

125. The ultimate conclusion is that far from maintaining its place as the nerve centre of the most important detective effort in history the Millgarth Major Incident Room became sadly inefficient and had the direct effect of frustrating the work of senior investigating officers and junior detectives alike.

FIGURE 7

Total number of persons in the nominal index (B ref)	267,962
House to House inquiries (E ref)	33,719
Total number of actions	115,297
Statement total (A ref)	30,926
Total vehicle sightings in "red light areas"	5,468,514
Cross area sightings	21,231
Triple area sightings	1,223
Total vehicle inquiries	158,206

Additionally, Incident Rooms in Sunderland and Durham were involved in a further 37,799 actions.

(ii) The Cross Area Sighting Inquiry

126. Prior to the murder of Whitaker (4/5 April 1979) Sutcliffe's victims were predominantly, but not entirely, prostitutes. It was reasonably believed, by the investigating officers, that prostitute victims were picked up in "red-light" districts by the murderer who was a "punter" (a prostitute's client) who regularly frequented known prostitute areas in a vehicle.

127. Following the murder of Jordan, in Manchester, an intelligence operation was mounted in the police areas of West Yorkshire, South Yorkshire, Greater Manchester and Humberside to gather information about prostitutes and their associates, the areas where they solicited and the places to which they took their customers. Efforts were also made to identify regular punters by recording their vehicle registration numbers. The scale of the problem was far larger than had been imagined and this was met, in West Yorkshire, by the issue of pocket tape recorders, the tape recordings from which were stored against the eventuality of another murder, when a list of vehicle registration numbers would be available for checking. Other difficulties encountered included the presence of large numbers of motorists who drove through "red-light" districts en route to other destinations. This problem was particularly evident in Bradford.

128. Consequent to an approach to the Police Scientific Development Branch (PSDB) by the West Yorkshire Police, a study was undertaken by PSDB, the Police Research Services Unit (PRSU) and the Police National Computer Unit (PNCU). Resulting from this study was the decision to store the vehicle surveillance data on the Police National Computer (PNC). No change was recommended in respect of the nominal index which was established in the main Ripper Incident Room in Leeds. The scheme adopted was for the computer to print out a record of any vehicle which was sighted in two different prostitute areas and, from this, the system was called "The Cross Area Sighting Inquiry." It was also possible to retrieve data relating to particular vehicles in particular areas and to search the records by make and description of vehicle. All these facilities, which were available from the computer, became known as the "Punters' Index."

129. The system consisted of

1. The recording of vehicle registration numbers on to tape with date and time interjected at regular intervals.
2. The transcription of this to a handwritten list which was then
3. Entered in the computer store via a terminal keyboard. Although the date and approximate time of sightings were transcribed on to the handwritten list, these were not entered into the computer store but the time of input via the terminal keyboard was automatically entered. Whilst the significance of this recorded time was well understood by the system supervisors, it must have created some confusion in the minds of operational detectives carrying out inquiries.

4. Once a vehicle had been input into the computer as having been sighted in two different areas it was automatically printed out as a "Cross Area Sighting". Subsequent appearances of the same vehicle in the same areas did not result in additional print-outs.

130. The system achieved the objective of producing details of vehicles seen in prostitute areas but a lack of detailed understanding of the system and its capabilities, particularly in relation to descriptive searches, was a serious limitation. Since a joint study by PSDB, PNCU, and PRSU, had recommended the appointment of a senior police officer with computer experience, to the investigation team, it is regrettable that this recommendation was not taken up. Had it been so perhaps the computer system might have been used to the full extent of its capabilities.

131. Initially the computer print-out was in the form of a list of vehicle registration numbers from which a separate computer search was made for owners' names. This need for a separate search for vehicle owners' names produced a bottleneck in the system. Thereafter although owners' names were automatically printed out with registration numbers, the facility was never developed to search the "Punters' Index" by vehicle owners' names. ie the computer could not answer the question "What car(s) owned by Peter William Sutcliffe have been sighted?".

132. The system began operation on the 19th June 1978. Observations were kept from 26 points in the "red-light" districts of Leeds, Bradford and Huddersfield. The first print out of "Cross Area Sightings" was made on 26 June 1978 and lists were issued weekly thereafter.

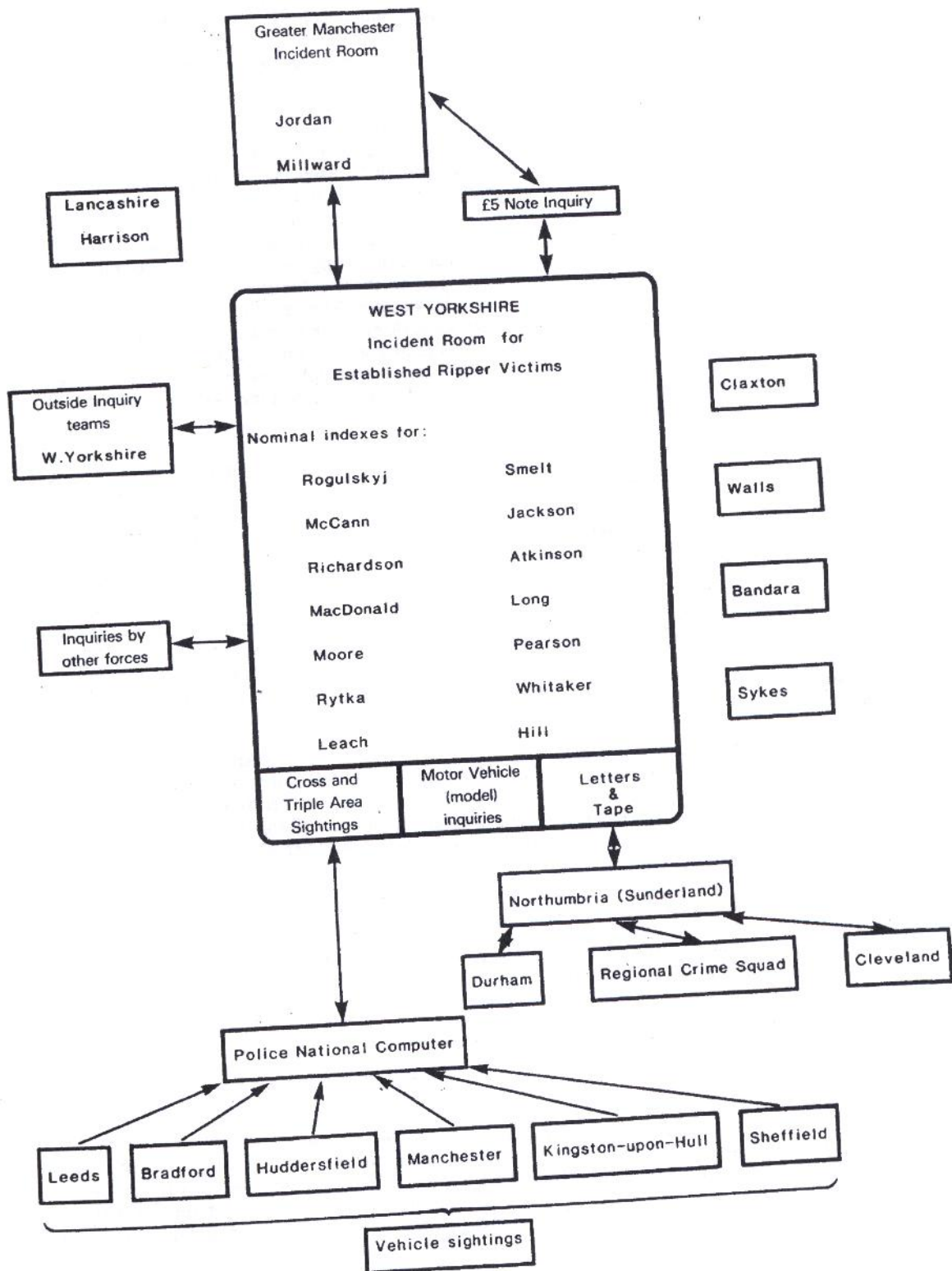
133. Greater Manchester Police joined the system in July 1978 with observations from 13 points in the Moss Side area. South Yorkshire Police followed in October 1978 with four observation points in Sheffield and finally Humberside Police in November 1978 with three observation points in Kingston upon Hull. The interfaces amongst these operations is described elsewhere and included in figure 8.

134. It was agreed that inquiries about the "Cross Area Sightings" from all the four police forces would be initiated by the Ripper Incident Room in Leeds. Contrary to expectations, the number of vehicles visiting more than one "red-light" district proved to be too many to handle. By March 1979 over 20,000 "Cross Area Sightings" had been recorded but only one quarter of the vehicle owners had been interviewed. The selection of vehicle owners for interview depended primarily on their home address. Owners living in West Yorkshire or Greater Manchester would almost certainly be interviewed whilst those living in distant parts of the country were regarded as having lower priority. At this stage the decision was made that only owners of vehicles recorded in "red-light" districts in three separate cities would be interviewed. Thus the "Cross Area Sightings" became the "Triple Area Sightings" project.

135. Humberside withdrew from the computer operation in August 1979 followed by Manchester and South Yorkshire in December 1979. Thereafter, whilst West Yorkshire Police maintained the system until the time of Sutcliffe's arrest on 2 January 1981, it was on a severely reduced scale and much more selective criteria were employed for the inclusion of vehicle numbers in the system. Throughout this aspect of the inquiry four police forces co-operated in producing 5.4 million vehicle sightings from which 20,000 "Cross Area Sightings" and 1,200 "Triple Area Sightings" were recorded. All the owners of the cars recorded in "Triple Area Sightings" were interviewed.

136. It is now known that Sutcliffe's red Ford Corsair (PHE 355G) was recorded on a "Cross Area Sighting" on the second weekly list produced by the system and consequent to this he was interviewed. Sutcliffe was later printed out, first as a "Cross" and then on the 23rd February 1979 as a "Triple Area Sighting" in another vehicle (Black Sunbeam Rapier registration number: NKU 888H) with the result that he was interviewed yet again. At the time of Sutcliffe's arrest the computer system was being little used but, despite this, his last car (Brown Rover 3500, registration number: FHY 400K), which he had acquired on 16 June 1979, had been recorded on seven separate occasions in the "red-light" districts of Bradford.

137. The "Cross Area Sighting" exercise was a mammoth task with substantial strategic and tactical problems. The early concept of recording the registrations of all vehicles which passed a given point may well have been effective in the event of another prostitute murder but it led to the swamping of the information processing system when used as a basis for a continuing series of



investigations. This was particularly a problem in the Manningham area of Bradford where the "red-light" district is crossed by a number of main thoroughfares. Faced with these problems the West Yorkshire Police changed their system and observation points a number of times whilst taking into account the tendency of the prostitutes and "punters" to change their ground in the face of intense police activity. Parallel with this ran changes in methods of recording vehicle numbers including manuscript, tape recordings, radio and telephone. In December 1979 the emphasis was shifted to only those vehicles containing a single white male with or without a female. Finally in May 1980, static observations were withdrawn and vehicle numbers were only recorded by a small team of Task Force officers operating mobile patrols.

138. The decision to conduct this operation covertly entailed keeping it from the knowledge of the general public and subsequently required interviewing officers to keep from vehicle owners the knowledge that their vehicles had been seen in "red-light" districts. A major consideration affecting this policy was computer privacy and the storage of non-criminal information on a police computer. (This topic is dealt with in more detail later in the report.) The former constraint was impractical in that police activity of this kind, night and day, for weeks on end was bound to be noticed. The latter constraint caused police officers, conducting inquiries on the ground, to be inhibited in their investigations. The consequences of these inhibitions can be seen in the interviews conducted with Sutcliffe which I will refer to later. The fact that the computer print-outs and the interview action sheets prepared from them showed the time the vehicle numbers were input into the computer rather than the time of sighting also hampered inquiry officers. In Sutcliffe's case officers would have been less likely to have accepted his excuse that he passed through the Bradford observation area on his way to and from work had they known that many of the sightings were between 11 p.m. and 1 a.m.

139. The Incident Room procedures in support of the "Cross Area Sightings" inquiry were substantial and complex. They involved the allocation of inquiries to detectives, the linking of their inquiries to others being conducted at the same time and the result of all these being collated, in all their aspects, with the nominal index. A separate index existed of motor vehicle registrations which originated from the computer out-put of, initially, "Cross Area Sightings" and, subsequently, "Triple Area Sightings". There also existed a vehicle index for the first six Ripper incidents. Thus, although the names of persons coming to notice through this part of the inquiry were properly carded and inserted into the main nominal index, separate vehicle indexes existed. Further complications arose in the course of inquiries related to subsequent murders where nominal indexes were eventually integrated into the main nominal index but where the vehicle indexes were kept separately. Finally 14 different vehicle indexes were maintained in the Incident Room.

140. Attempts to deal with the deluge of paper generated by the "Cross Area Sighting" inquiry led to the increase of staff from a small team of dedicated and competent men and women to a large anonymous and poorly structured group where motivation and enthusiasm suffered as a result. The system of recording vehicle numbers once and then transcribing them twice, resulted in large error rates. These errors, coupled with false registrations and vehicle transfers resulted in a large index of unidentified vehicles.

141. The list of registered owners produced by the computer was checked against the nominal index. Where a person was already on record in the Incident Room the new reference would be passed to a senior investigating officer, together with a photocopy of all previous papers, for action if required. Although the system identified Sutcliffe in both the "Cross" and "Triple Area Sightings", and he was interviewed on both counts, it failed in that interviewing officers were inadequately briefed. This was a consequence of poor index searching and failure to locate previous papers.

142. Probably as a consequence of the gradual realisation that the system could not cope, a high proportion of "Cross Area Sightings" were filed without the vehicle owners being interviewed. The murder of Whitaker caused the re-deployment of personnel and the "Cross Area Sighting" inquiry was left with no outside inquiry team. Consequently filing and inquiries were left pending. Eventually all uncompleted "Cross Area Sighting" inquiries were withdrawn from outside officers and given a rating of importance on a three-point scale with the intention of, possibly, resurrecting the inquiry later.

143. The change over from "Cross Area Sightings" to "Triple Area Sightings" generated problems of data handling on a large scale and these were solved in a way which, whilst effective from the data handling standpoint were, perhaps, less desirable operationally. Despite the fact that this was another aspect that operational officers did not fully understand, the backlog of "Triple Area Sightings" became manageable and Sutcliffe was once again identified for interview. (See para 261)

144. In spite of the fact that the capabilities of the computerised "Punters' Index" were not fully understood by operational officers, one particular search on vehicle type was conducted which could have led to Sutcliffe's arrest in March 1979. On the 2 March 1979, [REDACTED] was attacked in the College grounds by a man who hit her on the head with a hammer. She survived the attack and described her assailant as a man in his twenties, 5'10" tall, of broad build with dark curly hair and a drooping moustache. More importantly she was convinced that immediately before the attack she had seen the man sitting in a dark coloured Sunbeam Rapier saloon. Detective Inspector Sidebottom asked for, and obtained, a computer print-out of all Sunbeam Rapier and Alpine saloons which had been input on the "Punters' Index" since its commencement. The print-out listed 850 vehicles, including the Rapier NKU 888H, owned by Sutcliffe. This vehicle was shown to have been sighted on 46 occasions and whilst there were a few other vehicles which had been sighted more frequently, only three, including Sutcliffe's, had also been printed out as "Triple Area Sightings". Only 21 other vehicles had been printed out as "Cross Area Sightings". There is, unfortunately, no evidence that any police inquiries were made on the basis of this computer print-out which established Sutcliffe as one of three prime suspects for the attack on [REDACTED] although she was not at that time regarded as a Ripper victim. This was entirely due to a lack of appreciation of the information which the print-out contained, arising from the limitation to which I have previously referred at paragraph 130 and to which I shall also refer in paragraph 147.

145. The early decision to record the index numbers of motor vehicles seen in the "red-light" areas of Northern cities was a sensible insurance against the possibility of further attacks on prostitutes. The subsequent decision to store this information on the PNC was a wise one and had the direct consequence of bringing Sutcliffe to the attention of the police in connection with the movements of his vehicles. Unfortunately, as was the case with the vehicle "Tracking Inquiry", the proposal was not thought through so that its natural consequences could be provided for. Although the West Yorkshire Police cannot be blamed for under-estimating the extent of prostitution and the use of motor vehicles by people seeking the services of prostitutes, they could be faulted for not anticipating a significant response to the "Cross Area Sighting" inquiry and for failing to provide an adequate group of detectives to conduct the follow-up inquiries. The need for additional administrative and clerical staff in the Major Incident Room should also have been foreseen since it was inevitable that the inquiry would result in a considerable increase in the amount of actioning and indexing which would be required. The failure to anticipate the need for and to provide the manpower necessary to handle this new line of inquiry had serious consequences. For example although Sutcliffe bought his Sunbeam Rapier in May 1978 and had before the end of the year been printed out as a "Cross Area Sighting" and before March of the following year been printed out as a "Triple Area Sighting" (as already referred to in connection with the attack on Rooney) he was not interviewed about these sightings until the 29 July 1979. By this time he had disposed of the Rapier and acquired the Rover in which he was to be arrested. How much easier it would have been if the officers had been able to talk to Sutcliffe within days or at the most weeks of the visit to Manchester on the 22nd February 1979 which resulted in him being printed out as a "Triple Area Sighting".

146. I have already referred to the problems which resulted from the decision to keep the vehicle observations secret and the printing out of the computer lists with the time the index number was input into the computer rather than the time it was actually sighted. These two aspects added to the difficulties of inquiry officers and resulted in less positive use of the information which the computer made available than might otherwise have been the case. I recognise that the need for computer privacy must always be balanced against the need for expediency in a short-term crime inquiry but believe that in a difficult series case involving considerable loss of life the need for effective police action must over-ride other considerations. It was reasonable for inquiry officers to conclude that a majority of those printed out as "Cross" and more particularly "Triple Area Sightings" were "punters" or people who had an interest in prostitutes. The inquiries which had

to be conducted at the homes of vehicle owners were thus sensitive but nevertheless still demanded the adoption of a more positive line than officers were briefed to take in West Yorkshire. It is a matter of incidental interest that on the evidence adduced in the Ripper investigation, the extent of prostitution in this country is apparently much greater than has been supposed.

147. The most significant failure of all in relation to the "Cross Area Sighting" inquiry was that of failing to accept the advice given to the force by PSDB and PRSU that a senior officer experienced in handling computer information should be appointed to monitor the computer application and to ensure that the computer's scope for searching on a wide number of factors was understood. The result of this failure was that the computer was used solely to print out vehicles for "Cross" and "Triple Area Sightings" and was rarely used for searches on individual types of vehicle. For instance, although the murder of Rytka took place before the computer operation started, the system could have been used subsequently to print out sightings of vehicles in the "Farina" range, bearing in mind that West Yorkshire continued to operate the "Farina" inquiry until Sutcliffe's arrest. It would appear that the Rooney print-out was not used as the basis for an inquiry because the officers who received it did not know how to interpret the information which it contained, and were thus unable to grasp that of the 850 vehicles listed, only three had also been printed out as "Triple Area Sightings". It is now possible for anyone who understands the codes which were applied to the different "red light" areas to analyse this print-out in terms of "Cross" and "Triple Area Sightings" in less than half an hour. No other specialist skill is required and the information is not affected by hindsight. It is also apparent that had a senior officer with computer experience been appointed in West Yorkshire to act as a link between the computer and the force much more positive use might have been made of the information which was available. The emergence of Sutcliffe as a prime suspect for the [REDACTED] case, if not for the whole series, would have been inevitable.

(iii) The Tyre Marks and Vehicle Tracking Inquiry

148. Tyre marks found at the scenes of three of the crimes were a prominent feature of the investigation.

These were:

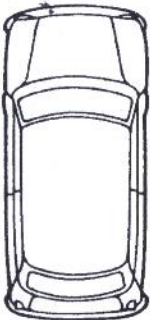
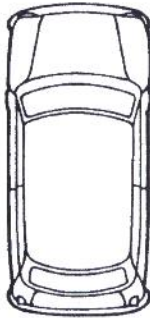
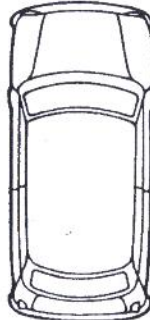
Richardson	—Leeds	5/6 February 1977
Moore	—Leeds	14 December 1977
Millward	—Manchester	16/17 May 1978

149. The tyre marks were measured at the scenes (to yield "tracking data") to gain some indication of the type of vehicle used. The tread patterns of the tyres causing the marks were recorded by casting in plaster of paris (Richardson, Millward) or resin (Moore). The information recovered in this way is illustrated in figure 9.

150. In the Richardson murder (5/6 February 1977) the tracking data was limited to a knowledge of the wheel-to-wheel distance on the same axle. No decision was made whether the front or rear axle was involved. Using this limited information together with that derived from the tyre patterns, a list of 100 vehicle types was prepared and used as a basis for a night-time check on all parked vehicles in the Chapeltown Division of Leeds. A similar check was carried out in scrap yards, vehicle breakers and auctioneers and of vehicles removed under the Civic Amenities Act. This procedure terminated on the 21st March 1977, six weeks after Richardson's murder. The list of 100 motor vehicle types was subsequently reduced to 51 types by the application of a more refined selection system.

151. This list of 51 vehicles was then used as a basis for a decision that all vehicles of these types in the West Yorkshire Police area and in the Harrogate area of North Yorkshire, should be examined. From a manual search at Vehicle-Licensing Offices and a search of computer records by the PNCU, a list of 53,000 vehicles and registered owners was produced. This list was compared with the record of cars eliminated as a result of the night-time check, and the amended list was used as the basis for inquiries at the homes of registered owners. Vehicles recorded in the Leeds Vehicle Licensing Office were examined first but beyond this, no strategy is apparent in the choice of vehicles for examination. On the 10th July 1977, following the attempted murder of Long at Bradford, this line of inquiry was suspended with about 20,000 vehicles remaining to be examined. Sutcliffe's vehicle, a Ford Corsair registration number: KWT 721D, was one of these.

FIGURE 9 **VEHICLE TRACKING DATA**

Incident	Tyre type and distribution	Details issued in special notices dated:
1: Murder of Irene Richardson at Leeds on 5/6 February 1977	<div> <div>India Autoway (1/2 worn)</div> <div>India Autoway (1/2 worn)</div> <div>Esso E110</div> <div>Pneumant</div>  </div>	17 February 1977 9 May 1977 30 May 1977 June 1978 13 September 1979
2: Assault on Marilyn Moore at Leeds on 14 December 1977	<div> <div>India Autoway (1/2 worn)</div> <div>India Autoway (1/2 worn)</div> <div>Avon Super Safety (Good condition)</div> <div>India Autoway (1/2 worn)</div>  </div>	June 1978 13 September 1979
3: Murder of Vera Evelyn Millward at Manchester on 16/17 May 1978	<div> <div>India Autoway (Well worn)</div> <div>Avon Super Safety (Good Condition)</div> <div>Esso E110</div> <div>India Autoway (Well Worn)</div>  </div>	June 1978 13 September 1979

152. The index cards made out during this inquiry were filed in registration number order and bore owners' names. No index cards were made out for names. Had such a nominal index existed this would have been the first reference to Sutcliffe by name and the information would have been available to officers who subsequently interviewed him on other lines of inquiry.

153. Following the abandonment of the first "Tracking Inquiry" as a result of the suggestion of the Mark II Ford Cortina in the Long case, a new inquiry was mounted in which the 5,000 owners of Mark II Ford Cortinas living in West Yorkshire were to be interviewed. 3,000 vehicle owners were interviewed by the police after which this line of inquiry was abandoned without conclusion.

154. In the assault on Marilyn Moore vehicle tyre impressions were again found at the scene of crime and the view was subsequently formed that the same vehicle as that used in the Richardson case was involved. The information from these impressions, together with the victim's description of the assailant's vehicle, led to the reduction of the list of possible vehicles to five models in the BMC "Farina" range. One of these five models was the Austin A55 Cambridge which had figured in the list of 51 vehicles from the Richardson inquiry. Furthermore, this model of car had figured in another murder inquiry (Wilkinson — Pudsey, 10th December 1977 at that time undetected but subsequently proved to be unrelated to the series) two months previously.

155. In the murder of Helen Rytka at Huddersfield on 31st January 1978 a "Farina" type of vehicle was described as being near to the scene at the material time. All four witnesses to this fact maintained their identification of the vehicle as a Morris Oxford, series 6. Since this vehicle did not fit the tracking data in either the Richardson or Moore cases, and neither did it figure in the list of suspect vehicles in the Wilkinson case, the problem was resolved by widening the scope of the Rytka inquiry to include all BMC "Farina" vehicles, some of which fitted the tracking data. Since Rytka was firmly established as a Ripper victim the "Farina" inquiry was seen as relevant to the whole Ripper series. Once again records were searched in Motor Vehicle Licensing Offices; lists of possible vehicles were prepared and the "Farina" link was circulated nationally.

156. When the scene of the Millward murder in Manchester was examined the last set of tyre impressions to be recovered at any of the crimes in the Ripper series, was found. Although the make of tyres leaving the impressions differed in part from those in the Richardson and Moore cases, the evidence suggested that the same car was involved in all three incidents. At this time the Greater Manchester Police accepted the findings of the West Yorkshire Police so far as the identification of the vehicle which might have been used in the crimes was concerned. They initially participated in the "Farina" inquiry but subsequently, following the submission of a report by Detective Inspector Fletcher of the Greater Manchester Police, took no further part in it. In his report, dated 21 September 1978, Inspector Fletcher pointed out that Esso and Pneumant tyres were not available for the 14" wheels with which many vehicles in the "Farina" range were fitted. To fit both the tracking data and the tyre type in the Richardson, Moore and Millward cases a BMC "Farina" car would have had to be fitted with rogue wheels. In addition to discounting the "Farina" theory, Inspector Fletcher, by applying the description of the door handle supplied by the surviving victim Moore, showed that only two vehicles matched the available criteria. These were the Ford Cortina Mk I and Ford Corsair models from 1964 onwards.

157. Once satisfied of the validity of Detective Inspector Fletcher's work, Detective Chief Superintendent Ridgway of the Greater Manchester Police visited West Yorkshire and discussed the vehicle inquiry with senior investigating officers. He was unable to persuade them that Fletcher's work was valid and they continued to pursue the "Farina" inquiry until Sutcliffe's arrest. Prompted by the Greater Manchester inquiry, Detective Inspector Sidebottom of the West Yorkshire Police applied the physical data from the scene of the assault on Marilyn Moore to the full list of vehicles (not constrained by the door handle theory) which the Greater Manchester Police felt might have been responsible for leaving the marks at the Millward scene. As a result of this analysis Inspector Sidebottom felt that the marks of both scenes could only have been left by one of five vehicles including the Ford Cortina and Corsair models. This information appears to have been discounted and West Yorkshire's "Farina" inquiry was allowed to continue. The "Farina" line of inquiry featured prominently in the "Special Notice" issued by the West Yorkshire Police on the 13 September 1979. A total of 26 vehicle models including the Ford Corsair was listed in the "Special Notice" but special emphasis was given to the "Farina" range. In Greater Manchester, Detective Chief Superintendent Ridgway had decided that little reliance

could be placed on the vehicle evidence from West Yorkshire's inquiry into the assault on Marilyn Moore, and Manchester officers began to abstract information from the Ripper Vehicle Index at Millgarth in respect of the full Manchester list of suspect vehicles. Unfortunately this inquiry was soon aborted.

158. During the period starting with the murder of Richardson and finishing with the murder of Millward, Sutcliffe is known to have possessed two vehicles. These were:—

- (a) White Ford Corsair 1600
Registration number: KWT 721D.
Purchased May 1976 — Scrapped September 1977.
- (b) Red Ford Corsair 1600.
Registration number: PHE 355G.
Purchased September 1977 — Sold August 1978.

159. It can be seen that the first vehicle was scrapped prior to the Moore assault and it is possible that Sutcliffe transferred its wheels and tyres to the red Corsair soon after buying it. This is a reasonable conclusion since it would be logical for Sutcliffe to retain the tyres from the white Corsair if they were better than those fitted to the newer vehicle, although he denies having done so.

160. Bearing these dates in mind, it is also noted that Sutcliffe was interviewed on the 2 November 1977 and on the 8 November 1977 during the course of the Jordan £5 note inquiry. At this time Sutcliffe was in possession of the red Corsair which may have been bearing wheels and tyres which would have associated him with the Richardson murder on the 5/6 February 1977. It is clear that the interviewing officers did not examine the vehicle. Had they done so it is highly likely that the inquiry at that stage would have taken a very different course since two entirely different lines of inquiry (Richardson tyre tracks, Jordan £5 note) would have led to Sutcliffe. This then, was a vital error in the Ripper inquiry, coming as it did after six murders and four assaults in the admitted Ripper series. Seven further murders and three assaults since admitted by Sutcliffe were to occur before his arrest on 2 January 1981.

161. The earliest evidence we have been able to establish of collaboration between the West Yorkshire Police and the Greater Manchester Police in the tyre inquiry occurred in September 1978. This was four months after the Millward murder and by that time the West Yorkshire Police were well committed to the "Farina" inquiry based on Detective Inspector Sidebottom's finding in the Richardson and Moore cases. To have accepted Greater Manchester's different findings at that stage would have been to admit that much of the effort of the previous two years had been wasted.

162. A final factor which tends to further complicate this line of inquiry is the uncertainty surrounding the inclusion of Moore in the Ripper series. Although it has been possible to locate various references to the Moore case in the Ripper documentation dating from the occurrence of the offence there are indications that it was not formally included in the series until six months later. A West Yorkshire Police report dated 13 January 1978 deals solely with vehicles which might have left the tyre tracks at the scene of the attack on Moore and makes no reference to marks found at the murder scene of Richardson. It was not until 14 March 1979 that a further report covering the whole "Tracking Inquiry" linked the Moore case with the preceding case of Richardson and the succeeding case of Millward. These omissions, for whatever reason, were an important contributory factor in the failure to detect Sutcliffe as the murderer at an earlier stage.

163. The vehicle tracks found at the Richardson, Moore and Millward scenes provided investigating officers with some hard factual evidence which, whilst difficult and time consuming to process, might have led them to Sutcliffe as a strong suspect. It failed to do so for several reasons.

164. The first failure was that of not identifying the model of car involved more accurately. Ideally this is a service which the Forensic Science Laboratory should provide or at least co-ordinate. Following the Richardson case, scientists were able to tell the West Yorkshire Police the track width of the suspect vehicle and the make, type, section and distribution of the tyres. They also supplied a list of 100 vehicles which had the correct track width. Detective Inspector

Sidebottom then consulted a technologist from a leading tyre company and, on the basis of the information which he supplied, prepared the list of 51 possible vehicles. This list led to the 53,000 owners who were to be interviewed by police officers in a demanding and repetitive inquiry. When, following the Millward murder Detective Inspector Fletcher, with the help of other experts, analysed the marks from the three separate crime scenes he found that the Esso E110 and the Pneumant Tyres from the Richardson scene had never been manufactured in 14" wheel size. Had this information been available to Inspector Sidebottom the list of 51 vehicles could have been reduced to 33 and produced a very much more manageable line of inquiry.

165. The second failure of the "Tracking Inquiry" was to allow one inquiry to be superseded by another before the first had been concluded. This happened several times during the series inquiry. When, for instance, 33,000 of the 53,000 vehicles in the original inquiry had been seen, it was discontinued because the demand for detectives to work on the investigation of the assault on Long drew all available manpower, including the officers who had been working on the "Tracking Inquiry." A nightwatchman witness in the Long case said that the car which drove away from the scene was a Mark II Ford Cortina. A Mark II Ford Cortina however was not one of the list of 51 vehicles in the "Tracking Inquiry" and could not, therefore, have made the Richardson tracks. In spite of this a Mark II Ford Cortina inquiry was started as a result of the nightwatchman's evidence but was also abandoned prematurely when information resulting from the Moore and Rytka cases suggested that the vehicle involved came from the BMC "Farina" range. The Ford Cortina inquiry was, itself, based on a false premise so that its abandonment to pursue an alternative inquiry also based on a false premise did not have serious repercussions, except that the importance which the West Yorkshire Police attached to the "Farina" information prevented them from accepting Inspector Fletcher's later analysis which correctly narrowed the identification of the vehicle down to two models.

166. The third significant failure in the inquiry was that, in spite of the fact that some officers believed that the marks at the Richardson, Moore and Millward scenes had all been made by the same vehicle, no scientist ever offered, or was asked, to compare the casts of the tyre impressions from all three scenes together. It is now almost certain that even if this exercise had been undertaken it would have been impossible to have established conclusively that the same vehicle was involved, although such a conclusion might have been reached had one or more of the tyres had a significant blemish or wear characteristic which might have been apparent in the impressions from two or more of the crimes.

167. The most significant failure of all, to which I have already referred was the failure of the interviewing officers to examine the tyres of Sutcliffe's vehicle when they saw him on the 2nd and 8th November 1977. This failure may well have resulted from inadequate briefing and an absence of recognition of the importance of the tyre marks in the Richardson case. It is fair to say, of course, that at the time of the interview the Richardson case was nine months old and that the white Mark II Ford Cortina in the Long case had superseded the tyre marks as the most significant vehicle information available.

168. A further administrative failure affecting the vehicle "Tracking Inquiry" was that of not including the inquiry information in the main nominal index of the individual crimes and subsequently of the series. Had the list of 53,000 owners in the original "Tracking Inquiry" been included in the nominal index, the name of Peter Sutcliffe would have been in the system before he was first interviewed during the £5 note inquiry. The inclusion of the 53,000 in the nominal index would certainly have involved a considerable staff requirement but such an investment could well have paid handsome dividends in that it ought to have ensured that the inquiry officers knew before they first saw Sutcliffe that he was the owner of a vehicle which could have left the marks at the Richardson scene.

169. It must finally be appreciated that motor vehicle inquiries are very demanding in manpower terms and hold out a very limited prospect of success. In the Richardson "Tracking Inquiry" for instance the odds that any single vehicle examined was the killers was 53,000 to 1 against, odds not likely to instil great confidence or enthusiasm in the detectives to whom such repetitive inquiries were allocated. We should not be surprised that it was in connection with this type of inquiry during the Ripper series that the morale and discipline of a group of detectives broke down to the extent that they prepared false eliminating statements rather than continue the weary round of

interviews with vehicle owners. I will refer to this topic again under the heading "Lessons to be Learned" but for the purposes of this part of the report conclude that at the commencement of a large scale vehicle inquiry, senior officers of the West Yorkshire force did not go far enough in their attempts to limit its scope neither did they provide the scale of manpower resources which would have enabled the inquiry to be completed quickly and effectively. Failure to calculate and provide proper manpower resources was an even more significant failure by the time the ill-founded "Farina" inquiry came to be mounted.