between sections and within sections. These comments are strongly endorsed by many operators and supervisors. The lack of radio discipline is manifest in two ways. On some occasions persons using the radio are unduly lengthy in their discourse, quite often indistinct in their pronunciation and slack in their use of accepted protocols. All of this leads to a less comprehensible communication which takes up too much airspace, and potentially blanks out other more urgent calls.

In addition there is a very wide-spread practice of failing to book on and off duty, when leaving the vehicle for what is expected to be a short period of time. This means that the Communications Rooms are quite incapable of keeping an up-to-date account of the resources that they have available and this often leads to difficulty in making allocations to incidents.

CONTROL

There seems to be an unprecedented reliance on "C" calls. These are calls which are variously termed 'general' or 'volunteer' calls, in which an operator asks for any vehicle in a certain area to attend an incident. This procedure may be distinguished from the more precise form of allocation by a controller who specifies the vehicle or vehicles which he wishes to attend an incident. The use of "C" calls tends to cause an imbalance in the allocation of resources, as it often attracts large numbers of units to a single incident. Effectively the communications rooms are relinquishing their control of the allocation of resources by resorting to this type of call. It can cause a fairly serious imbalance in the positioning of resources within a control area as frequently units will attend a 'C' call, and then go off the air leaving the control room with no resources which it can contact when a second or subsequent incident occurs.

Many operators argued that they used "C" calls because they were generally faster than individually directed calls. I think that this may be an error on their part in so far as they are confusing the time which it takes to relieve themselves of the incident, with

the overall elapsed time, taken to deal with the incident. There is often a tendency for 'C' calls to be answered by certain specific units, possibly those with officers of greater enthusiasm, or on occasion merely perhaps more effective radio equipment. However, the responding unit may well not be the nearest unit to the incident and the fact that the control room operator has been able to quickly unload the responsibility of the incident to an attending resource, does not necessarily mean that the overall time to deal with the incident is short. There is no regularised method by which supervisors or indeed the control room operators themselves, can become aware of the average time taken to attend and deal with an incident. It is therefore quite possible that malpractices of this nature can go undetected for long periods of time, in the absence of objective feedback information.

ALLOCATION OF

RESOURCES

Present Practice (March 1979)

One of the principle complaints about control room operators is that they tend to send a resource to all incoming incidents. To a degree this is a reflection on the lack of guidance concerning their role. A number of operators have informed me that 'the policy' is to send a vehicle to every incident, and they are firmly convinced that this is the right course of action. As previously stated no such policy exists. In addition, all operators and supervisors so far interviewed state that they tend to run out of appropriate mobiles to allocate to incidents on a fairly frequent basis. This

is a situation which suggests that potentially serious allocation problems may exist. The remedy is a coherent policy and adequate operator training.

Effects of new Force policy

The Chief Constable's recently declared policy is to reduce the number of mobiles and increase the number of foot patrols. This is bound to place a fairly heavy load on the communications staff, in so far as it will reduce the number of incident response vehicles available to them for allocation. In addition, because of the problems with UHF radio and of course the purely physical limitations of a foot patrol vis a vis a mobile, the ability of the police force in this area to respond on an emergency incident basis, is bound to change. It may be that this is quite an acceptable proposition for the policing of our area. In any case a very much greater burden of discretion will be placed on the operators to allocate vehicles only to incidents which require an emergency response. The difficulty is that they frequently have to deal with rather fuzzy and ambiguous data. Incidents which seem to be innocuous on the telephone can fairly easily, but unfortunately, subsequently, prove to have serious connotations. At the same time other incidents which appear to be serious can transpire to be quite trivial. In the past the operators have had the luxury of being able to allocate a resource to virtually every incident, thereby transferring the decision concerning subsequent action to the police officer on the beat. The Beat Officer is arguably in a better position to make that decision, but of course the Force as a whole has had to extend resources to get him to the position where he can make that subsequent judgement.

The basic point is that incoming incidents will have to be graded and treated on the basis of their importance and urgency. There are bound to be honest mistakes made in this decision making process and the majority of officers in communications rooms are fearful that they will not receive the backing of their supervisors when these errors are disclosed. I think that it cannot be too strongly emphasised that supervisory police officers must be aware of the difficult and vulnerable decision making position in which communications officers operate, and to be tolerant of a reasonable number of honest mistakes.

I suggest that incoming telephone calls be graded on a basis of urgency and importance by a police officer in the communications room. It could be on, for instance, a seven point scale with level 1, meaning a message which can be dealt with within the next week. Level 2, perhaps within the next day, level 3, within this shift, level 4, as soon as possible within this shift, level 5, within an hour, level 6, immediately and level 7, a serious emergency. Using such a classification (this is only intended to be a guide), subsequent allocation decisions would be greatly facilitated. In addition the presence of a formal coding should standardise the way in which these messages are treated.

There has in the past been an unnecessary allocation of vehicles to incidents, because certain shift supervisors wished to clear all of the messages before they complete their duty. This has meant that they have allocated a vehicle to an incident, purely so that

they could append a result to the message. The use of a formal allocation code should reduce this type of activity.

Patrol Supervision

On a number of occasions during my surveys the patrol supervisors rang the control room to ask what was happening in their area. The theory has always been that because they are in possession of a radio they can monitor the incidents which occur within their own geographical area, and therefore they are always in touch. It is apparent that this monitoring role of supervisory officers for one reason or another is not always working.

HUMAN FACTORS

Acoustic confusions

A number of acoustic confusions were noted during the course of my observations. When police officers were passing information concerning registered vehicle numbers it was frequently necessary to repeat the information backwards and forwards and confirm it a number of times. Even so certain vehicles were checked and found that the registered number had either not been allocated or grossly different from the one given. Further checking frequently revealed that there had been an acoustic confusion between the police officer on the radio and, the WT operator on the PNC (e.g. a vehicle given as UPH 97J was read as UBH 97J). I presume that the normal acoustic confusions which have been known to psychology for some time are evident in these contexts.

However, acoustic confusions also occur within the room when the 999 operator passes information to the radio operator. On one occasion I monitored a call where the complainant gave their name as COOKSLY (and spelt it to make sure) and it was passed to the WT operator who repeated it on the air as COOKSON. No serious problems occurred but it does demonstrate that information can be distorted during the mouth to mouth transfers which occur.

Information Distortion (Semantic)

Difficulties do arise (a la old party game) wherein information which is gleaned from a member of the public is passed, usually verbally, to a radio operator who then passes it onto a P.C. Supervisory officers within the Communications Room say that with certain operators there is a considerable element of semantic distortion caused by these various transformations. They argue that some information is added to the message, and often (more often) salient information is lost.

H.Q. Operators - Vigilance Task - Dichotomous Listening

Most of the operators in the H.Q. Information Room are required to monitor at least two channels simultaneously. In the majority of cases the predominant channel (this is usually designated as the busiest channel) is received via their head set. That is an ear piece into the left ear. The more minor channel is monitored via a loud speaker and is therefore predominantly received by the right ear.

All the operators to whom I spoke stated that they had difficulty with this sort of task in that they tended to attend to one or other of the channels and their attention was only drawn to the alternative channel when they heard some key word such as their own call sign. Unfortunately they were then unable to recall what had gone on before that call sign was received. In the majority of cases this should not be too serious as radio procedure states that the destination call sign should in fact be the first words uttered over the air. For instance if the traffic vehicle Tango 24 was calling H.Q. Information Room (call sign QB) then the message would go "QB from Tango 24, 10/6 at Launceston". In a fairly large number of cases, however, vehicles will say Tango 24 to QB in which case the H.Q. operator is likely to miss the vehicle call sign if he is monitoring the other channel.

There is a move to change the procedures for passing this type of call, the view being that the message 'QB from Tango 24' etc., is too long and that 'Tango 24' followed by the message would be quite sufficient. The argument is, that this shorter form of the message would save airspace. I would strongly recommend no changes should be made in that direction. Whilst from the simple mechanistic point of view it sounds reasonable to remove what appears to be the redundant precursor to the message (it being invariably obvious that a vehicle is attempting to speak to the base station) I would suggest that this early element of the transmission whilst having no semantic value is of considerable psychological benefit to the monitoring operator. It calls his attention to a channel and allows him to get his perceptual processes ready to receive the semantic

information which appears a few words later. I think that a very cursory glance at the dichotomous listening tasks and experiments carried out by Professor Broadbent and his team over the years, should convince the policy makers that the removal of these attention-gaining precursors is likely to cause more difficulties than any advantages which might accrue from the minuscule improvement in airspace capability provided by their deletion.

Difficulties however, do not end of course with the obtaining of the operator's attention. Quite frequently two incidents are occurring simultaneously on different channels, both of which should be monitored. The operators argue that there are long periods at which all channels are busy, therefore, any simple daily average work loading tends to be misleading.

The system seems to be as close to a perfect example of the laboratory dichotomous listening task, as could be contrived. (And it's all free). In addition the operator also has the task of logging certain aspects of the various calls, monitoring a telephone panel in front of him and maintaining either on a piece of paper or mentally a vehicle availability log. The latter task is an important, but in some ways somewhat sterile task. The objective of the H.Q. operator maintaining the availability, is only for use upon the very improbable eventuality that he might have to take over an incident. As this only occurs for each operator about once a month (if that), somewhat naturally motivation is difficult to maintain.

The auditory environment within the Information Room is degraded by the fact that each of the three major positions has an open loud speaker channel. This means that each operator has two interfering channels potentially available to compete for his attention. Invariably the loud speakers are kept at relatively low volume in order to mediate this affect. Unfortunately that in turn has the effect of reducing its 'attention getting' potential for the operator who is supposed to be monitoring that channel.

Headquarters operators frequently need to communicate with the HQ PNC operator whose position is situated at the other end of the room. This is invariably to ask for a PNC check (on the computer) which has been relayed to them from a radio vehicle. There is a sophisticated system of switching the radio vehicle transmission through to the PNC operator's console, but before this can be done the attention of the PNC operator must first be obtained. This is usually done by calling him across the room. A similar situation appertains with incoming telephone calls. If a telephone call is received within the control room, then it is usually picked up by an operator on one of the telephone panels. If, as frequently occurs, that particular position cannot deal with the call, he must locate the position controlling the geographical area that he requires (something that he can easily do from experience) and then call that operator and ask him to pick up the call on his own Mascot set. Both these activities can, at busy times, increase the ambient noise levels within the control room and lead to a number of distracting influences. Whether these influences are deleterious to operator performance is not known. In some ways they increase the feeling of

participation by operators and are therefore welcomed. At other times, particularly those of peak load, they can cause a loss of operator concentration, whilst the high ambient noise conditions which are likely to physically decrement the clarity of any verbal communications.

There seems to be a fairly naive belief that there is no difference between an operator attending to a large number of channels which are fairly sparsely used and attending to one single busy channel, providing the work loads, in terms of number of the messages per time period, are roughly equivalent. This argument seems to ignore the fact that a single busy channel is co-ordinated to some extent by the fact that persons transmitting to base can only do so when they hear that a channel is open. When an operator commences a conversation with a particular mobile the rest of the system is informed of that fact by either hearing his voice or some form of pip tone. There are of course occasionally difficulties when two mobiles simultaneously attempt to transmit, but this happens infrequently when compared with the total number of transmissions. On the other hand, in a multi-channel system the filtering has to be carried out by the operator and of course he is not in the same position to queue his inputs. Theoretically there is no reason why pip tones could not be transmitted on a number of channels whenever the operator is busy dealing with an incident on one of his other channels. This would, however, have the unfortunate effect of preventing immediate talk-through on those channels during that period and this is a facility which is widely used. The interruption of the talk-through facility would be quite

frequently, because not only would pip tones be necessary when the operator was talking on that channel but also on any other channel which might occupy his attention, and in some Divisional Control Rooms this could occupy a considerable (although intermittent) period of the day.

A related problem is referred to in the section under equipment regarding the Mascot operators.

STAFFING

SUPERVISION

General

It was noted that in most operations rooms the supervising sergeant will frequently be employed in taking 999 calls. The difficulty with this situation is that whilst he is thereby in a relatively good situation to be aware of the contents of calls upon his resources he can be largely unaware of the movement of the vehicles which are being directed by his WT operators. He becomes just one of the team, with a detailed view of one aspect of the workload, but effectively loses some of his ability to take an overview, and supervise the running of the control room.

To an extent the layout of some of the consoles tend to force this situation, in so far as no special provision is made for the sergeant. In some stations the sergeant in fact becomes the main 999 call operator and this seems to be a rather inefficient use of his talents.

Plymouth

An extension of the supervision problem was noticed in Plymouth for one of the areas. It was noted that on frequent occasions the Charles Cross Police Station made requests for resources directly to the 'E' Division WT operator by telephone. This form of communication completely by-passes both the sergeant and the police constable who are in the room. This is therefore a situation which could potentially lead to a decrement in quality of the supervisors knowledge of the activities under his command. Estimates concerning how much of a workload is bypassing the sergeant by this means varies. The WT operator estimated that approximately 50% of his allocation work comes directly from Charles Cross whereas the communication room sergeant and P.C. estimate that a very much lower figure, possibly about 10% bypasses them in this manner.

Exeter

This Divisional Control Room has the normal linear layout with the radio operator at one end of the console and the sergeant at the other. The remoteness of the sergeant from the radio tends to mean he is out of touch with the current allocation of resources. The PNC operator who is situated in the middle of the console is often in a better position to know which resources have been allocated, because he is sitting beside the WT operator. Civilian operators informed me that they often accept an allocation of a vehicle from the sergeant which they know has already been allocated and they then tend to send a vehicle which they "know" is free rather than the one which he has instructed them to send.

Civilian Operators

There was a general complaint by many supervisors that civilian operators required very much greater supervision than police operators on the WT and telephone. Analysing this over a number of interviews it would seem that civilian operators tended (because they generally had longer experience in control rooms) to be more expert at the mechanical operation of the equipment. However, they tended to lack the necessary experience and knowledge to be able to evaluate from ambiguous information whether an incident was likely to escalate or remain trivial. Supervisors basically said that civilian operators often had no 'feel' for situations. One must suppose that if this is true this is largely because their experience of incidents on the ground is vicarious whereas police officers are able to make use of their own knowledge of similar events in evaluating situations and making predictions. (Cognitive mapping?). No observations have been made up to this point to evaluate this criticism.

At 0003 on one Saturday night during my observations, the Plymouth Control Room was dealing with four simultaneous 999 calls (they only have two 999 lines, other calls come through via ordinary telephone and are re-routed by the G.P.O. operator). Since there are only two police officers (normally) in the room it can be seen why it is necessary for civilians on occasions to answer and deal with 999 calls. It seems that 2 calls simultaneously, or at least the immediate aftermath of one with another one coming in soon after, is quite a frequent event (at certain times of the day).

CIVILIAN STATUS

A number of civilians have complained that they are treated as second class in the control rooms. They feel that this adversely affects their prestige and interest in their jobs. The police officers are pre-eminent in all activities within the control room and despite the fact that for the civilian this is their only career, whereas it is not necessarily a career for police officers. I have had no opportunity to evaluate the complaints and effectively they are outside my terms of reference. However, they may be an interesting aside to other findings within this project.

POLICE PRESENCE

It is obviously necessary that there should be a police presence within the control rooms for a number of reasons.

1. The ultimate responsibility of deployment at any incident should rest with the senior police officer of supervisory rank, and
2. The presence of a police officer in a control room who is able to monitor incoming information is invaluable as he can frequently, because of his experience, perceive the possibility of certain situations which would not necessarily be apparent to a civilian.

Nonetheless there is the difficulty that in the main the civilian operator becomes, because of his long experience with the equipment and the operation in the area, very much more expert in the operating procedures. There is therefore the competing

difficulties that a police officer needs to maintain both his police knowledge and also an effective knowledge of how to operate a communications room. It is likely that the future computer systems will require even greater expertise, particularly in respect of the searching of data bases etc., therefore that a short tenure in a control room will be counterproductive for the organisation as a whole. In this case it will be difficult to match the competing and opposite demands for a police officer to retain his knowledge of police work whilst at the same time his operating knowledge of communications systems. It is likely that it will be advantageous for him to complete fairly extended periods within the communications department and a career structure for officers predominantly within that department should be available with breaks in some other operational theatre, such as C.I.D. or patrol duties.

ALLOCATION OF JOBS

There seems to be some differences in the allocation of tasks within the control room between police officers and civilians. In some areas a round robin schedule is adopted, and in others staff generally have a fixed responsibility. There is a tendency that police officers will normally answer 999 calls although for various reasons, including workload, it is not always possible to rigourously maintain this policy. In one station in the Force the PNC operator is a police officer whereas the WT operator is a civilian. This seems to be a little odd as the operation of the PNC is a relatively mechanistic activity whereas one could argue that police expertise could be more usefully employed on the radio system.

CAREER PLANNING

CIVILIANS

Succession planning and training

The present level of training for civilian communications officers in the Force seems to be relatively low. The majority of them have not received any formal training of a nature which would equip them for their task. A number of operators have been on a one week familiarisation course, but this is in the main to do with administrative matters connected with their employment as civilians within the Constabulary, and in no way gives them specific instruction on their communications responsibilities. In addition there are no real grades within the communications department despite the fact that it is beginning to have quite a large establishment. This mitigates against the employment of young people, and in the past there has been a tendency for communications officers posts to be a sinecure for persons on retirement pensions. It is difficult to over-emphasise the importance of communications to a police force and beat officers should be able to expect a professional communications approach from the officers in the control rooms. This can only be obtained if those officers can be properly recruited, trained and motivated.

The Force is lucky that it has a number of operators, some of whom are ex-servicemen, who are dedicated to communications as a way of life and are prepared in these circumstances to forego, (possibly reluctantly) any long-term career development. I feel that serious

consideration should be given to provision of a high quality technical training for communications officers and the provision of an effective career ladder within the Department

POLICE OFFICERS

Succession planning and training

The situation concerning police officers has been discussed elsewhere in this Appendix. It is obviously necessary that they should have a considerable knowledge of the communications department particularly as they are invariably in a supervisory role within the communications rooms. In addition, they are generally expected to have an in-depth feel for the policing activities which are going on outside of the communications room but under the auspices of its control. This poses an extremely difficult training and career development problem which is likely to be exacerbated in the future as systems become more technically complex. Serious thought must, however, be given to providing a route within the communications branch which will allow officers to spend quite considerable periods of their service gaining the necessary expertise.

SENIOR SUPERVISORS - COMMUNICATIONS DEPARTMENT

Succession planning and training

The difficulty that the police force currently faces is that the area of communications is an extremely technical one. It is certainly not possible for a police officer to fully grasp the ramifications and technicalities in the space of one or two years, which is their current normal tenure of office. The difficulty is, therefore, that policy and planning within the police forces is undertaken by officers who are usually technically naive and this is in part a contributing factor to the rather poor state of design of both the communications systems as a whole and the communications rooms in particular.

This is a difficulty which is likely to be exacerbated over the next few years as the forces take on board advanced computer technologies.

There is no doubt that it will be necessary to maintain officers of relatively senior rank within a Communications and possibly Computer Department, in order that they might obtain and retain within the department the expert knowledge of telecommunications and computer systems which will be required to deal sensibly with scientists and engineers in this area. There is a view abroad in the police force that it is unnecessary for police officers to be technically competent in any area, as they can always call in experts. This is a view which has been prevalent in a number of industries and found to be generally false. The police officer

normally needs to have sufficient technical knowledge (which may mean quite a considerable amount of technical knowledge) to understand the ramifications of any new initiatives and their impact upon current police activities. His knowledge therefore needs to embrace both police operations and also communications, and computer technologies.

OVERVIEW

It would seem that the growth of communications in the police force has rather taken the service in some Forces by surprise. Facilities have grown in an ad hoc way. In some cases what used to be enquiry offices have been built up piece-meal into communications rooms, often still using the original accommodation. New equipment has been slowly added to these rooms with very little consideration to the potential competing effects. This is a situation which has occurred over many years and the difficulties have been gradually exacerbated as each new piece of equipment has been added.

It also seems that the facilities provided by the Directorate of Telecommunications are not always adequate. Some of the equipment is somewhat ancient and the maintenance problems are enormous. In addition because with large government organisations it tends to take a long time to commission new equipment the service is generally not keeping up with the new facilities which are currently becoming available from the micro electronic industries.

The policy of the police force in many areas has been "make do" and "mend". The consoles for instance are often made by local persons with little or no knowledge of ergonomics. No professional human factors design expertise has been employed in any of the Devon and Cornwall Control Rooms and this is evidenced by a large number of very simple ergonomic failures which could easily have been obviated by a modicum of professional assistance.

Communications are becoming increasingly crucial to police services as the pace of life and the complexity of society increases. In a period of less than 15 years police forces have gone from only having one or two radio sets to having many hundreds, and there are other communications systems such as telephone and telex, teleprinter facsimile etc., which have all increased proportionally. These trends tend to place heavy loads on those centres where these communications come together, and nowhere are they more concentrated than in the Force Communications Rooms. It is my view that most of the difficulties which I have noted in a relatively cursory way in this appendix could be fairly simply dealt with by the application of a methodical design approach accompanied by some human factors advice. Overall such an approach in addition to improving the job satisfaction and efficiency of the communications staff, would also be likely to reduce the waste of equipment and materials.

John Hulbert
Chief Inspector

APPENDIX III

Judgment Schedule for Chapter Twelve

JUDGMENT SCHEDULE

Transposition of information from Emergency calls to Logs

JUDGMENT of 'meaning' or 'sense' in calls and logs

LOG NO. _____

SUBJECT _____

Judges Initials _____

REPORT OF ANY CHANGES

Distortion of meaning: Not Distorted 1..2..3..4..5..6..7.. Grossly Distorted

Type of Changes

- | | |
|---|--|
| 1. Amount of <u>DETAIL</u> in description of incident | Much More, More, Same, Less, Much Less |
| 2. Degree of <u>FIRMNESS</u> of caller's knowledge | Much More, More, Same, Less, Much Less |
| 3. Apparent <u>SEVERITY</u> of the incident | Much More, More, Same, Less, Much Less |
| 4. Apparent <u>URGENCY</u> of incident | Much More, More, Same, Less, Much Less |
| 5. <u>COHERENCE</u> of the story | Much More, More, Same, Less, Much Less |

Changes of Terminology : Of words or phrases

<u>IN CALL</u>	→	TRANPOSED TO	→	<u>IN LOG</u>
		→		
		→		
		→		
		→		

REMARKS re Changes

ACTION Level Judgment (Police Judges only)

APPENDIX IV

Examples of Verbal Protocols

Obtained from a Police Control Room

PC - WT 1534 Ask Tango One One if the Lamp Post is down or in a dangerous condition.

PS We've got a bloody great punch up down the Barbican - Barbican Club. Someone's had £500 pinched and they want Policewomen down there to assist in searching females.

PC They're short of radios down there, about 6, and 8 or 9 up here short.

PS We've got two policewomen walking around here now with no radios. There's so many patrols out this afternoon that we've run out of radios.

PC Golf Victor thanking us for our assistance.

PS Oh Yeah and Golf Three is coming in.

PC Yes

PS That lovely job.

PS - WT You got that did you Mark. Echo two one has arrested that bloke and Golf three is coming in to pick him up - Alright.

PC Alarm xxx Peverall Park Road.

PS Wait a minute theres something funny about the keyholder for that one I can't think what it is. You've got to do a permutation or something.

PS We've had to send out patrols to find the PW's cause they're out without a wireless.

PC - WT Have you got any CID down there.

WT Well we've got everybody else down there.

WT I've sent November Two Three.

PC - PS Sgt. PS HOUGHTON Task Force for you.

WT Panel Alarm. Lanes.

PC OK

PNC Whats the Charge Room number down there and is it Rod

PC 3 - 0 - 8

PC Theft from Car - Nine -

PC - WT Thats yours Mike did you get it.

PS Roger. Have you got hold of that Policewoman

WT Yes Sarge.

PS - WT Tell 'em before they are let loose again. One of them get equipped with a radio will you. One of the Policewomen.

PS who did you get for xxx Engineering Mad.

WT Hang on Sgt.

PS We've had some trouble with control. I had to tell that one yesterday. They're keen but it means that I lose control. Had a 10-9 in G Div. and before I knew what was happening he was halfway to Plymstock. I called em back and then he argued it

24 DEC 1979

was a 10-9 'Policeman in Trouble'. They didn't like it, but if we let them do just what they want we'll lose control of the situation.

If G want assistance they'll come through us and we'll decide what to send.

1603

WT Premises seem secure

PS It's the whole perimeter which is alarmed. There's nothing inside (alarms) so if the perimeter is secure, can't raise the keyholder and the owner lives in London. I'll have to keep trying thats all.

1607 PC Member of Committee City Social Club small riot he says.

PC - WT Punch up City Social Club.

PC Unit 8 has just cleared from an alarm but I don't know how committed the Devonport cars are because a lot goes straight to the F radio.

At times we are not sure of the total situation Mac will soon tell us whether he has got anybody or not but you know you can't always keep up with it all. Its coming in all ways, radios, stations, telephones, miners, PAT, telex, people come in, you name it.

Don't you think so Rod.

PS - PC You've been up here a fair time now but don't you think that control is the thing up here that may be you gloss over its something that may be you know. It slips. Let a vehicle go and then he's gone.

PS You've got hell of a job to keep control.

PC Thats especially true if your answering as well and

PC If everything came through here it would just pile up and up.

PS Controls the biggest thing here. I suppose there's two aspects Control and Communicate. It's the Control that goes on at least the co-ordination

PS I've often thought that we up here should be free to check the whole room and then we could get a better grip on it all.

WT I don't know what'll happen when the computer comes in we can't get it down now.

PS - WT I don't suppose your log is accurate now

WT No not this afternoon especially with that flurry around the Barbican Club.

We need one person to talk and one to write it down.

PS That would double the staff.

WT We can work fine we can cope with it when it's quiet. It's

24 DEC 1979

- 3 -

when it's busy it goes to pieces and that's just when we need to know, need the information and response and that.

PS To my mind we should be solely supervisory up here but you can't you haven't got time. If I go over there, there's hell let loose over the other side or go over there, it's up here. You just can't keep tabs of it all.

PC One of Mac's units hasn't been heard from for 25 minutes and he's in a good reception area.

PNC He's gone on enquiries re. that m/cycle accident last night.

WT I know but he should still be on the air.

PS We've had problems with getting the PC's out there to understand the problems in here. Now we've got the other side getting the civilian staff in here to understand the difficulties out there. We've been sending the Op's out with the PCs so now Mac there knows that his PC has got an awkward area so when something like this happens he can have a better idea about what's happening. We've found it very successful. It's got the blessing of the boss.

1616 PC WT has sent another unit to look for him.

PC Press wants to know if anything happening. There's fights all over, large groups of marauding youths roaming all over the town dozens of shoplifters, accidents and RSA's everywhere, a milk float trying to climb a lamppost. No a typically quiet Christmas Eve, nothing of news value.

PS Can't find this blessed accident in the logs.

PC Sgt's looking for an accident, last week. Only a little one. He was taken in with just a broken leg and now he's dead.

PS Yes, it'll give the PC a shock when he finds out he's got a fatal.

PC Hope he didn't GO it.

WT - PS I've got a couple of units looking for Tony xxx

PS Yes.

PNC He'll be alright. He won't come to no harm.

WT You never know. He always answers alright.

PC Try the radio log Sarge.

PC Lady complaining nobody's come. I told her a Unit will go as soon as its cleared from the other previous jobs.

PNC Sarge. Doctor here wants to report a suspicious death.

PC Caller said a Police car has been parked over the other side of the road for half hour. It's insecure, the windows are down. Mac did you get that.

WT Yes.

24 DEC 1979

- 4 -

PC Bloke reported a garage break and mentioned that there was a police car nearby.

WT Unit 1 has found the Panda but can't find the PC.

PS His Sergeant's downstairs let him know. He may know more what he was doing.

PS Doc attended house from St. Budeaux Health Centre, doesn't know deceased and wants police. Doesn't look too bad. I'll tell Coroners Officer no need send a Unit he can't do anything.

WT Unit One's found him. He was down the road making enquiries looks like his radios duff.

PC We'll send him to that break he's nearly sitting on it.

PS And tell him to pick up a radio that works.

WT E Echo One Three. Mac did you here that.

WT F No what.

WT E Echo One Three is looking for an Audi with a load of youths believed going round the town causing criminal damage. It's blue on the PNC but witnesses say its a red Audi Will you 'C' call it.

WT E Where was the damage.

PC Last was the Peking Palace.

PS I've past that death to the Coroners Officer.

PC Woman here just going away on holiday put the cases by the car whilst she got some more and somebody drove up and took the lot. Nice place North Prospect.

PS You'd think living there they'd be more careful.

PS You get a quiet period now. I think that they'll start again until oh, ten o'clock. They'll get over this afternoon now and you won't get much more until ten.

PNC I would think they'll start before that.

PS Well as you say they've had a skinful this afternoon then they'll simmer now. They'll start drinking when the pubs open, at what is it, six, time for em to get tanked up. I'll say nine o'clock at the earliest before they start again.

PC Could be.

PS They'll probably stay local so we'll get trouble around places like the tiger here or the Abermarle you know or Lion & Column. They all shoot off to the individual pubs. A lot of people they won't travel far will they. They go to a place where they can say that I'm not far from home. Those are the pubs that'll take it tonight rather than the pubs in the City Centre where they might have difficulty getting home after you know.

24 Dec 1979

PC It'll be mostly drink tonight.

PS Yes but last week we had a spate of husbands coming home beating up wives.

PC Yes but it was odd wasn't it within ten minutes they all seemed lovey dovey didn't they.

1653 PC Woman says that people have come in tampering with her clocks. She's got a nice Scotch accent but she sounds a bit fifty five aswell. I know Churchway. People might have been in her house but I don't know if its a break I doubt it. It's certainly non-urgent anyway.

PS Two o'clock I started looking for this accident. What time is it now five to five. Any way I've found it on 20th December but we've only a wireless log.

1655 PC Fight in house Higher Efford Road.

WT What was the name Sgt.

PS PINK 34 Higher Efford Road, Domestic, I should think.

WT Yes, Units 1 and 2 on way.

PC What nos. sub div CID.

PS He'll be lucky at this time of day.

PC - WT
1656 21 is tied up with a Prisoner and then Meal Break OK

1658 WT - PS They've found a dinghy tied up on the other side of marine products. So we could have a break where the Patrol can't see it.

PS - WT Dingy.

PNC My terminals down. I rang them and they told me to go ahead but all I get is this Ignore message.

PS - WT Is the Bobby going to stay down there. There is a policeman in attendance is there.

PS I'll get the keyholder.

1718 PS I can't find the keyholder for Palace Theatre.

PC No "ive got the card out here. I'll do Marine Products.

PS I'm on to him now.

PS - WPC Keyholder is on the way from Widey Lane.

1724 PS I've sent the Task Force to get that keyholder for the Palace. We'll they asked if there was anything they could do.

PC - WT Road are freezing out your way Mac. Be a few accidents. There's a Corporation bus out there slipping and sliding Shaw Prior. Is that City Corporation or County.

PNC - WT 2 boys and a girl vandalising a car Laura near the bridge.

WT I'll try Unit 3. The others are at meal break.

WT What's the address.

24 DEC 1979

PNC 54 Norfolk Road, Laira.
WT No GO
PNC Anyone downstairs.
PS - PC Anyone gone to that one.
PC No can't raise him, trying now.
PS We had a complaint up there before. Garages being vandalised.
Naval Property it is. Last time I had bother I think I got the
MOD Police out there.
WT Nothing on Unit 3 can't raise him.
PS I've got an ambulance going. That's a drunk over to Lee Court
there but I've got nobody to send there.
1927 PS Drunk being objectionable. Thousands of them around today.
WT Got any traffic for this Norfolk Road one
PS Try Traffic.
WT No, no traffic. Well I can't raise it I just asked Harold.
WT - PS Will you speak to Sgt. PEARCE on 263.
PS You get to the stage sometimes when you have to start drawing
them off jobs. You get to a point where you are drained of
staff,
WT Can I get a City Centre vehicle to go to the Lee Court.
CC WT I've only got two vehicles out and they are both committed.
PS Its only a drunk. Probably he'll find his way home.
PS Its important to tell callers what to expect from us. You've
got to be in a position to tell them exactly what you're going
to do about it, ^{whether you are going to have a quick response or} whether you are going to have a delayed response
or sometimes you say well we'll get a Community Constable to
call down. Worse thing is to say we'll get someone to you
and then they don't turn up.
PC That means you've got to keep on top of things.
PS Domestic are a problem as a rule we should go to all domestics.
But some of them go on and on and we keep going. If we're
very busy sometimes we have to say "Well I'll tell you the
same as the Bobby if were to go." And you hope that you've
made the right choice, cause you never know.
We had one the other night which was a domestic, an old
domestic, always going strong.
PNC Sgt. Unit wants to 'C' call that Suspect French Car which was
circulated at 3 o'clock this morning.
PS What was that.
PNC It was sus and parked on a meter bay for three days. It was
there earlier but now its gone. He wants to 'C' call it.

24 DEC 1979

PNC Bloke down there beating hell out of his daughter.
PC Police car on the way.
WT Sarge I monitored that one. I reckon she's the one I had the other night she came home drunk and her father hammered her. But she deserved it.
PC Linda xxx I'll check her out.
PS Check the address.
PC She sounded hysterical this time. But it's an odd one.
PS The mental aspect here is funny. You don't get it through the eight hours but at the end of a shift especially if you get a very busy shift. I think Rod feels the same, you don't feel it through the shift do you.
PC No.
PS It's when you come to the end of the shift you feel as though, as you walk out of this door that everything seems to drain out of you doesn't it.
PC Yes.
PS Well this is like a build up over 8 hours and you suddenly become relaxed you know. You don't often notice it in the eight hours its at the end of the shift.
PC Thats Chubbs Sarge they're working on xxx's.
PC Yes it's right I can never go to bed after late turn I need to sit in a chair for an hour or so to unwind.
PS Can you give me a time on that last one.
WT Eh yes seventeen thirty four.
PS Anything on that girl.
WT I've got one officer in the house and one outside no result yet.
PC At least she's stopped screaming then.
PNC - WT Bob. Hit and run. Can you circulate PO4 xxxG Green Vauxhall Viva involved in hit and run. Miller Way.
WT Sorry. Hit and run where.
FNC Miller Way.
WT Miller Way.
FNC I've checked the keeper he lives in Estover.
PS Any traffic car.
PC Not heard one about, one coming out.
PS Just a minute. Do you do a check for that car. Oh you've done it have you Mac.
PC Yes it's just gone out as a 'C' call.
PNC One just coming out.

24 DEC 1979

- 9 -

PS Hang on one just booking on the air from Charles Green now.
PNC What do you want observations for this one.
PS Yes and him to go to the address. Tell em that we've got no
units at all to attend.
PNC OK
PS Direct him up that way and give him the name and address.
PNC I don't know if he'll go. He hasn't booked on with us I think
he's heading out into 'G' Division by the sound of it.
PS I think we can get Tango One One to deal with this one.
PNC Can I have the name and address of the complainant and the
damage to the complainants vehicle for Tango One One. They're
attending.
PS I'll get Crownhill to pass the details. They are taking details
now.
PNC And time please Sergeant.
PC I'll ring up Devon County I think and make sure that xxx Hill
has been gritted.
PNC Sgt. ESTOVER can you give us a way in for this Traffic vehicle.
He doesn't know the area.
PS Have we got a map?
PC Where's he want to get.
PS Penwith Gardens first.
WT It's off Miller Way.
PNC Off Miller Way is it OK.
PNC - PS Can I tell you about this message re. Mr. WILCOX.
PS Hang on a minute I can't find our blessed book (locations)
PNC No they've all disappeared.
There's this elderly man 69 yrs. ~~Said by~~ I've got November three two.
PS Yes.
PNC Yes this old gent was coming to spend the Christmas with him in
Exeter. He sent the fare down but the old boy hasn't arrived.
He's tried to contact him but he can't. He's a bit worried as
he thinks some ill may have befallen him. He's very concerned
for his welfare.
PS OK. We'll do what we can, we'll get a unit in the area to
check when its free. We'll ring him back and let him know the
result. Where should he have gone to.
PNC Exeter. Mr. WILCOX in Exeter.
PS OK.
PS Eight hours of this. You can tolerate it but that's all. You're
often glad when you can hand over.

24 DEC 1979

- 10 -

PC There's more strain in here than outside. Much more.
PS It's the mental strain isn't it.
PC It's the mental strain that you've got to clear the job up and
you've got to have them all answering you know. If you can.
PS There's different degrees in here as well. The Operators (WT)
have only got their own little thing to think about. But our
position here you've got to think about the whole lot. You
know. Well your bound to get a bit knackered mentally.
PC Its keeping tag of everything what's going on.
PS Yes this is it.
PC You always hope you can get every incident you get come in being
dealt with when you are relieved. That's when it comes if you
got, in the half hour before you go off, a lot comes in then.
Then its a bit difficult to clear a hell of a lot.
PC But certainly when you go home you need to sit down an hour or
more.
PS Yes I always do.
PC You could never go home and go straight to bed.
PS Yes well I've a fair ways to go and I can use that for my
unwinding period. But if you're living close bys you know you've
just got to plonk in the chair for an hour.
PNC Two drunks trying to break in Cosden Place.
WT Is that the drunks.
PNC Yes have you got it.
WT Yes but we haven't got anyone to go.
PC Cos tomorrow's Christmas Day, it'll be a bit quiet. Only we get
a lot of bloody domestics tomorrow. Domestic day tomorrow.
Christmas Day.
PNC Yes you'll ge the ole man giving the wife a hammering cause the
dinners cold.
PS Yes it's funny, you can be quiet out on the Section but it can
be hell let loose up here. It's all funnelled in you see.
PC The only trouble seems to be about the lunch hour.
PNC Yes remember that late turn last year Christmas. Bloke chucked
his bloody wife over the balcony down at Breton Side.
PS Flats fell 32 feet and she'd only burnt the turkey. Mind you
she was lucky had a fractured skull and shoulder.
PS Mac. Tell you units. Black ice forming.
WT Where.
PC In the force area. Black ice forming on all roads.

24 DEC 1979

- 11 -

PC City Centre will be OK. It's the side roads which will be
dodgy.

PC Just change of keyholder temporary over Christmas Holiday.

PNC There isn't anyone in the house where the drunks are trying to
get inn. The lady is out.

WT Temp. change Bank keyholder only for few hours. I'll put a note
on the Briefing Board.

PS OK.

PC Who took the message for Manston Close.

PNC I did.

PC - PNC That old fella who didn't go to Exeter, he's OK. He was just
pissing it up with some neighbours and forgot to do.

PNC What Jones. I'll let the guy in Exeter know.

WT Alexander Road. 2 men fighting. Unit attending.

PC What have you got going.

WT Echo one six and Echo one zero.

PC Yes. There's only two men fighting.

WT Unit asked for back-up Sarge.

PS Who went down to King Street this girl screaming.

WT Fifteen thirty three. They've just changed over.

WT Fire Brigade attending Frankfurt Gate.

PS Check Cosden Place the Unit has never heard of the place.

WT Its at the end of Cross Park Road.

PS How many going.

WT 2 units. 3 men. Echo one zero and one six.

PS Thats enough.

PC Apparently they're fighting over the 'bit of stuff' that rang in.

-PNC - PS Sarge Tango One One returning Charles Cross with a refused
breathalyser. Result of the hit and run.

PS Fine.

PC Someone's thrown a lump of coal through a window down at -----
Hang on.

PC Sarge were you enquiring about Tango One One just now.

PS Yes.

PC Well he's just arrested the driver of this car and taken him to
Charles Cross refusal breath test. Could you get Crownhill to
contact Charles Cross direct.

PS Station Sergeant down there is a bit busy.

PNC Rod your panel lights are not working properly.

- 12 -

PC Thats a surprise that 'Clock' result is 'further enquiries'
I would have bet that that was a duff one just shows.

PNC Got Echo one zero checking a car owned by XYZ Garage.

PNC Sgt. This vehicle is the one involved in the punch-up at
Alexander Road. Drove off. It's owned by XYZ Garage. It was
a punch up between 2 men and a woman and a child. They've all
left the area now. I don't know whether you want to send a
Devonport Unit there or whether you want to ring them.

PS Yes I know XYZ. He won't answer on the phone. He don't like the
police. If you go he'll make a fuss and then tell you what you
want to know but he's just a bit awkward.

PS Ole Dave there he's got this attitude with him (referring to
Unit coming over one of the radio channels). He gets so excited
the trouble with him is that eventually he gets the operators
going because although from the tone of his voice it sounds urgent.
It isn't at all. I've seen him get operators here going up and
up, sort of involved in the excitement when there's nothing in
it, it's just his way of speaking like.
It's like a car if the driver is tense so are the passengers all
tensed up. They take their mannerisms from one bloke.
You see it all the time here. Sometimes he frightens the life out
of some operators.

PS Some of the blokes are keen and thats very good but it can give
us problems because they are harder to control. They want to
skit off to anything that comes up whether they are needed or not.

PS There's a great difference in temperament between our units and
its something you've got to know. We've a bloke on here at City
Centre who never flaps, a couple of weeks ago he came up on the
radio and said "I think I'll have a 10-9" and he was in a
battlefield down there. Well when he asks for assistance you know
that he needs it. Other blokes come 10-9 at a drop of a hat with
message all distorted and excited. You can't get anything through
and the Operator gets all up and says "I can't understand what he's
talking about" and they get into a flap. The operators react,
everybody reacts and you know.

PC We don't know a lot of these guys personally we only know them on
the radio. The Operators still get affected by some officers
even though they know them.

PS Yes if they know the guy they may remain calm for the first three
seconds or so but so much is happening they just get an operator

standing on his head. It may be only a little job but he keeps on and in the end he gets him going like.

PC Yes we've obviously got to think of their safety first but if someone keeps lo-9ing its bound to affect the way you react. Having worked down the City Centre you can often visualise whats going on.

WT - PC That drunks been taken home.

PC Taken home? Must be Christmas.

WT - PC Rod that one about further enquiries. Churchway.

PC That one Churchway with the clocks

WT Yes. No crime she's a bit doolally. They've rung up the son and he said no. She apparently complained that people kept breaking in and swapping batteries in her radio set leaving flat ones.

PS Yes I've closed that one Pod with further enquiries pending on it.

PC I thought it was a bit funny.

1918 CHEERS THROUGHOUT CONTROL ROOM

What's up?

PS Oh its just a PAT call we don't get very many.

WT - WT Can you send a car down to the Armada Way toilets someones found a purse with a large amount of money in it.

PC There was a large sum lost earlier, might be same. Somebody reported losing a purse with a lot of money downstairs.

WT - PS My unit can't find One three zero Cattedown Road.

PS Try one zero three

WT Can't find that either.

PS Hang on I'll have a look.

WT I don't think the numbers go that high.

WT OK Sarge he's got it

PC Sarge he's got it Sarge.

1923 WT Unit 10 going to Land charges Burrington Way.

PC Panel alarm.

PNC That could be a break at this time of night.

PC That hit and run was a positive breathalyser. Doctor on his way.

1924 PC That land charges has reset.

PS Whose that land charges reset.

PC Its reset yeah.

WT - WTF Do you know whose dealing with that missing person.

WTF Yes. E'Xxx.

PS What's the next T M there Rod.

24 DEC 1979

- 14 -

PC What time Sarge.

PS Timed nineteen twenty five.

PC I'll have seven ninety you can have seven ninety one.

1934 WT Someone left premises just before the unit arrived. It looks secure - land charges.

PS Well the keyholder is rather concerned cos there shouldn't be anyone there. (PS has keyholder on line).

WT It was a Marina car.

PS And he's left this bloke.

WT I'll check - Yes.

PS It's a poor reception area, it's breaking up a lot.

PS - WT Get him stopped. Keyholder will be there in ten minutes.

PS We had the alarm go in landcharges, Burrington Way. Well within a minute it was reset and within another minute our patrol was there. No sign of anybody there. But they saw a maroon coloured Marina being driven away and in the meanwhile I got hold of the keyholder and he said "There shouldn't be anybody there the computer operators should have been the last ones, they should have gone long ago." Well he wasn't happy about it. We stopped this Marina went out and stopped it and it's the caretaker Mr. xxx and this Mr. yyy whose the head of it all isn't quite happy with it now. So he's going up there now he is. If anybody wanted to they could make a hell of a mess of that place.

PS There shouldn't be anybody at the premises.

PS This bloke was quite good he rang back to check but most of them don't. We ring up in the middle of the night and say "You're alarms ringing' they just go. Come out with the keys never check that it really is the police. Could be a bloody CRO.

PC You only need a leaky staff member and they'd soon know who the keyholder was.

1938 WT Sarge have we got a dog on.

PS Yes there is one on call P.C. PAICE.

WT Yes we want a dog.

PS Where's that to.

WT Plympton. They've got a chappy thats lost and he's collapsed in a large expanse of

PS Yes I suggest that we give them the number of the Dog Handler and they can ring him and decide what to do.

PC They're not in the same state as us with the overtime.

- 15 -

PC - WT The number is 123456. Tell their Inspector that he will have to authorise the overtime. On G Division.

PNC Road conditions -2 and frosty.

2010 WT RTA Stoke traffic lights. Ambulance in attendance.

PC Oh ambulance call- let me know who came.

2011 PC Have you tried this number lately Hagen.

PS I tried about half hour ago but nothing since then in the last half hour.

PC OK I'll try it.

PC It's the keyholder for some premises where the alarm went off years ago now at quarter to four.

PS Anybody there yet.

PC No.

PS Well they're the only two keyholders we've got.

PC Probably away for the holiday and forgot to change the keyholders.

WT My Unit can't find that RTA at Stoke.

PC OK I'll check with ambulance control. The call came from them. Ask them (Police Unit) to check at the other traffic lights.

WT The firebrigades turned up as well. This sounds like a hoax, all three services are there now.

PS What was that.

PC RTA Stoke seems to be a hoax.

PS Tell the ambulance and firebrigades that we've checked all the area, all the traffic lights, negative and they can call back their units.

PNC We've had reports from Golf two three that the weather conditions are very dicey out there. Horrbridge.

PC Anything on Cookworthy Road yet.

WT No.

PNC - PS Do you want to Plymouth Sound the road conditions.

PS Yes I'll contact their News Room in a minute.

WT We're getting reports from our patrols that its raining and then freezing.

PC What was in the Alexandra Road one. Fight over a child or something.

WT No two men involved.

PC The PNC Ops panel seems to pick up calls faster than mine. I got to mine before him but he got the call.

PNC 'G' Div. there's RTA driver ran off.

PC It's a mobile hit and run.

PNC Why did the unit go through to QB

WT You were engaged.

PC - PS Sarge do we still cover DOA's at the hospital or is it straight over the Coroners Officer and dealt with through the hospital.

PS What've you got.

PC They've picked up a bloke from the Post Office and he was DOA.

PS We usually contact the Coroner's Officer and see what he wants. It's Bob Brown tonight.

PC Ambulance Control've got no details of this chap.

PC I've contacted Bob we leave it to the hospital, we've not done the property for a long time now.

PC Landcharges alarm has gone again.

PS It's probably the owner still in there.

WT Do you want to send someone.

PS Stand by.

PNC Whose dealing with the theft of a motorcycle at Whiteleigh.

WT Steve he's just coming up.

PS How are you doing Rod. Alright.

PC Yeah got a break at 8 Halcyon Road, North Prospect.

PS I think I heard something about that just now.

PS - PNC Is that 8 Halcyon Road Mac.

PNC Yes.

2053 PS We've got it Rod. Halcyon Road. We've had another break there earlier this ^{evening.} where was that ...

2054 PS Roger RTA on Embankment. I think that its on the junction of Lanhydrock.

PS Have we had any accidents since tea time involving a Capri.

WT No.

PC No.

PC Have you got Landcharges Card. (Keyholder)

Telex Sarge Telex for you.

PS Someones lost a set of master keys to all the xxx stores and showrooms in the Southwest.

PNC Sarge you were quite right it's nine o'clock and all the niners have started.

WT Unit two is dealing with an RTA at Exeter Street. I'll have to send Unit four.

WT No good Unit four is tied up. I'll try Unit one.

PS Roger that RTA is on Lanhydrock just past the police garages (PS answered a repeat call)

WT I haven't got any unit to go.

WT Sarge Unit One is going.

PS Mr R (Landcharges) is back the alarms reset but he can't understand the system at all. He's going to get Avon Alarm out.

PC OK.

WT Unit Two is dealing with the RTA in Exeter Street which I didn't tell him to do.

PS No we've lost control there. Who've you sent.

WT Unit One and Two Eight. Unit four is tied up with the accident I sent Unit Two to.

PS Where did we have that break earlier.

PC There's not one on a nine. There's the Wolseley Road flats one.

FS Wolseley Road flats yes but we've had another one again in that area haven't we.

PC I can't recall.

PS It disturbs me when I hear of breaks in the North Prospect area. I expect them to come from there not commit them.

PS It's Swilly its funny when they renamed it North Prospect. At first they would say "I'm from North Prospect" now they say "I'm from Swilly" because that sounds a bit tougher.

WT They can't find that accident on the Embankment.

FS He said it was past the Police Garages. It's a straight bloody road he should see it.

WT I think he meant Laira Sarge I don't think it's the Embankment.

PS Sometimes you try to help someone (callers) with a location and they click on to what you say. Especially if they don't know where they are.

If you say "just past the Police Garages" they often just agree with you.

PC It's right out by Marsh Mills roundabout.

PNC Sarge I've got X Ray one three. He's got an RTA at Laira and needs a suspended tow.

Is this the same RTA.

PS No I don't think so. xxx is on call and he's a law unto himself: What's going on. Got an RTA and a Police Range Rover has broken down as well.

PNC Sounds as though the traffic cars been involved in an RTA as they also want a suspended tow.

PS I shall be surprised if xxx will want to come out for this.

PNC The Traffic Sergeant is there - Whiskey one three is at scene and has cleared the suspended tow.

24 DEC 1979

- 18 -

WT - PC That accident is a 79c. Unit Two dealing.
PC Which accident is that.
WT Exeter Street.
PC We didn't get that one it came from Charles Cross.
PS - WT Goss Motors is next garage on the list. Will be there in
10 minutes.
PC I thought we had a call on that Exeter Street accident, but
there's nothing here.
WT I don't think that XRay one two is on my waveband.
PS No he isn't Harold.
PNC OK passed.
PC - WT Anything for Echo one two on your side Mac.
WT No nothing.
PS That's three garages.
PC You'll end up getting down to Yelverton Garages again Ern.
They'll come anytime.
PS Yes. These'll have missed their turn for another few weeks.
PS Harold can you knock up GJYXXE for me please (On the PNC)
PNC Yes it's a Hillman Minx, green in colour belongs to a Mr. xxx
of Lidford Park Road.
PS OK
PC Lets try this keyholder again. You haven't tried him recently
have you Ern.
PS No.

2030 PNC The unit has called at Wentworth - no trace.

WTE No he won't have. He's in City Centre locked up.

PC No. We are looking for his wife.
Where did you last hear Bambam.

PNC That one that two went to was all quiet on arrival.

PC O.K.

WTF We ought to be able to get the RSPCA in on these horses.

PC There's nothing else that we can do.

PC This is stupid we are not going to clear half of these tonight.

PS What have you got outstanding now.

PC This Arson but I can't get an answer as to what's happening.

WTF Inspector wants to know re this at the FORUM. (Cathy dealing?
(Woman laying in road screaming).

PC Cathy is unit eight.
Who went to the Gem Box (Alarm).

WTE Unit one five and unit three. They want the keyholder.

PC O.K. I haven't had time to get it out.

PC Can't get any reply. He's gone out.

PS Is it all in order down there.

PC Yes.

PS O.K. Can't contact keyholder. Resume.

PC - WT Laive Bridge Garage keyholder will be about half an hour. They
don't seem to be bothered. Tell them to resume.

WT He says he doesn't mind staying to half past eight.

PC O.K. but he goes then.

2102 PC What did he say about that alarm. Unknown fault.
(PC heard this over WT).

PS Yes.

PNC Eagle pub Coxside Man slashed by bottle from Ambulance control.

WT There is no Eagle pub at Coxside.

PNC I've checked with QB. That's what ambulance control has got.

PNC - PS The car fire was a hoax call.

WT We're getting a few of those from that area recently.

PNC - PS QB have report of a fight in a pub at Coxside called Eagle Tavern (inadcurate no report of fight).

PS Check the Eagle Tavern Cornwall Street first.

WT Can't find it.

PC Looking for a pub. It might be in Commercial Road. It's called Eagle Tavern.

PC Do a 'C' call on that Cortina stolen from Budshead Road.

PNC The Unit has found the Eagle but there's nothing I'll check with Ambulance Control.

PNC - WT Man on the way to Freedom Fields in Ambulance.

PNC Unit re theft of car will check around.

PC Can you get him to contact the complainant first, so that he knows about it and what we are doing.

2140 START OF CHANGE OVER BRIEFING

LPC - NPC We've keyholder there who's not in. There's some details for the Night Duty C.I.D.

PS - PC Don't forget we take over Bickleigh Paush at Midnight. That's Bickleigh Village, the Marine Camp and all that area.

PNC There's a missing car from Budshead Road.

PS Oh yes yeah they've gone up to it haven't they. Yes they are going to send a Unit up.

PC That's a stolen one.

PNC Whisky Mike Lima Six Seven Three One.

PS Yes.

PS If there are any bad accidents out ther, Gordon Two One can go as it will have to be VHF cover in any case. I see on here that it says Unit three but it is pointless sending Unit three at this stage because it is not equipped with VHF so we will have to play it off the cuff. I would suggest that Unit one or even five goes out there. It is pointless sending anything out there that hasn't got radio communicators especially to an accident, cause they'll be strugglling.

PS If you get a report of an unusual light at Tecalamit its ^{or} they've left in on. It's all in order.

WT The pubs are they open until 2 a.m. today.

PS Don't know I'll check.

PS They've confirmed that stolen vehicle, a Unit is going to go out to them.

PS Yes OK. Still can't get that keyholder.

PS Clive anything on your log about an RTA at Commercial Road (miss-briefed).

WTE What time.

PS Well Colin Dayles up to the hospital now.

PS Jack are you Night Duty C.I.D.

ND CID Yes Don't call me I'll call you.

PS Who is Crime Car.

ND CID There isn't one tonight.

PS What no crime car on New Year's Eve. That's crazy.

PNC I've got a note on the log Sarge. it was a fight in a pub (it wasn't).

PS The units are all booking on with normal meal breaks. Now that's plain stupid tonight because they'll all be coming in for a meal just when the pubs turn out and the fights an all start. The pubs are closing at half past midnight and the clubs at two thirty. We've less than half staff at meal-breaks what with reliefs and all. I've been trying ringing the stations Charles Cross and Devonport to get them to delay the mealbreaks or else we'll have no chance.

2215 -PS Crownhill (Inspector) won't delay the mealbreaks so if it gets busy up here I'll have to pull units up from the City Centre or across from Devonport area.

PS - Unit No back-up tonight.

PS She's useless always wants back-up for every job she goes to.

WT We usually try to send two or more to any roughish job.

PS Yes that right but that one wants backing up for everything.

PC What resources have we.

PS Normal more or less. We've cut back to a skeleton. It was going to be worse but we kicked up a bit we were really struggling. I don't know if you know about the problems we've got with overtime here. They were going to cut us back like they did over the Christmas Bank Holiday but we've managed to get almost normal shifts on.

You know New Year's Eve we can't operate with less staff.

PC If anything we should have more.

PS Well that's it but they were going to go the other way.

PC They were panicking about the overtime.

PS Yes

PC We seem to be the only Division in this state.

PS Yes I don't think there has been anything outstanding in the Division.

2235 - h That's bad tonight (VHF).

PS That's one five - fifteen Laurel Road.

PS Gordon can you get unit eight to have a look around they've been off now. Fifteen Laurel Road outside. You needn't see the complainant. He's an old chap. He has fits and he's had a cou tonight apparently. Obviously the buggers know what he's like. They've thrown bricks and stones at his house.

WT Its been every night this week he said.

PS Well you know the type of individuals out there. They know he gets in a state, they obviously aggravate him. (WT put out to unit that man did not wait to see police).

WD - PS I shall be out an hour. If anyone wants me I shall be over at
Insp. Devonport.

PS Sergeant Callings is down there on her own isn't she.

Insp. Yes. All be well I'll be down there and back up here for one-ish.

PS OK Sir.

Insp. What Channels will I need for out there.

PS I think it's channel two over there. We've one transmitter out so if that doesn't work try one and three. It all depends where you are really.

PC That's a bright start. The first keyholder is in the Isle of Wight and the other is no reply.

PC I've managed to get one keyholder but most banks need two at the same time. The one I've got is going and then if we need a second we'll have to get something worked out.

PC - WT Mr. John on the way Clive. Local from Stoke, should only be a few minutes.

PNC Sarge. This car stolen from Budshead Road.

PS Yeah.

PNC Well I just tapped it up on the screen. To erh, sort of see what's what. An its come up to say car found two men arrested on M5.

PS That's bright. About, tell us that is it?

PNC No I've asked QB they don't know anything about it.

PS Well is Echo two one about.

WT They didn't know.

PS What time was it put out.

2250 PNC Twenty two thirty four.

PS Sergeant Price gone out do you know Dave.

WT No. No he hasn't.

PC What's wrong.

PS Ron just banged it on the screen for curiosity and it comes up with two blokes being arrested up on the M5 You think that they would let us know wouldn't you.

PC Up on the M5.

PS Yes.

PC What time were they arrested.

PNC Twenty two thirty four (Note: Re how up to minute mode is maintained).

PS Gordon perhaps you can tell unit four just for the owners information that his vehicle has been located up on the M5. Two men arrested. Just to put him in the picture and put the owners mind at rest.

WT He says what do they intend doing with the vehicle.

PS Tell him we can't tell him any more at this stage. It's all we've got. Just for his information.

PS The wonder of modern communications. Must be a moral there somewhere.

WT Sarge. Anonymous call here "Listen carefully bombs will be on the Tamar Bridge we are setting them off at Midnight. We are entering the eighties as we started to see you bastards out".

PC Very nice. Cornish Republican Army?.

WT Yes.

PC Didn't say where they were.

WT No. No name no nothing. Two bombs on the Tamar Bridge will go off at Midnight.

PC You've got fifty six minutes.

PS Ta. Ask Mr. Hooper to give us a ring.

PC Yes he was going out that way wasn't he.

PS Yes.

WT Very well spoken gentleman too, apart from his language. Cultured voice.

PC Did he have a Cornish accent. (Tape would have helped here).

WT No.

PNC That car was stopped on M5 right up in Stroud.

WT I've got a punch up at the Lion and Column unit eight attending

PS Yes OK.

WT Sarge. What about this then.

PS What's that.

WT Devonport phoned me fight at the Lion and Column.

PS Yes.

WT I passed it out. Three units attending. He calls back sorry about that it's the Crown and Column.

PS Well that's different altogether.

WT Wells. It's not good enough I've got the wrong units rushing to the wrong pub.

PS Well never mind we all make mistakes.

WT Yeah but.

PS Send someone to the Crown and Column.

Unit - PS What can I do about this car.

WTE From echo one six where Laive Bridge School.

PC I think it's near Narrows left first on right.

WTF I'm logging this change as being from Devonport.

PS Yeah.

PC What did the bridge Inspector have to say about it anyway. Concerned or anything.

PS Nothing much. No. Any joy with Mr. Hooper.

PC No not yet.

PS I've got the Inspector on line.

WT Here Della now do you want her (PW Sgt.).

PS Excuse me a second she's on the air.

PS - WT Could you tell her to go to the Tamar Bridge and give me a ring from there.

PS Yes I've got her she's going. I'm going to let Launceston know about it.

PC Where did you put those warrants.

PS Over there.

WT Unit nine to Grasserdale complaint smashed headlights. Is it Grasserdale Avenue or Grasserdale Gardens.

PS Avenue.

PC What's unit seven doing Gordon do we know. Could he just have a run through Borringdon Avenue, St. Budeaux.

WTF What's that for.

PC About a dozen youths going up there chucking bottles all over the place up there. Generally disorderly. That's all I've got.

2330 PC Someone washing good booze on that one. Showered with punch he says.

PC Finished with the Tims.

PS I'm just writing those off.

PS That's a report of late night drinking by non members of a social club. Not going to do much tonight. I've left it for the Licencing department. Anonymous - from a friend.

PC - WT Unit three have you got.

WT Yes what do you want.

PC An you give me a TK in Loosely Lane.

PC It's a request from the Navy to pull a load of ratings out of a party. Their ship has got to sail urgently for a Channel rescue.

PS We still get a few PAT calls because Plymouth sound keeps plugging it. The main advantage of course is that it gives us an extra staff member in here. Of course the pat calls don't take up hardly any time so he is available to relieve the pressure generally in here.

Looking at it purely selfish. Well I don't think it is selfish cause he can sit there and cover that radio operator and any incidents come up he can help any other operator. So from out point of view we can operate more efficiently.

WT Bank Royal Parade. They can't get anyone to come down this evening to ss to the alarms. They'll be there in the morning. Could we see that patrols keep an eye on it when passing.

PS Yes O.K.

PC There's a ship in distress out in the Channel. HMS Avenger is going out from the Dockyard. We're giving a hand locating some of the crew.

PC There as party of them up at Losseleigh Lane on some New Years Eve do.

PS I hope the driver of the 'Avenger' is still sober.

PS City Social Club was all he said sounded like a riot. I don't know which one it is.

PS - WT Ralph City Social Club any idea where that is.

WT Plymouth City Social Club.

PS No that's different.

PC Chapel Street I think.

PS Yes Chapel Street that's it.

PS - WTE Clive try the Chapel Street your end.

WT What trouble up there.

PS Yeah punch-up.

PS I called him back but he rang off.

PC Sounds like a big punch up there Clive.

WT Are you sure Sarge.

PS Tell them to make their way up there and they'll be told before they get there.

WT Units asking for more directors.

PS Half way up on the right. It's off Regent Street between

Gibbon Street.

PS - WTE Gordon can you get yours checked in Merrivale Road there a city social club there as well. Get your units to check there.

WTF Merrivale Road. Where's that name

PS Beacon Park. City Social Club.

PS - PNC Try three five on VHF.

PS I try to get three five as well could be back at a light police on there. As soon as I tried to get more details he was gone.

PS Who've you got there Gord.

WTF Whose patch is it.

PS It doesn't matter eight nine ten I don't make any. It's eight actually but you want a couple of units there in any case.

WTF Well unit eights double crewed.

PS Lovely.

WT Is that the one at Beacon Park - Ron.

PS It's in Merrivale tucked back in between, on the junction of a couple of streets.

WT Well isn't that part of the Cherry Tree is that the one you're thinking about.

PS No. No. No.

WT You're not talking about the Dockyard Club are you.

PS No it's called City Social Club off Cookworthy Road in that area. Well Cookworthy goes right across North Prospect.

WT Thats Civic.

PS No there's one tucked right in behind Gordon.

WT Oh is there. I was thinking of the big one. The em Civil Servants Club.

PS Oh no.

PS Clive I think it's probably the Devonport one so if your units find it clear tell them to carry on. I'm more inclined to think that it's Devonport now.

Prompt. Why.

PS Well thinking about it the Devonport one's more likely to have this sort of thing.

WT All quiet at City Social Club.

PS Lovely we're checking the Devonport one.

2351 PC - WT Clive trouble at the Barley Sheaf.

WT We'll have the Domestics later on when they get home. You know "you were kissing so and so" and on and on it goes. What a load of rubbish it all is.

WT From unit three occupier heard door click and offenders went up off street. Sometime ago now.
(Break).

PS O.K.

WT Barley Sheaf lot of damage a gang have gone up road towards Royal Parade.

PS Yes.

PC What about a description.

PS Well there's a P.C. going after them.

PS Brian there's a punch up out to Merrivale.

2358 PS - WT Can we have a sit rep from unit eight.

PS There's not a Community Constable on after eight o'clock. Laughing aren't they had Christmas off now none on New Years Eve. Means the others left on have got to work harder.

PS Alright there Gordon.

WT Yes fighting has been subdued.

PS They didn't even say that they had arrived so we didn't know they were there.

WT Two five wants us to ring the AA.

PS Tell them to use the phone box from the bridge we're too busy.

1980
PC It is now ten seconds past Midnight Happy New Year and welcome to a new decade.

PS Tamar Bridge is still there.

WTE I opened the window to hear the bang.

WT Careful remember they're probably using Cornish Clocks.

PC There Mister Hulbert you'll no doubt remember where you were in ten years time, sitting in a Control Room waiting for a bride to go up, and all the fights to start.

007 PS Knocked her down (P.S. on 999) Ambulance Room.

PC O.K.

PS Echo three five for that one Gordon.

WT Which unit covers that Saltash Road.

PS Nine.

PS Got Ambulance Ron.

WT Alexandre Road Keyham Report of a girl being knocked down.

PS Deliberately!

PC Deliberately?

PS (On hearing radio request). It's near the entrance to the Dockyard. The Camels Head entrance.

PS I should tell two six on that one, and two five.

PS - Ambulance Sounds as if this isn't an RTA but a deliberate knocking down.

PS Two seven is over that way.

WT She's attending.

PS Is she oh that's lovely.

PS You got nine alright did you.

WT Yes.

PS What's three five gone off to Gordon.

WT They're doing enquiries at that Club.

PS But unit eight went there.

WT Yes but they went as well. The Social Club thing.

PS Yes well what eh was wrong at the Club there then.

PC I thought they said all quiet.

WT I dunno something about argument between two parties.

PS Well I should pull them. Get them around there as well. Then perhaps they should also attend that one. There may be someone to knock off there or something a bit complex when they get there. This sounds deliberate this lot. Ask them to also look along. Woman may be dead, anything could happen.

WT They've still not blown up the Tamar Bridge.

WT I can't get him on here.

PNC I'll get him on here (VHF).

PC Sergeant Michelmore Saltash would like a word (ref Tamar Bridge).

PC - WT 1534 Ask Tango One One if the Lamp Post is down or in a dangerous condition.

PS We've got a bloody great punch up down the Barbican - Barbican Club. Someone's had £500 pinched and they want Policewomen down there to assist in searching females.

PC They're short of radios down there, about 6, and 8 or 9 up here short.

PS We've got two policewomen walking around here now with no radios. There's so many patrols out this afternoon that we've run out of radios.

PC Golf Victor thanking us for our assistance.

PS Oh Yeah and Golf Three is coming in.

PC Yes

PS That lovely job.

PS - WT You got that did you Mark. Echo two one has arrested that bloke and Golf three is coming in to pick him up - Alright.

PC Alarm xxx Peverall Park Road.

PS Wait a minute theres something funny about the keyholder for that one I can't think what it is. You've got to do a permutation or something.

PS We've had to send out patrols or find the PW's cause they're out without a wireless.

PC - WT Have you got any CID down there.

WT Well we've got everybody else down there.

WT I've sent November Two Three.

PC - PS Sgt. PS HOUGHTON Task Force for you.

WT Panel Alarm. Lanes.

PC OK

PNC Whats the Charge Room number down there k08 is it Rod

PC 3 - 0 - 8

PC Theft from Car - Nine -

PC - WT Thats yours Mike did you get it.

PS Roger. Have you got hold of that Policewoman

WT Yes Sarge.

PS - WT Tell 'em before they are let loose again. One of them get equipped with a radio will you. One of the Policewomen.

PS who did you get for xxx Engineering Mac.

WT Hang on Sgt.

PS We've had some trouble with control. I had to tell that one yesterday. They're keen but it means that I lose control. Had a 10-9 in G Div. and before I knew what was happening he was halfway to Plymstock. I called em back and then he argued it

0012 PC Nine nine nine. Royal Marine Efford large fight. In the pub and in the Car Park.

WT From Royal Marine Police Patrol - A Happy New Year.

PC We'll give em Happy New Year. Give them that fight.

PS Yes send them.

PS - PC Three five and two four send them up there. See if you can get their location.

PS I've got two one going on VHF.

PS You haven't sent unit five have you or she may want 'back up'.

WT No.

WT Tango one one is looking up.

PC Might as well all of Effords up there.

WT - Unit 4 You had better hang around cos you're the only one left.

WT - PC Unit four is going up the Falstaff.

PS What's up there Gordon.

WT Nothing that's why he going up there. If you're with me.

PS Yes.

WT If he cruises around outside in a minute when they kick out we might not get anything. That's what the idea is any rate.

WT Three five is resuming from that accident at the Dockyard.

PC Got a call what's this Grasserdale Avenue he's on about.

PS There's a log somebody kicking headlights in or something.

PC Oh only he doesn't want to make a complaint now.

FC Ray. All quiet there no complaint.

PC - PS Who went there before do we know.

WT Yes unit five.

PC Well they're tied up have three five resumed.

PS Yes. They're on here.

PC Yes what was it 27 Grasserdale Avenue wasn't it. Well there's a general disturbance there now.

PS Three five on VHF.

PC It's a bit confused. There was a criminal damage originally. Some cars headlights but now some blokes have come back and it's all happening down there - again.

PS Perhaps he's gone back and found another one's gone.

WT Do you know of any Cheltenham besides Gloucester.

PC No. It's not a Wally special is it.

WT No I don't think so.

PS What's it about.

WT Well PC XXX received from information from someone in the street. She rang someone in Cheltenham and apparently this woman is being beaten up badly by her husband and she wants the police to call round.

PS Yes.

WT Well I've rung the police at Cheltenham but they don't know the address or the area. I contacted PC XXX and he says that the complainant is quite sensible.

PS Well look in the AA book and the Almanac but I don't know of one.

PC There's nothing only one in the STD book and only one in the Almanac.

0028 PC Three nine nine nine calls on the trot and they just rang off when I answered.

PS They're returning with Prisoners from the Royal Marine.

WT Two five wants echo three to RV.

PS Tell her that the officers dealing with an incident.

PC It's happened again.

WT Ron caller here wants to speak to officer in charge.

PC Floke here wants us to check all the Taxi drivers in Plymouth.

PS Ron's got a funny one by the sound of it.

WT Ron did you ring down just now.

PC Yes they were engaged.

PC Still engaged. It's to set em up for the prisoners coming in.

PS How many arrested.

PC I dunno what he said.

PS No I only heard prisoner.

PC Last caller said that every taxi driver was blind drunk at the moment. Would say if any in particular. Got quite snotty when I asked for more details.

PS There was a call last week about Taxi drivers being drunk or something.

PC Perhaps it's a Mini-cab firm trying to set up.

0033 PS - WT Get unit five to ten three Crownhill. They've got some women prisoners in there.

0035 PS There's a dozen football supporters. Damaged a Railway Carriage and they've left the Station gone into the town, from Railway. Clive just put it out for information. They'll be wandering around all night. The football special doesn't go until the morning.

PS Yes - stand by, (answered VHF call).

PS Yes Clive a dozen youths in donkey jackets just in case they're seen around the town.

PS Anything Night Duty C.I.D. anyone.

WTF No.

WTE No.

PNC No.

PS November three five negative your ten six.

PS Tango. One three's out another traffic car. (Monitored VHF transmission) didn't even know that was on. That's handy

WT Can the unit pull any of those youths for the damage.

PS No no it's only for information I don't think that they can prove anything. It's the Cornish branch of Argyle.

PNC We've just had a call re a man in a brown suit on the A38. He passed him at 2 1/2 miles before the roundabout. On Westbound carriageway wandering about.

PC Golf Victor just circulated that only they had him nearer Mars Mills. Tango one three went to find him.

PS Better let them know.

PNC O.K.

WT Whose that Inspector (radio going for meal break).

PS There's only one on must be Mr. Hooper.

WT He's at Devonport at the moment.

PS O.K.

PS Whose dealing Ron (with fight).

PC Mike's dealing. There one injured in casualty.

PS Do you know where Dick is.

PC No.

PS 86 Tangmere Gardens blokes locked out will have to smash a window to get in but doesn't want the neighbours to think it's a break in. Could two one just assist him.

PS Echo three five are they tied up.

WT Negative.

0042 PS There trouble at the Submarine Public House.

WT Three five attending.

PS Eh How many Devonport units clear. Have you got em. I want one at least a double crewed one to Submarine Public House - trouble down there.

WT Tangmere Gardens someone locked out - well don't worry they got in.

PS Cancel him, has got in quietly.

WT Submarine Pub.

PS That's it Gordon.

WT Unit nines going as well.

PS O.K.

PC Noisy party.

PS Another call re Submarine.
You got a number Ron.

PC What time's your's.

PS I'll make it two.

PC This message was all taxi drivers drunk in the end it was Silver Line and Chequers.

PS Well that's it. You can't check that.

PC You can't sit outside there checking all the taxis.

PS Might as well send a copy to Licencing. Just endorse copy to 'Licencing Department for information' that'll solve that. They won't have a lot of connection with them but you never know.

PC What's Ken doing at the moment Gord.

WT He's er (stopped as PC took 999 call).

PS Anybody on a niner.

PC Yes I am.

PS Lindy no Lundy I expect it is punch up.

WT Where Searge.

PS 17. Big punch up.

PC Got the son of that keyholder for Gem Box (alarm) but he hasn't got keys.

WT It's off Clitterford Road there isn't it.

PS Yes is unit four clear. It's three actually. It's his patch, but three's gone down town hasn't he. Er unit four then. Seventeen Lundy Close report of a punch up.

PC We are getting calls all the time re this alarm ringing and we can't get the keyholder. It's a right problem. I'm trying to get the son to locate his father and get him to ring us.

PC What time's your niner.

PS Forty two. The timings gone to shute a bit and I've got another right after have you got another one.

PC I've got one af forty three.

PS Yeah you'll be one four won't you and I'll be one five.

PC - WT What unit ten oh anything Gord. Do we know.

PS The niners and the TM's are going to run consecutive now for a while for the next month.

PS They've just stopped doing the stats on the niners and TM's. It's been done for ten years and they stopped it. It's used to be interesting to know how many of each type we'd had. The blokes miss it you know.

PS Damage there at three fives incident was there (heard on WT).

0055 PS Who've you got out to Crownhill. Anyone.

WT Yes.

PS Well there's a couple of drunks staggering along in the road at West Park if you get someone down there.

PS Is that fight all cleared.

PS Unit ten Gord will he check out the George Street News Report of Audible Alarm sounding.

WT Call here from H.Q. The ambulance are in Hyde Park Road with a drunk requesting police attendance. Creating hell there.

PS Any traffic car there Ron.
Any traffic car on the Mutley Plain area. Don't tell em
too much about it get ask them to attend.

PNC Yes tango one one.

PS Lovely job, get down there. Don't tell them all the details
just say ambulance attending incident. (Deliberately
misleading to get traffic to attend).

0059 PS There's a fight in the Griffin Club inside and out.

WTF Who covers that Sarge.

PS Unit ten and that's Devonport. Any uncommitted Devonport Units.

WTF Told you they'd start fighting, domestics next.

WT Where's the Griffin Club Sarge.

PS In erh in erh the Brickfields.

0100 PC Blokes found the door open to Georges News.

WT Well, he's on his way there.

PS Mr. Lawrence came up Ron. They keyholder, the Gem Box.

PC Yes.

PS The son went by. He's going to ring his dad from Charles
Cross and a policeman'll go over the premises with him.

PS The next niner I've got is at fifty five.

PC I've got fifty six.

PS Then I'll have one at fifty nine. Then one at one hundred.

WT That blooming Georges News goes off every shift.

PS It does yes we had it a couple of times las week didn't we.

PC Who went down the Submarine Pub earlier on.

PS Three five. Got another one.

PC Yes I've had the licensee having a mumbled at me. He kicked
out four people himself for causing trouble, threatening
behaviour that was all but he's still asking where are the
policemen. No one's turned up.

WT Well they've been there. They've tried and tried and tried
to get him. They couldn't get hold of him.

WT Anyway they're all down the Griffin Club now so he's had it.

107 PS Unit three is he clear or what's he doing. Did he go down the hospital. Yeh can you get unit four to check the bottom of Southway Drive, near Tamerton Foliot Road there's a car parked without lights on the offside lane of the down carriageway. Southway Drive near the Tamerton Foliot Road.

PS Clive there's a fight at the Chinese Restaurant 47 Bretonside. See if we've anyone else Ron.

108 PC Mr. Wiggle. He's complaining about four lads outside causing some damage to his sister's motorcycle.

111 WT Is there anyone who can go to eight zero Embarkment Road. Suspect intruders.

PS We've only got a traffic car.

WT Sarge. what Restaurant is this.

PS Chines Restaurant. Chinese 47 Bretonside.

WT Well I've told them that.

PS Well I don't know Clive. That's the address 47. It's a Chinese Restaurant. It's the actual Restaurant.

RT Sarge. unit three's gone.

PC Will you go and see Mr. Wiggle. Four lads outside apparently interfering with his motorcycle.

112 PC Clive will you cancel him please the lads have now gone and he doesn't wish to pursue the matter.

WTF Unit nine to drunk in hedge.

PC I wonder how three fives getting on are they still committed.

PS I dunno they went to a fight Ron (Events too fast at this point for the two police officers to keep up to date)

WT I've got unit eight going back to the Submarine.

PC What did they say, he's gone where, Gordon he's going where.

WT H says that he's returning to Devonport but Della (WPS) said that he should see this licensee.

PC Well.

WT I don't know whether to phone her and tell her that he's coming in. Cos the other units which attended are committed.

PS Well I should tell her over the air.
(P.C. not obeying Woman Sergeants instructions. Control Room trying to keep out of crossfire).

PS Ron. You are to go to to.

WT Well I know what he's about he's got the office relief in the car with him see.

PS Well I should give it to him Gordon. It's up to him if he he, you know.

WT I did.

PS Are you told him then that's it.

WT I told him and he said I'm going back to Devonport. Well what can I say to that?

WT I'll phone her.

PS Yess tell her, that's right. She'll know that you've given it to him then.

PS What was that Gordon.

WT The owner is there and they've pushed car away out of it.

PS Oh Smashing lovely. It's not a night for a drunken motorcyclist to go in the back of it.

117 PC Can we get someone to check the paper shop doorway bottom end of Union Street by the roundabout. There's an old man lying in that doorway. He's not sure whether he's ill or just drunk. Can he be checked out Clive.

PS I've got twelve Ron.

PC Yes O.K. I've got thirteen.

PS They're coming off fairly quick aren't they.

WT Unit three's at rear of 80 there's a window smashed and a stolen car's turned up there. Whisky Mike XXX five oh two XXX.

PNC No trace PNC.

WTE Landlady Lich and Column. It's alarmed will be away for a few hours at a New Years Eve party if we want key holder.

PS O.K. Peg put it on a piece of paper and I'll pin it up here for a minute.

WTE That car was stolen earlier.

PNC Well it's not on the box.

WTE I dunno.

PS Who went to the Chinese Restaurant Clive.

WT Unit three.

PS O.K.

WTF From Devonport Clarence Street complaint noisy party unit ten attending.

WTF Well he got that one.

PS What.

WTF No problem (with radio reception).

PC You still clearing niners.

PS Yes.

PS Tango one one come up with this reply yet Ron.

PC What the ambulance no no.

WT Clarence Street was it.

PS Yes.

PC Who went down to Stonehouse. Unit one was it.

WT Unit one.

PC Unit one was it.

0128 PS 388 Gord, Blandford Road re missing boy.

WTE Unit one.

WTF Watchdog one is going to a drunk at RNH from Charles Cross.

PC Anything from tango one one Ron, at all.

PNC No I give him a shout just now he didn't answer.

PC What's in that one Clive.

WT Yobos kicked door in and ran off.

PC I'll check with that one later on Clive. It was Colin Doyle wasn't it.

WT Can you make sure the back door is manned.

PS Is that another one on the in Gord (Prisoner).

WT Yes.

PS Who's got that one.

WT We sent unit three up.

PS Yes he's coming back from the hospital.

0134 PS Gordon can you get unit two to five seven Briardale Road it's a burglary. I've told him we're very busy but we'll get there as soon as we can.

PC Pass me the niners.

PS You haven't got any more to go in have you Ron.

PC No, I'm just trying to scrub a couple off.

PC Trouble with the George Street news keyholders but that's all over.

PC What did they say about the Submarine Pub then Gord.

WTF Well the Landlords flaming drunk, and he wants to make a complaint. We've told him when he's sober in the morning if he wants to ring Crownhill.

PC Right.

WT Who's is Briardale Road Sarge.

PS Eight or nine. It's eight's patch.

WT Is it.

PS Yes.

PS If they are double crewed call nine.

WTE Romeo one I've passed twenty youths in the Railway Car Park causing trouble from his Control.

PC The Railway Police have got a set and there's one equivalent down the Millbay Docks. There's usually only one on at each place but they're very useful on occasions. We get quite a bit of contact, it comes in handy.

On occasions if we have something really sharp for them, if there over the platforms or sculling around the Docks somewhere we can go straight up and get them. Yes very handy.

PC How did the Griffin finish up do you know Gordon.

WT All quiet and no complaint.

0142 PC 38 Flamstead Crescent.

WT Hang on - yes what was that one Ron.

PC Six sorry thirty eight Flamstead Crescent. Mr. Short got a bit of a domestic with his son and half a dozen of his mates in there.

WT Where's Flamstead Crescent.

PC It's seven. Actually. Who've you got out. She's early isn't she.

PS No they're not going in to two are they.

PC Arn't they.

PS No they're early one's going in at two, late meals at three.

WT Unit seven is it.

PC Yes.

PS I've got the next one have I Ron.

PC Forty two mine was. (Making up logs one hour behind).

WT Unit four going to Harvy's Club someone's had a large amount of money stolen.

0143 PS Domestic at Mr. Crow.

PS Gordon number sixteen no number fifteen Park Street, Stoke there's an extra loud party going on could you get someone to ask to turn the noise

WT Street, which Street.

PS Park Street.

WT Park.

PS Yes.

WT Where's that.

PS Stoke it's Unit ten's patch. Perhaps you can get them to turn it down.

WT The complainant lives at fifteen I suppose.

PS Yes don't see the complainant. I've got the name and address of the complainant but don't see them they're elderly.

PS Yes actually the party's at fifteen. Complainant lives next door but don't see her only cause bad feeling. (PS keeping the peace for future?).

PC Make this card up before I forget it. (Keyholder's card).

PC What's Ken doing Gord.

WT A

PC What's Ken doing.

WT I don't know.

PS He's gone to that party.

0156 WT Anybody spoken to a Mr. Manching.

PC There was quite a spate of shoplifters in the logs.

PS Yes I saw that about fifteen or more this afternoon, most of em women.

WT Yes only one shoplifting day to Christmas.

PS We've had that before.

PC Yes there was a steady stream of them. Most in two and three's

so it looks sort of er organised.

WT That's the stolen vehicle isn't it Ron.

WT Ron!

PC What.

WT Uniform delta echo eight hundred hotel.

PC Yes it is (PNC checked).

WT It's in Bridwell Road but there's no petrol in it.

0157 PS Bretonside Chinese again got a little bit of trouble in there, hard to understand em, but doesn't sound like it's a punch up, but they've got trouble there again.

PS You've got the next one Ron haven't you.

PC Yes.

PS Your next I'll take twenty two.

0159 PC Breaking Hortwood Road. Is Jack Simpson down there still.

WT Not heard.

PC - PS Yes looks like a breakers got in. Em had a call from a Mrs. Own 29 Holtwood Road apparently their neighbours at number 22 are away and they've just been over to check the premises and they've come across a busted window there. I'm sure there's a break at this stage. I'll get hold of unit three to have a look. I didn't ask her when she last checked the property, looks like they do it quite regular.

PC - WT Do you know if there's anyone going out.

WT Twelve thirty.

PC - Unit Is the Sergeant around anywhere. If you could mention to him. We don't want to clobber two one, to do break statements with him, that's all we've got out. Perhaps you can have a word with Dave Price and come to some arrangement as to who can pop up there with you.

PS That noisy party sorted out Gordon.

WT They haven't come back yet Serge.

PS That alright I only wanted to write it up. Yer he's busy that's right. There's no rush I just thought you had the answer.

PC Tell unit ten I've been able to raise the George Street keyholder and he'll be there shortly.

PC - WT Who've you got out at Devonport Gordon, what's unit eight on.

PC Yes will you, hang on another niner.

PC - WT Have you got a unit which can look down North Road West there's a bloke called PETERSON at the TK there. There's about fifty to sixty yobos milling up and down there, causing mayhem, he's rather scared of the situation.

WT Ron. Is it the one's that were up the Railway Station earlier.

PC Possibly.

PNC I've got a twenty year old suicidal making for the Tamar Bridge from Wolseley Road.

PNC It seems quite serious he's made a couple of serious attempts.

PC What's nine doing Gordon do we know.

WT Nothing I know of.

WT Ron.

PC Yes.

WT That U.I.D. 800 Hotel could you confirm that the owner lives at 4 - 9 Winfield Road.

PC Yeah he does.

WT O.K. I'll let unit seven know.

PC - WTE Can you get someone to contact Mr. Harvey he's at Gifford Tee Road, Junction Trelawney Road, Smack on the boundary but Devonport are stretched. There's a mini just been dumped there by four or five lads, he strongly suspects it's been nicked.

PC The lads are fairly nearby.

PS Any uncommitted vehicle City Centre.

PS Clive can you get anyone to go to a fight Raleigh Street. I've got two one at Mutley Plain if your stretched.

PS Got anyone to go over.

WT Yes unit two.

WT He's on way.

PS - PNC Tell two one not required.

PS Keeping two one on the Plain as back up.

PS Now is unit eight clear or waht about these erh em.

WT He wants TAS for that break.

PS Leave it now Gord we'll do it in a minute when it quiets down.

WT If I don't do it now I'll forget anyway he's waiting there.

PS Get XX to do it for you. What vehicle is it.

WT What Sarge. it's not a vehicle it's a break at 57 Briardale Road.

PS Oh is it, Yes yes so it is. Fair enough.

0210 PS How are getting on Ron.

PC I'm up to 0109.

PS Well I've got the next two that's twenty two and twenty three and twenty four.

PC Yes I'll have twenty five and twenty six.

PS Can you get unit nine to look up Tamar Bridge we've had a report from a Mrs. Hammond lives Wolseley Road to say that her twenty year old son has gone up the bridge threatening to commit suicide. He's made two previous attempts at suicide. Got a red shirt. (This was someone delayed).

WT What's his name.

PNC She didn't give me his name.

WT Did they find that matelot who jumped off the bridge.

PS No I don't think they ever did.

WT Unit nine no reply I think they may have gone into the meal break Serge.

PS Three o'clock they should be. Well the only other one is unit ten. They came up just now didn't they.

WT What about three five what meal did they have.

PS Well I should try to call them then.

WT They've done bugger all tonight. At least I haven't used them.

PS No we haven't.
(A unit was overlooked in the general high activity).

WT No.

PS Get two one to go out there.

(The protocols dried up over the last few hours because the staff were working flat out. In addition the updating message between officers dried up as they each concentrated on their own individual jobs. This essentially meant that co-ordination was greatly reduced. Also there was a tendency to write logs before sending resourced in order to try to keep

APPENDIX V

Example of Operator Comments and
Experimenter's Notes and Evaluation

Faint, illegible text, possibly bleed-through from the reverse side of the page.

This short section of verbal protocols was taken during the early part of the survey when the emphasis was on specific incidents as they occurred.

Summary of Operator Statements

Experimenter's Notes

999 Accident 1555	Got to rely on memory. No availability board.	Suggestion that the operator is considering the information re. resource disposition when making allocation decision. He seems to infer that his memory may not be accurate.
	Keep them on the line or they'll put the phone down.	Operator is viewing the link as fragile. He must have a mental model of the caller as being likely to terminate the call before full details have been obtained. Also he seems to feel that there are methods that he can employ to lessen the possibility of a premature termination.
	Think we know where they are. 'Send police up here'	The caller does not have an accurate ideal of the location of the police op. Therefore their conversational are not in phase. Presumably the ops are aware of this.
	Told 'em, 'don't move the cars'. Got to give them them advice on what to do.	Obviously the op has taken a classificatory decision and the initial action for his plan to give instructions implies a view of the caller as needing this advice.
	No injuries but roads blocked.	Taken as an indication of seriousness (voice inflection is involved here as well). Also there must be sub-plans when roads are blocked or there are injuries.
Dispute 1624	It's a boy complaining of assault. It's 2-2's, isn't it. Don't know that address. Is it Torquay? He didn't sound 15. That kid was never 15.	During call. Area Op's considering allocation early in the call. He checks addresses against memory. Doesn't uncritically accept given information. Evaluates a sort of credence factor for caller. Credence factor does seem to affect actions. (On paper this was a serious assault but the op simply did not believe the information given). Op has mental image of the effects that an inflammatory statement might have and he is playing down the incident in line with his as yet unsubtracted view that there was 'nothing in it' i.e. he suspected a hoax.
	If I had had a quick ref it would have helped.	RESULT Hoax call

1643
Sudden
Death

Must tell Sir.
Sudden Death.
Park owner has the deceased's dog.

1740

Sotheby Bearn again.
It's opposite the Lav Courts.
Isn't it in higher Union Stree?
Got problems with the keyholders.

1749
999

It's an RTA - serious.
Head on - fast stretch of road out there.
Caller doesn't know if anyone injured.
Will need Fire Brigade.

PS
WT

I'll call them.
What's going on - could be bad.

WT

Set up a diversion the road's blocked.
Sus fatal one dead one critical.
Will need TAS. Can you give him directions.

PS
WT

There's enough there, keep one on the air.
Can't contact anyone at scene, only a unit that's on diversion.

Op

I knew it was a nasty one. I suppose from the description and what I know of the road, and previous incidents. They're often bad on that stretch. The caller was quite calm, not at all excited.

Classified as serious and to be dealt with by police

Recalling previous false alarms. Seems to indicate a low probability of it being a genuine call. Laid down response BUT this has to be modified because most of the cards are unrealistic. This factor gives de facto flexibility. The decisions involving this flexibility may be affected by the view that it's likely to be a false alarm. Op recalls that there are keyholder problems with these premises.

From his past experience, op came to definite conclusion on very little evidence (and ACTED on it). Only knew the location and that it was 'head-on'. Had definite views about accidents on that (fast) stretch of road and also likely effects of head-on collisions.
Sergeant monitored op's reactions and above exchange made decision re. own action. Op passed info to W/T. Then commenced log. He then lost touch with deployments.

Info received from source at scene. Agreed extent of diversion with units at scene. On confirmation of the serious nature of incident decided that TAS should be called and realised that directions would be required as the TAS man on duty did not know the locality very well.

PS decided that enough units were at scene to deal. This was without confirmation from the scene.
Realised (from experience?) that there was danger of losing contact with the scene and issued instructions to prevent such an eventuality. Failed - contact lost.

(Post hoc description immediately after initial flurry)
Amplification of how she came to the conclusion that the accident was serious. (Uncannily she had called the Fire Brigade and they were needed to remove bodies and injured - yet calling them as a preventive measure is not normally done. This suggests an accurate evaluation on little evidence. However it is only one incident and could have been lucky.)

1802
Sudden
Death

Do we know about this death? Happened in a
Doctor's surgery. Someone must be dealing.
Happened some time ago.

Control Room very busy. Op must have classified the incident
as one which police would normally deal.
Coupled with this the fact that he did not have knowledge of
the incident (and he presumably thought that he should have
known). This led him to conclude that a search for a report was
appropriate.

2027

Armed man - nuttier!
Know her, she's always on.
Got to cover ourselves, she's got an armed man
in her garden this time.

Serious complaint - caller veracity evaluated - resultant view -
non-serious.
Used previous knowledge.
Execute minimum resource plan aimed at goal of covering against
possible complaints rather than dealing with complaint acvity.
(Sent one unarmed Panda Driver.)
Must have a view of the type of voice (tone?).
Suggests.

Her voice told me she was one of our queer ones.
They have a pattern.
I don't know her personally but she's known by
the other operators and the men on the beat.

Result - no trace.

2046

First necessary details, who, then name and
address in case we miss him.

Suspect persons loitering near hotel.
Op has strategy of the type of the information, and the sequence
of data needed. He also gave a reason.

Need a short summary. This was Suspect Persons.
His attitude told me it was urgent - wanted me
to get there.

Evaluated caller. This time found that he was responsible and
therefore took immediate action based on presumption that report
was fully accurate.

He sounded sensible - no nonsense.

2301

Prowler - Warberry Road.
Sensible bloke, can take notice.
Need 2 cars, double crewed if we can.
I would send incident car and a dog.

Evaluation of witness credibility
Evaluated the witness credibility as part of the evidence
collection.
Extracted action plan based upon conclusion and amended ideal plan
upon correct resource availability.

APPENDIX VI

Simplified Explanation of Kelly's Construct Theory

Fundamental Postulate and Elaborative Corollaries

Corollaries:

1. Basic

2. Elongation

3. Equivalence

4. Cycle

5. Invariant

6. Postulate

7. Cycle

8. Invariant

9. Postulate

10. Cycle

A SIMPLIFIED EXPLANATION OF KELLY'S CONSTRUCT THEORY

Kelly's Construct Theory can be thought almost as a form of semantic navigation.

If we use the analogy of a map reading exercise one can see immediately that it is possible to position oneself with relation to the world by the use of two axes, longitude and latitude. By knowing our northerly and easterly values an accurate positioning of any element (in this case ourselves) can easily be obtained.

The relative position of another object can be obtained with reference to the same two axes (northerly and easterly).

By using this fairly simple two axes system, it is possible to position any number of objects in a geographical space.

Cognitive Space

When we are trying to consider the relative positions of two different elements we are working in something which may be called cognitive space. In this particular case we can use a similar system to that previously described in the navigational area. Instead of the axes being northerly and easterly they can be something which is semantically meaningful, such as 'degree of goodness', or 'degree of cleverness'. If, for instance, we had a map whose axes were 'goodness' and 'cleverness' it might well be possible to locate a number of different individuals with whom we are acquainted within this 'cognitive space'.

This essentially is the philosophy followed by Kelly's Construct Theory. Normally the axes instead of being simple descriptors such as 'goodness' are bi-polar axes such as 'good-bad', however, this is only a labelling difference and has no affect on the basic concept.

In the analogy that I have employed we of course only used two axes. A major difference in Kelly's system is that a particular element, be it a person or concept, is often considered in relation to many more than two axes. It is very difficult for the human mind to conceive of any more than three dimensions at one time because such an idea is never encountered in the physical world and, of course, it cannot be easily drawn. However, the concept of many dimensions (usually referred to as 'n' dimensions) is well known in mathematics and frequently used in all sorts of complex mathematical and statistical problems. Although it is not possible for us to draw 'n' dimensions of cognitive space, it is possible for us at least in embryo to understand the concept. More importantly it is certainly possible for us to carry out calculations in 'n' dimensions of cognitive space and this is essentially what our computer program does.

By using a large number of these navigational axes it is possible to fix extremely accurately the otherwise slippery and difficult concepts in cognitive psychology.

The following is based upon BANNISTER and FRANSELLA (1971)

Fundamental Postulate

A person's processes are psychologically channelized by the ways in which he anticipates events.

This implies many things - it implies that man is not reacting to the past so much as reaching out for the future; it implies that a man checks how much sense he has made of the world by seeing how well his 'sense' enables him to anticipate it; and it implies that a particular man is the kind of sense he makes of the world. The word 'anticipates' is nicely chosen because it links the idea of prediction with the idea of reaching out and beating the world to the punch.

The fundamental postulate is Kelly's attempt to state what man is in business for. Just as other theories have assumed that man is in business to process information or to adapt to his environment or to reduce his drives or to obtain wish-fulfillment, so Kelly stresses that man is in business to make sense out of his world and to test the sense he has made in terms of its predictive capacity. Thus the model man of construct theory is 'man the scientist'. This picture of man as striving for personal meaning is elaborated in the following corollaries.

Construction Corollary: a person anticipates events by construing their replications.

The dinner we ate yesterday is not the same dinner that we ate today, but our use of the construct dinner is an explicit

recognition of some sameness, some replication, which we wish to affirm. Thus, basic to our making sense of our world and of our lives, is our continual detection of repeated themes, our categorising of these themes and our segmenting of our world in terms of them. Kelly often used the analogy of listening to music to illustrate this corollary, because it allowed him to stress that the replication is something which emerges because of our interpretation. Each time we hear a melody played in a piece of music, different instruments may be used, there may be a change of key, there may be a change of rhythm and so forth, but still we recognise the replicated theme. At a very basic level the themes we recognise, the samenesses we detect, can be 'concrete', as in our noting new examples daily of pencils and sneezes and shoelaces, or they may be very complex, subtle and highly personal replications, as when we realise that once again we have met defeat or affectation or truth.

Kelly is here aiming to make every assumption clear, to reach down to the obvious which must be stated if a theory is to be built up in an explicit manner. Thus, our capacity to recognise replicated themes is an explicit assumption of the idea of conditioning. Yet it is not dealt with in conditioning experiments because the experimenter gives the status of 'reality' to the generally recognised replication on which he bases his investigation. For example, we might attempt to condition an eyeblink response to the stimulus 'prime number' by blowing a puff of air into the eye of the subject every time a prime number is flashed on a screen, but not when a non-prime number is flashed on a

screen. Whether we succeed in establishing such a conditioned response will depend on whether the construct prime number versus non-prime number exists in the personal construct system of our subject. If it does not, he might condition to replications that he can perceive. For example, he might establish a conditioned response to odd numbers because prime numbers, bar two, are always odd. (The experience for him would then have become an intermittent reinforcement study.) But no matter how many conditioning trials he experiences, the presentation of yet a new prime number will not elicit the conditioned response. The presentation of the same prime number many times might establish a conditioned response to that particular prime number, but not to the replicated theme of primeness.

The fallacy of stimulus-response psychology (and its more sophisticated derivatives) is that a man responds to a stimulus. He responds to what he interprets the stimulus to be and this in turn is a function of the kind of replications (constructs) he has detected in or imposed upon his universe. Thus, Humphrey pointed out that you can condition (by electric shock) a man to withdraw his arm when the note G is played on the piano, but when you play him 'Home Sweet Home' he will not twitch a muscle, although the tune contains the note G fourteen times. Presumably because he construed it as a 'tune' and not as a series of notes.

Individuality Corollary: persons differ from each other in their construction of events.

It could be argued that the fundamental mystery of human psychology is covered by the question "Why is it that two people in exactly the same situation behave in different ways?" The answer is, of course, that they are not in the 'same' situation. Each of us sees our situation through the 'goggles' of our personal construct system. We differ from others in how we perceive and interpret a situation, what we consider important about it, what we consider its implications, the degree to which it is clear or obscure, threatening or promising, sought after or forced upon us. The situation of the two people who are behaving differently is only 'the same' from the point of view of a third person looking at it through his particular personal construct goggles.

Among the many implications of this statement is that when people are said to be similar, it is not necessarily because they have had the same experiences, but that they have placed the same interpretations on the experiences they have had. Two bank clerks may work at adjoining counters and live what are, in terms of concretely accounted stimuli, very 'similar' lives, but they may be entirely unable to make sense out of each other. On the other hand, one of the bank clerks may correspond with an aged missionary working out his life's significance in the jungles of some tropical country. These two may find their exchange of letters full of meaning, because they have basic similarities in their way of construing events. This corollary does not argue that men never

resemble each other in their construing (the later sociality and commonality corollaries cover this) but it does argue that in the final analysis none of us is likely to be a carbon copy of another. Each of us lives in what is ultimately a unique world, because it is uniquely interpreted and thereby uniquely experienced.

Organisation Corollary: each person characteristically evolves, for his convenience in anticipating events, a construction system embracing ordinal relationships between constructs.

The term 'system' in the phrase 'a personal construct system' directly implies that a person's constructs are inter-related and in this corollary Kelly is stressing that the relationship is often one of inclusion or subsuming. For some people the construct traditional jazz versus modern jazz may be subsumed as a subordinate implication of the construct good jazz versus bad jazz and both poles of the construct might be subsumed under the 'music' end of the construct music versus noise. This hierarchical quality of construct systems is what makes our world a manageable place for us. The simple trick of grouping hundreds of ways of making a living under the construct jobs (versus hobbies or versus rest or versus vocations) means that we can then handle a whole range of such subordinate constructions easily. We can offer them to each other, look at their higher, more superordinate implications, add to the category when necessary and so forth. A further way of regarding this corollary and evaluating it is given in the following terms by Bannister.

This pyramidal structure of construct systems seems to serve a variety of purposes in science and in living. For example, if we accept that the more superordinate constructs will have more implications and a wider range of convenience than their subordinate constructs, then 'climbing up our system' may be a way of finding strategies for cross-referring more subordinate constructions which cannot be directly related to each other 'across' the system. Thus the old adage that you can't add horses and cows is nonsense as soon as you climb up the subsystem and subsume them both as farm animals and you can blithely add in hermit crabs if you are prepared to climb up as far as forms of organic life.

Equally you may use the hierarchy as a conflict-resolving process by taking decisions in terms of the most superordinate, relevant construct. For example, for some of us courteous-discourteous may be a subordinate construct to kind-unkind and if this is so, we may in exceptional circumstances decide to be discourteous if we feel that in the long run this is the kindest way to be (say in curtailing a mutually disastrous relationship). However, if that is the way we organise our constructs, then it would not make sense for us to be cruel in order to be courteous. Going down the pyramid if we assume that for us spitting in the spittoon-spitting on the carpet is a subordinate construction (one possible operational definition if you like) of the construct courteous-discourteous then again, in exceptional circumstances (say in culture which has reversed our particular rituals), we may find it makes sense to spit on the carpet in order to be courteous.

Dichotomy Corollary: a person's construction system is composed of a finite number of dichotomous constructs.

Kelly is here arguing that it is more useful to see constructs as having two poles, a pole of affirmation and a negative pole, rather than see them as concepts or categories of a unipolar type. In line with his philosophy of constructive alternativism he is not asserting that constructs are bipolar, and that they are not unipolar. He is merely asserting that we might find it more useful to think about them as if they were bipolar. Most people recognise bipolarity where it has an explicit verbal label to cover it - black versus white, up versus down, nice versus nasty, here versus there, concrete versus abstract, noisy versus quiet, intelligent versus stupid, male versus female and so forth. However, Kelly asserts that even where there is no label readily available for the contrast, we do not affirm without implicitly negating within a context. There would be little point in asserting that 'I am tired' if the contrast assertion of freshness and energy were not implicitly around somewhere to be negated. When we point and say 'That is a chrysanthemum', we are not distinguishing it from every other object in the universe, we are usually contrasting it with some other flower it might have been confused with, i.e. this is what we are doing psychologically, whatever the logicians say we are doing logically.

The idea of bipolarity in constructs also allows us to envisage a variety of relationships between them - they can be correlated or logically inter-related in many ways, whereas concepts can only

either include or exclude one another. There seems a tendency to think of Kelly as an illiberal person who was trying to plead for a black and white world in which there were no shades of grey. In fact, Kelly insisted that constructs could be used in a scalar mode, while still being bipolar in origin. Thus, the famous 'shades of grey' stem from the construct black versus white. It is interesting to note that in terms of choice and decision we invariably break back from scalar modes of construing (which are most useful when we are speculating about and investigating a problem) to bipolar modes of construing. We may spend a long time, if we have to get the piano through the door, in measuring, in most exquisite scalar mode, all kinds of dimensions, but eventually we have to decide that the bloody thing will either go through or it will not.

People sometimes seem to think of constructs as double ended categories with fixed contents. Kelly stressed that they are portable axes of reference. Thus, North-South is a useful distinction but clearly Timbuctoo can be either North or South depending on where you are; the construct is not a 'container' for North 'things' and South 'things'.

Choice Corollary: a person chooses for himself that alternative in a dichotomized construct through which he anticipates the greater possibility for the elaboration of his system.

This is the corollary whereby Kelly tucks the tail of his theoretical snake into its mouth. He thereby creates either a tautology or a complete and integrated theory.

If man is in business to anticipate events and if he does this by developing a personal construct system, then he will move in those directions which seem to him to make most sense, i.e. to elaborate his construct system. Kelly pointed out that the elaboration may take the form of definition (confirming in ever greater detail aspects of experience which have already been fairly actively construed) or extension (reaching out to increase the range of the construct system by exploring new areas that are only very partially understood). It must be stressed, however, that the elaboration is sought in terms of the system as it exists at the time and that the choice corollary does not imply that we always successfully elaborate. We can over-define to a point where we suffer the death of ultimate boredom, circling in a ritual manner around the same area, or we can over-reach the system and suffer death by ultimate chaos. It has been in that sense unscientific. It can be counter-argued that the corollary is testable if we know enough about the structure of a particular individual's system to predict his choices in terms of that system.

Range Corollary: a construct is convenient for the anticipation of a finite range of events only.

This follows from the original assertion that constructs are bipolar and finite in number. Kelly is here stressing that he is not simply refurbishing the old notion of a concept. The concept of 'furniture' as a general abstraction includes tables, chairs, desks, commodes and so forth and contrasts with everything that is not included in the category of furniture. The construct of

'furniture' as used in a particular context would include tables, chairs and so forth as contrasted with say office equipment, or as contrasted with Georgian tables which are to be regarded as objects of art. The whole construct would then exclude sunsets, battleships, acts of heroism and candyfloss which are outside the range of convenience of the construct; they are not subsumed under either pole of it.

Kelly used the term focus of convenience to indicate those things for which a construct was specifically developed. Thus, the construct 'honesty', for some people, has as its focus of convenience keeping your fingers off other people's property and money. The focus of convenience of construct theory is the psychotherapeutic situation. The range of convenience is all those things to which people might eventually find the construct applicable; thus for some people 'honesty' can eventually be used in relation to political honesty, sexual honesty, aesthetic honesty and so forth. In later sections dealing with grid method, it will be seen how the range corollary, along with the dichotomy corollary and others, guides the construction of the instrument, which in its turn, provides operational definitions for some of the constructs of the theory.

Experience Corollary: a person's construction system varies as he successively construes the replication of events.

This is the developmental focus of the theory and obviously relates to the choice corollary. A personal construct system is not

a collection of treasured and guarded hallucinations, it is the person's guide to living. It is the repository of what he has learned, a statement of his intents, the values whereby he lives and the banner under which he fights. A personal construct system is a theory being put to perpetual test. Thus, one man may construe private versus exposed as aligned with safe versus dangerous, and live in these terms until other aspects of his construction system force him to risk the dangers of 'exposure'. If he then does not experience the penalties of 'danger', the link between these constructions may be weakened and that aspect of the system begin to modify. Systems flow and modulate continuously, as do the theories of scientists, but as will be shown in relation to constructs such as 'hostility', we do not modulate invariably or always logically.

Construct systems change in relation to their varying validation fortunes, predictions are sometimes proved correct, sometimes found wanting. This central aspect of the theory has been described by Bannister in the following terms.

The constructions one places upon events are working hypotheses which are about to be put to the test of experience. As our anticipations are hypotheses to be successively revised in the light of the unfolding sequence of events, a construction system undergoes a progressive evolution. The constant revision of personal construct systems is a function of incoming varying validation experience. Constructs are essentially predictive. Thus, when we construe a man as honest rather than dishonest we are essentially predicting that if we lend him

money we shall get it back. When we construe a table as solid rather than liquid we are essentially predicting that if something is placed upon it it will stay 'on the surface' and not 'be submerged'. Constructs are not merely ways of labelling our universe, they are ways of trying to understand and anticipate it. Since every act of construing is simultaneously an act of prediction it follows that every act of construing may have one of three outcomes. The elements (objects, persons or whatever) which we construe as X may turn out to be X and we are validated. The elements may turn out to be the opposite of X and we are invalidated. The elements may turn out to be outside the range of convenience of our construct X-not-X. Thus, when the hopeful young man takes the young lady back to his flat he may construe her as willing rather than unwilling and he may be validated - an affair commences. He may be invalidated - she slaps his face and rings for the police. The element may turn out to be outside the range of convenience of the construct - 'she' turns out to be a transvestite. It is precisely because constructs are essentially predictions that our construct systems are in a continual state of change for each of us. As the evidence comes in we tend to modify the individual construct or parts of our construct system. The modification may be a minor one. We may simply shuffle the element from one pole of the construct to the other. A person we regard as loving behaves nastily and we now proceed to regard him (construe him) as hating. However, we may be wrong so persistently that we have to make some more major alteration, such as dispensing with the construct loving-hating and developing some other construct

to view the element through. Or we may have to modify whole subsystems within our construct system in order to get a truer (more predictive) view of the elements which confront us.

Modulation Corollary: the variation in a person's construction system is limited by the permeability of the constructs within whose range of convenience the variants lie.

Kelly's theory is a theory of change. He argues that man is a 'form of motion' not a static object which is occasionally kicked into movement. However, he is at pains to suggest parameters for change, and the modulation corollary is such a parameter. The construct permeable-impermeable refers to the degree to which a construct can assimilate new elements within its range of convenience, generate new implications. Some constructs are for most of us fairly impermeable - we happily apply fluorescent versus incandescent to sources of light, but rarely find its range of convenience extendable. On the other hand, for most of us a construct such as good versus bad is almost continually extending its range of convenience. When we are faced by a 'new' situation then, if we generally traffick in permeable constructs, we can use them to make sense out of the new events which confront us. If our constructs tend to be impermeable, then we may take pains to make sure that we do not encounter 'new' situations, or else we may force them into the existing system however bad the fit. Both permeable and impermeable constructs are useful in given contexts, but the corollary stresses that one of the dangers of being too precise is that it transfixes one to a particular precision.

Fragmentation Corollary: a person may successively employ a variety of construction subsystems which are inferentially incompatible with each other.

Kelly is here suggesting a further parameter of change - a parameter that suggests that change is not and need not be 'logical' in the simple sense of that term. A construct system is a hierarchy and also a series of subsystems having varying ranges of convenience. Therefore, conclusions about the 'same' series of events can be drawn at levels which are not necessarily consistent with or even related to each other. This is elaborated by Bannister and Mair in the following terms.

Although the presence of permeable constructs may allow the variation of aspects of a person's construct system to accommodate new evidence, this does not mean that a person's system will be completely logically related, with every construct being implied by every other one. The way a person will behave today cannot necessarily be inferred from the way he behaved yesterday. A parent may kiss and hug a child at one moment, smack him a little later and shortly afterwards ignore him when he insists on showing off by excessive chattering. To the casual observer, it may seem that one response could not be anticipated from the previous one and that grossly inconsistent behaviour and constructions were being adopted by the parent. This may be the case, but need not be so. Just because different constructions do not seem consistent with each other and one cannot be inferred from the other directly, it does not

mean that no consistency exists for the person involved or for some other observer of the scene. When, for example, the parent's superordinate concerning love and training are considered, some thread of consistency in the various actions may be noted.

Commonality Corollary: to the extent that one person employs a construction of experience which is similar to that employed by another, his processes are psychologically similar to those of the other person.

This is the converse of the individuality corollary and stresses that people are not similar because they have experienced similar events; nor for that matter similar because they appear, along some limited time line, to be manifesting similar behaviour; nor yet again similar because they utter the same verbal labels. People are similar because they construe, i.e. discriminate, interpret, see the implications of events, in similar ways. They are similar in so far as, and with respect to, events which have the same meaning for them. This is an interesting corollary in its implications for experimental psychology, since it implies that we do not need to put people into the 'same' experimental situation in order to find out whether they are similar or different. People in the 'same' situation may be behaving similarly for the time being, but attaching a very different significance to the events they are encountering and to their own behaviour. Any long term predictions we make as to the continuance of their identity, on the basis of this temporary behavioural similarity, are likely to lead us very

much astray. On the other hand to the degree that we can explore and evaluate the personal construct systems of two people, we may be able to determine similarities between them, having observed them in apparently different situations.

Sociality Corollary: to the extent that one person construes the construction processes of another, he may play a role in a social process involving the other person.

This is the key corollary in that it is Kelly's attempt to explain why we bother with each other at all. It insists that interpersonal interaction is in terms of each person's understanding of the other. This is quite different from assuming that people can only interact when they have similar construction systems or are in some sense similar people. An adult may interact for a long time with a child and be very much playing a role in a social process with that child. This does not imply that his construct system is the same as the child's, only that this construct system gives him a meaningful picture of the child's construct system. Nor does it make role a purely social construct, that is, see it as the acting out of a dialogue written for the two persons by the society in which they have been brought up. It sees each of us as attempting, in relation to other people, be be psychologists, whether we be good, bad or indifferent psychologists. In terms of our ideas about the other person's construct system we may seek to inspire the other person, confuse him, amuse him, change him, win his affection, help him to pass the time of day or defeat him. But in all these and many other ways we are playing a role in a social process with him.

APPENDIX VII

Time on Message Logs - Surface Structure Errors

Message Log	Time	Surface Structure Errors
1	00:00:00	0
2	00:00:01	0
3	00:00:02	0
4	00:00:03	0
5	00:00:04	0
6	00:00:05	0
7	00:00:06	0
8	00:00:07	0
9	00:00:08	0
10	00:00:09	0
11	00:00:10	0
12	00:00:11	0
13	00:00:12	0
14	00:00:13	0
15	00:00:14	0
16	00:00:15	0
17	00:00:16	0
18	00:00:17	0
19	00:00:18	0
20	00:00:19	0
21	00:00:20	0
22	00:00:21	0
23	00:00:22	0
24	00:00:23	0
25	00:00:24	0
26	00:00:25	0
27	00:00:26	0
28	00:00:27	0
29	00:00:28	0
30	00:00:29	0
31	00:00:30	0
32	00:00:31	0
33	00:00:32	0
34	00:00:33	0
35	00:00:34	0
36	00:00:35	0
37	00:00:36	0
38	00:00:37	0
39	00:00:38	0
40	00:00:39	0
41	00:00:40	0
42	00:00:41	0
43	00:00:42	0
44	00:00:43	0
45	00:00:44	0
46	00:00:45	0
47	00:00:46	0
48	00:00:47	0
49	00:00:48	0
50	00:00:49	0
51	00:00:50	0
52	00:00:51	0
53	00:00:52	0
54	00:00:53	0
55	00:00:54	0
56	00:00:55	0
57	00:00:56	0
58	00:00:57	0
59	00:00:58	0
60	00:00:59	0
61	00:01:00	0
62	00:01:01	0
63	00:01:02	0
64	00:01:03	0
65	00:01:04	0
66	00:01:05	0
67	00:01:06	0
68	00:01:07	0
69	00:01:08	0
70	00:01:09	0
71	00:01:10	0
72	00:01:11	0
73	00:01:12	0
74	00:01:13	0
75	00:01:14	0
76	00:01:15	0
77	00:01:16	0
78	00:01:17	0
79	00:01:18	0
80	00:01:19	0
81	00:01:20	0
82	00:01:21	0
83	00:01:22	0
84	00:01:23	0
85	00:01:24	0
86	00:01:25	0
87	00:01:26	0
88	00:01:27	0
89	00:01:28	0
90	00:01:29	0
91	00:01:30	0
92	00:01:31	0
93	00:01:32	0
94	00:01:33	0
95	00:01:34	0
96	00:01:35	0
97	00:01:36	0
98	00:01:37	0
99	00:01:38	0
100	00:01:39	0
101	00:01:40	0
102	00:01:41	0
103	00:01:42	0
104	00:01:43	0
105	00:01:44	0
106	00:01:45	0
107	00:01:46	0
108	00:01:47	0
109	00:01:48	0
110	00:01:49	0
111	00:01:50	0
112	00:01:51	0
113	00:01:52	0
114	00:01:53	0
115	00:01:54	0
116	00:01:55	0
117	00:01:56	0
118	00:01:57	0
119	00:01:58	0
120	00:01:59	0
121	00:02:00	0
122	00:02:01	0
123	00:02:02	0
124	00:02:03	0
125	00:02:04	0
126	00:02:05	0
127	00:02:06	0
128	00:02:07	0
129	00:02:08	0
130	00:02:09	0
131	00:02:10	0
132	00:02:11	0
133	00:02:12	0
134	00:02:13	0
135	00:02:14	0
136	00:02:15	0
137	00:02:16	0
138	00:02:17	0
139	00:02:18	0
140	00:02:19	0
141	00:02:20	0
142	00:02:21	0
143	00:02:22	0
144	00:02:23	0
145	00:02:24	0
146	00:02:25	0
147	00:02:26	0
148	00:02:27	0
149	00:02:28	0
150	00:02:29	0
151	00:02:30	0
152	00:02:31	0
153	00:02:32	0
154	00:02:33	0
155	00:02:34	0
156	00:02:35	0
157	00:02:36	0
158	00:02:37	0
159	00:02:38	0
160	00:02:39	0
161	00:02:40	0
162	00:02:41	0
163	00:02:42	0
164	00:02:43	0
165	00:02:44	0
166	00:02:45	0
167	00:02:46	0
168	00:02:47	0
169	00:02:48	0
170	00:02:49	0
171	00:02:50	0
172	00:02:51	0
173	00:02:52	0
174	00:02:53	0
175	00:02:54	0
176	00:02:55	0
177	00:02:56	0
178	00:02:57	0
179	00:02:58	0
180	00:02:59	0
181	00:03:00	0
182	00:03:01	0
183	00:03:02	0
184	00:03:03	0
185	00:03:04	0
186	00:03:05	0
187	00:03:06	0
188	00:03:07	0
189	00:03:08	0
190	00:03:09	0
191	00:03:10	0
192	00:03:11	0
193	00:03:12	0
194	00:03:13	0
195	00:03:14	0
196	00:03:15	0
197	00:03:16	0
198	00:03:17	0
199	00:03:18	0
200	00:03:19	0
201	00:03:20	0
202	00:03:21	0
203	00:03:22	0
204	00:03:23	0
205	00:03:24	0
206	00:03:25	0
207	00:03:26	0
208	00:03:27	0
209	00:03:28	0
210	00:03:29	0
211	00:03:30	0
212	00:03:31	0
213	00:03:32	0
214	00:03:33	0
215	00:03:34	0
216	00:03:35	0
217	00:03:36	0
218	00:03:37	0
219	00:03:38	0
220	00:03:39	0
221	00:03:40	0
222	00:03:41	0
223	00:03:42	0
224	00:03:43	0
225	00:03:44	0
226	00:03:45	0
227	00:03:46	0
228	00:03:47	0
229	00:03:48	0
230	00:03:49	0
231	00:03:50	0
232	00:03:51	0
233	00:03:52	0
234	00:03:53	0
235	00:03:54	0
236	00:03:55	0
237	00:03:56	0
238	00:03:57	0
239	00:03:58	0
240	00:03:59	0
241	00:04:00	0
242	00:04:01	0
243	00:04:02	0
244	00:04:03	0
245	00:04:04	0
246	00:04:05	0
247	00:04:06	0
248	00:04:07	0
249	00:04:08	0
250	00:04:09	0
251	00:04:10	0
252	00:04:11	0
253	00:04:12	0
254	00:04:13	0
255	00:04:14	0
256	00:04:15	0
257	00:04:16	0
258	00:04:17	0
259	00:04:18	0
260	00:04:19	0
261	00:04:20	0
262	00:04:21	0
263	00:04:22	0
264	00:04:23	0
265	00:04:24	0
266	00:04:25	0
267	00:04:26	0
268	00:04:27	0
269	00:04:28	0
270	00:04:29	0
271	00:04:30	0
272	00:04:31	0
273	00:04:32	0
274	00:04:33	0
275	00:04:34	0
276	00:04:35	0
277	00:04:36	0
278	00:04:37	0
279	00:04:38	0
280	00:04:39	0
281	00:04:40	0
282	00:04:41	0
283	00:04:42	0
284	00:04:43	0
285	00:04:44	0
286	00:04:45	0
287	00:04:46	0
288	00:04:47	0
289	00:04:48	0
290	00:04:49	0
291	00:04:50	0
292	00:04:51	0
293	00:04:52	0
294	00:04:53	0
295	00:04:54	0
296	00:04:55	0
297	00:04:56	0
298	00:04:57	0
299	00:04:58	0
300	00:04:59	0
301	00:05:00	0

APPENDIX VII

TIME ON MESSAGE LOGS - SURFACE STRUCTURE ERRORS

This appendix describes an evaluation of the accuracy of timing (Time of Report) on the Message Logs. The survey is an extension of the surface structure analysis of Chapter 12.

The following is a histogram illustrating the minutes past each hour which were included in the 'receipt of message time' on a sample of Message Logs. The sample was obtained from the general Message Survey (Chapter 4) and comprised approximately 24,000 Logs of Emergency Telephone and '999' calls received in Communications Rooms.

MINUTES PAST THE HOUR

THE PERCENTAGE OF INCIDENTS RECORDED FOR EACH MINUTE PAST THE HOUR - AN INDICATION OF TIMING ACCURACY BY OPERATORS

Minutes Past Hour	Percentage
00	5.23 PCT
01	1.06 PCT
02	1.07 PCT
03	1.03 PCT
04	1.35 PCT
05	2.59 PCT
06	1.11 PCT
07	1.32 PCT
08	1.14 PCT
09	1.58 PCT
10	4.57 PCT
11	0.63 PCT
12	1.31 PCT
13	1.05 PCT
14	1.05 PCT
15	4.59 PCT
16	0.92 PCT
17	1.36 PCT
18	0.92 PCT
19	0.74 PCT
20	4.57 PCT
21	1.50 PCT
22	1.52 PCT
23	1.41 PCT
24	1.67 PCT
25	4.22 PCT
26	1.19 PCT
27	0.95 PCT
28	0.95 PCT
29	0.79 PCT
30	5.44 PCT
31	1.06 PCT
32	1.10 PCT
33	0.82 PCT
34	0.95 PCT
35	3.54 PCT
36	1.05 PCT
37	1.98 PCT
38	0.70 PCT
39	1.69 PCT
40	4.20 PCT
41	1.03 PCT
42	1.11 PCT
43	0.95 PCT
44	0.69 PCT
45	4.70 PCT
46	1.00 PCT
47	1.29 PCT
48	0.77 PCT
49	0.69 PCT
50	5.36 PCT
51	0.50 PCT
52	1.03 PCT
53	0.92 PCT
54	1.00 PCT
55	3.25 PCT
56	0.98 PCT
57	1.03 PCT
58	1.03 PCT
59	0.71 PCT

It is probably reasonable to presume that messages are evenly distributed throughout the minutes of the hour. Obviously callers do not await exact quarters of the hour (or multiples of 5 minutes) to report burglaries, robberies or even domestics. If this presumption is true then for each minute there should be recorded 1.67% of the total workload (100/60).

It is likely that the rounding tendencies shown in the histogram are due to operator error. This situation will disappear with the advent of a Computer System as the time will at that point be automatically inserted from the system clock.

