HISTORY OF THE 999 SYSTEM AND FIRE BRIGADES

Before automatic exchanges the public telephone system was based on large numbers of local manually operated telephone exchanges, many of which were found in local tradesmen's premises manned on a "sleeping watch" basis by the occupier.

All calls, local or long distance, were connected manually by the exchange operators, since automatic dialling was then in its infancy. At that time Fire Brigades were also completely decentralised (organised in the form of local units) and created few communication problems. In cases of emergency subscribers called the local exchange , where upon the operator connected them to a local point for the receipt of the emergency calls. There was little if any need for the co-ordination of communications planning over a wide area.

Local arrangements for the receipt of emergency calls varied enormously, and little was done to improve them until late into the life of the National Fire Service, when the introduction of simple remote control facilities made it practicable to achieve a limited amount of centralisation.

As the conversion of manual exchanges to automatic exchanges occurred it played its part in forcing Fire Authorities to make alternative arrangements where previously local telephone exchange staff had undertaken the acceptance of the emergency call and the operation of local call out systems.

Telephone manager's areas were divided into groups of telephone exchanges, all exchanges in each group being connected either directly or indirectly to the Auto manual parent exchange. These were some times known as Auto Manual Centres AMC for short. Exchanges in the groups could be manual or automatic, but none could dial past the parent exchange. Any one of the exchanges which had a ' 999' emergency calling facility could route an emergency caller to the AMC where an operator would connect the caller to the appropriate emergency service.

WHY 999

The 999 system came about via the Metropolitan Police in London as they found that their Police Stations were being overrun either by visitors to the station alerting them to emergency situations or trying to phone them in the growing trend of using the new invention, the telephone. Not every one could remember or knew the telephone number of the local Police Station. In November of 1927 the general public in London were advised " if you have an emergency dial 0". When the operators answers ask for the service you require. The Metropolitan Police maintained this service till 1934 then they introduced their Information Room with the famous number of Whitehall 1212. Where all emergency calls ended up. Emergency calls via telephone kept increasing and telephone operators were unable to identify emergency calls from other operator service calls.

As is normal a disaster of some description was required to prompt government action. In November of 1935 a fire occurred in London in which five people died, in the inquiry which followed it became apparent that a system was required that alerted telephone operators to emergency calls. A parliamentary Committee called the Belgrave Committee examined the problems and set up various experiments in London. A great deal of discussion took place between the Home Office, the Police and Post Office. It was decided not to use 111 as this number can be dialled by phones which are faulty. 12 was not a good idea as at that time any one wanting a number on the 12 exchange would be barred because of the emergency calls. The same could be said for 222, this would have closed a big exchange in London and that could not happen.

999 was used because the numbers could be remembered easily, that they were all at the same end of the dial. It was relatively simple to convert coin boxes to accept 999 calls with out charge. The 999 system open in London in July 1937, it was 1938 before it reached Glasgow. It was the first service of its type in the world.

TODAY

There are two company's that look after the 999 telephone system, British Telecom and Cable & Wireless..

The AMCs belonging to the GPO of yesteryear have been replaced by 15 Operator Assistance Centres (OAC) of British Telecom of today. Nation-wide these handle approximately 21 million emergency calls a year. This figure includes 6 million 999 calls made by mobile phones. It is anticipated that calls from mobile phones will

grow to 12 million by the year 2000. These figures are quoted in a BT document issued to Emergency Services in 1996.

BT receive 33,000 calls each week mostly due to children playing and misdials.

Cable & Wireless have three OACs and they dealt with 3 million emergency calls in 1996.

HOW ARE CALLS CONNECTED

When a caller dials 999 they are connected to one of the 15 OACs. In 99% of cases the telephone number being used will automatically display to the BT Operator, ALSO showing the address to which the telephone number has been registered. The system used by BT will then show the operator what numbers to be used to connect this caller to the Emergency Services from this telephone user area. The actual handling time of a BT operator on a typical 999 call is around 8 seconds. The BT operator will stay on the line with the emergency call until that caller is connected to the emergency service and is giving details. All Emergency calls are tape recorded by BT as well as being logged on a call print out system. So should the call be cut off for what ever reason the Emergency Service can obtain the name address from where the call originated from very quickly indeed.

Cable & Wireless on similar lines to BT however they only have three OACs who deal with Telephones and Mobile phones.

British Telecom and Cable & Wireless are provided with an agreed list of ex directory telephone numbers to use for emergency calls to the Emergency Services, there are generally three numbers provided, the third being the next nearest control room which the Emergency Service has agreed could handle its call in the event of the lines being busy or that control room being evacuated for an emergency situation of its own.

VERIFICATION OF EMERGENCY CALLS

Verification of emergency calls is required when we arrive at an address and there is no sign of an incident. By double checking the incident details taken by Fire Control and getting in touch with the OAC to check the call details we can see if we are in the right area. Crews will spend sometime looking before committing themselves to sending a stop message.

ADDITIONAL EMERGENCY CODE 112

European Community countries are gradually introducing a common emergency code, 112 to work alongside existing national codes. There only 180 genuine 112 emergency calls a week.

MOBILE TELEPHONES

The mobile telephone network covers Britain from over 3000 aerial sites. They generated 6 million emergency calls (1996 figure) and this figure is expected to double by the year 2000.

Mobile phones use radio waves to work, when you dial a number and send it, the signal is pickup by the nearest aerial site which provides the strongest signal to send it on its way.

Mobile telephone networks have three Operator Assistance Centres, Blackburn, Newcastle and Inverness. The BT operators screen displays the callers telephone number and the zone code which identifies the base station and the network used. The system then automatically selects and displays a list of connect to numbers for the correct Emergency Control room that covers that zone area.

Base station radio reception areas cannot be sharply defined or matched exactly to County Boundary's. Therefore a small amount of calls will originate from outside of our area. There are several reasons for this:

1 The caller is on the move and could delay reporting what they have seen.

2 A distant base station sometimes provides a stronger radio path.

3 The caller could be within the shadow of a hill or large building.

4 Cellular signals can travel long distances in certain weather conditions

5 The nearest base station may be fully occupied with calls.

You should be aware that calls could come for almost anywhere via a cellular telephone and many callers may not know the area that they are calling from.

VERIFICATION OF MOBILE PHONES

Unlike landline telephones, mobile phones cannot identify exactly where a 999 call was made. It can tell you the base station used, but that can be some considerable distance away from where the help is needed. Generally speaking verification of mobile phone calls are not of help to us.

OTHER USERS OF 999

Please be aware that there are people using the 999 system that were denied in the past. People with special needs now have the facility afforded them. The deaf and those with speech difficulties can use TYPETALK. Typetalk is a system run by the Royal Institute for the Deaf and funded by BT. Their exchange is in Liverpool. Operators receive text messages from the caller and speak on the callers behalf to where ever the deaf person needs to communicate with. For 999 calls the call will be extended to the nearest Emergency Control room for the service that the deaf person needs to communicate with.

There are also various items of speech simulators to help those who have difficulty talking. A silent line may not be a non speaker but some one who is setting up their string of words for you to listen to. Be patient and try and give them the time they need to communicate with you.