

DUMFRIES AND GALLOWAY CONSTABULARY

INTERIM OPERATIONAL DEBRIEF

FRIDAY 28 APRIL 1989



LOCKERBIE AIR DISASTER

WEDNESDAY 21 DECEMBER 1988

L.I.C.C.  
Dryfe Road  
LOCKERBIE

CONFIDENTIAL

LOCKERBIE AIR DISASTER

Interim Operational De-brief

Friday 28 April 1989

1. Present

Mr. J. Boyd, Q.P.M., Chief Constable, Dumfries & Galloway Constabulary.  
Mr. P. Newell, O.B.E., Q.P.M., Deputy Chief Constable, Dumfries & Galloway Constabulary.  
Mr. J. T. Dickson, O.B.E., Assistant Chief Constable, Strathclyde Police.  
Superintendent [REDACTED], British Transport Police.  
Constable [REDACTED], - " -  
Chief Superintendent [REDACTED], Central Scotland Police.  
Inspector [REDACTED], - " -  
Chief Superintendent [REDACTED], Cumbria Constabulary.  
A/Superintendent [REDACTED], - " -  
Chief Superintendent [REDACTED], Dumfries & Galloway Constabulary.  
Superintendent [REDACTED], - " -  
Superintendent [REDACTED], - " -  
Superintendent [REDACTED], - " -  
Superintendent [REDACTED], - " -  
Inspector [REDACTED], - " -  
Det. Inspector [REDACTED], - " -  
Inspector [REDACTED], - " -  
Chief Superintendent [REDACTED], Fife Constabulary.  
Superintendent [REDACTED], - " -  
Chief Superintendent [REDACTED], Grampian Police.  
Det. Chief Superintendent [REDACTED], - " -  
Det. Superintendent [REDACTED], Lothian & Borders Police.  
Chief Inspector [REDACTED], - " -  
Det. Inspector [REDACTED], - " -  
Inspector [REDACTED], - " -  
Chief Superintendent [REDACTED], Ministry of Defence.  
Chief Inspector [REDACTED], - " -  
Detective Superintendent [REDACTED], Northern Constabulary.  
Chief Inspector [REDACTED], - " -  
Chief Superintendent [REDACTED], Northumbria Police.  
Superintendent [REDACTED], - " -  
Det. Superintendent [REDACTED], Scottish Crime Squad.  
Chief Superintendent [REDACTED], Strathclyde Police.  
Det. Chief Superintendent [REDACTED], - " -  
Superintendent [REDACTED], - " -  
Superintendent [REDACTED], - " -  
Superintendent [REDACTED], - " -  
Det. Chief Inspector [REDACTED], - " -  
Det. Chief Inspector [REDACTED], - " -  
Chief Superintendent [REDACTED] Tayside Police.  
Chief Superintendent [REDACTED], - " -

CONFIDENTIAL

2. Apologies

- 2.1 Apologies were received for Detective Chief Inspector [REDACTED], Dumfries & Galloway Constabulary.

3. Welcome and Opening Remarks

- 3.1 [REDACTED] opened the meeting by welcoming everyone to Lockerbie Incident Control Centre. He outlined the timetable for the day and reminded those present that the purpose of the interim de-brief was to give those officers involved the opportunity of apprising others of the lessons learned as major catastrophes will undoubtedly happen again in the future.

- 3.2 He then moved on to say that before the de-briefing a video would be shown detailing some of the ways in which the Police and other agencies attempted to respond to the responsibilities placed on them by the disaster. This would remind everyone of the horror and enormity of the task and set the perspective for the meeting. (The video was then viewed).

4. The First Hours - Mr. P Newell, Deputy Chief Constable

- 4.1 Mr. Newell opened his comments by making reference to the fact that while his Force had well laid contingency plans for dealing with various Major Incidents including Air Crashes, none of these covered the situation which happened at Lockerbie on Wednesday 21 December, 1988.

- 4.2 On arrival at Force Headquarters, Dumfries, the telephones were all engaged, with the odd ex-directory line the only way to telephone out and radio communications were dominated by a vast amount of traffic from persons reporting and asking for information relative to the disaster. The call-out of all available personnel was an immediate problem due to both the lack of telephone lines and personnel to go and inform needed officers personally. Fortunately many saw or heard about the disaster through the media and reported for duty.

- 4.3 Tremendous initial pressure was put on the Chief Constable by a constant bombardment of requests for immediate Policy decisions from other Senior Officers at a time when he was having to think of Mutual Aid and many other important things. A conflict between immediate action and attempts at co-ordination of effort was inevitable and apparent. However, very early on the management structure was decided by the Chief Constable who briefed the most Senior Officers on their duties and responsibilities. Important decisions in this regard were the appointment of an Assistant Chief Constable as Incident Commander and the allocation of a Senior Officer to be in charge of each Sector with the rank to be able to make decisions without reference to the Chief Constable and the authority to control and co-ordinate the many resources, police, voluntary and from other agencies, who were coming to assist.

- 4.4 At Lockerbie it was immediately apparent the Police Station would be inadequate for the purpose of controlling and co-ordinating the Incident. Immediate thoughts had to be given to identifying suitable premises and the Chief Constable instructed a Senior Officer to investigate this aspect.
- 4.5 Security of the Police Station was a low priority at this point with only a token uniform Officer on the front and back doors. An early difficulty lay in identifying all those who were arriving on the scene, e.g. F.B.I., F.A.A., Boeing, Pan Am, AAIB. It was important to identify and get to know how to deal with these people at an early stage. Their arrival in large numbers also presented the problem of accommodation as there was no place to put them. Many meetings took place in corridors.
- 4.6 The media created a problem and had to be dealt with in a firm and professional manner. This was achieved with the assistance of Superintendent [REDACTED], the Strathclyde Force Information Officer and his staff.
- 4.7 V.I.P. visitors began arriving very quickly and had to be escorted to places of interest and kept informed about what was happening. It was necessary to drop everything else to attend to these people. It was a time-consuming exercise but very important as it allowed us to give them the information about what was happening at Lockerbie.
- 4.8 The immediate containment of the crash area presented problems. It was already dark and the full extent of area over which the aircraft parts and bodies had fallen was not known. Many hundreds of Officers spent a long wet night guarding areas where wreckage, bodies, and property were lying on the ground. However it was later learned that the area was much bigger than initially envisaged.
- 4.9 Many offers of assistance were made by Police Forces and other organisations and all had to be acknowledged and dealt with when time allowed. In addition to those who called and offered assistance there were many who arrived without being requested. Mr. Newell gave a number of examples to highlight the various areas where assistance had been forthcoming.
- 4.10 Mr. Newell made mention of the briefings system saying that within a short time it was well organised, however in the very early hours such briefings were many and very much ad-hoc. Nevertheless, they were instrumental in laying down the Chief Constable's policies and directions, so allowing Managers further down the line to get on with their tasks.

4.11 Concluding his comments on the first hours Mr. Newell spoke of the trauma of being involved with such an immense disaster, which had affected everyone.

5. The Initial Responses - Mr. JT Dickson, Assistant Chief Constable

5.1 Mr. Dickson said he was instructed to attend at Lockerbie at 2100 hours on the evening of the crash and did so along with the Superintendent in charge of his Emergency Planning Section. On arrival he was given a briefing by the Chief Constable. So far as Strathclyde was concerned, resources were despatched as early as 2008 hours.

5.2 Initial problems centred on communications. The radio link between Strathclyde Force Control and Dumfries & Galloway Control did not work and disruption to telephone lines was being experienced.

5.3 At 2104 hours Strathclyde sent a further 15 Sergeants and 120 Constables and by midnight on the first day a total of 207 Strathclyde Officers were directly involved in the incident.

5.4 The Police response to the Incident peaked on 24 December, 1988 when there was a total of 1028 Police Officers from many forces, including 20 officers from the Metropolitan Police at Heathrow, and an equal number of civilians all involved in trying to recover as many bodies as possible by the end of that day.

5.5 Mr. Dickson then apprised those present of the areas for action which he and his Emergency Planning Officer identified en route to the crash location including - Locus Protection; Mortuary; Key points; Force Information/Media Team requirement; Media RVP; Designated Routes; Outer Cordon; Co-location of emergency services; Traffic Regulation/Control; Casualty Bureau; HOLMES; CRISIS; Resource Centre; Video & Still Camera Team; Location of Police Resources, (siting of Incident Command Centre, Investigative Group Headquarters); Equipment; Availability of Army personnel; Special Branch Personnel, W.R.V.S./Salvation Army Assistance, Question of Hazardous Materials on Board the aircraft; the storage of Property and Productions; Need for protective clothing; Need for lighting; and the possible use of helicopters by the Police.

5.6 Mr. Dickson then mentioned a number of areas where information was not immediately available to him. He felt it was necessary to know about the Procurator Fiscal's interest whether the AAIB had been advised; the areas of wreckage; whether the EPIC Centre was operational; whether Kenyons had body bags; the availability of Mortuary and Post Mortem facilities, the procedure for handling Found Property; the procedure for handling bodies; the best use of Mutual Aid; and the location of the black box flight recorder.



- 5.7 Mr. Dickson mentioned that a lot of V.I.P.'s started arriving early on and this caused the Chief Constable and Deputy Chief Constable to be constantly interrupted. For the first 24 hours the Chief Constable was not accessible to anyone due to the number of V.I.P.'s attending at the scene.
- 5.8 The Command Structure which Mr. Boyd had authorised for the command and control of enquiries, and for the work to be done in the Sectors had been well put together and had stood the test of time. The co-operation which existed between all those involved had been commendable.
- 5.9 The Police cannot handle such massive tragedies alone. There is great importance in every Sector of the community assisting and in utilising Military Aid to the Civil Power, where necessary.
- 5.10 The Management Team did manage to walk over the six main areas of the crash scene on the morning following the disaster and this was very beneficial in future planning.
- 5.11 Mr. Dickson commended the briefing meetings which were held regularly as very important for allowing expert advice to be given and in order to achieve tight and proper management.
- 5.12 Mr. Dickson commented favourably on the excellent work carried out by the RAYNET organisation.
- 5.13 The problem of over-resourcing existed initially due to being unable to cope with the large number of officers arriving. Everyone was looking for instructions immediately. However it is a better problem to have than lack of resources. The fact that every person on the aircraft had died and it was dark allowed time to plan and organise properly.
- 5.14 At the start of the incident the Chief Constable laid down the principles of - Accuracy; Co-ordination; In-gathering of Productions and Evidential matter whether bodies, aircraft parts or other property; The proper timing of release of any relevant information to the media or any other party; and the proper diplomatic channels to be used where enquiries were carried out overseas. These principles together with the planned phasing of the operation have proved to be sound.
- 5.15 Mr. Dickson also made brief reference to the excellent work carried out by British Telecom and how the problem of obtaining Ordnance Maps in the middle of the night had been overcome by the Lothian & Borders Police calling out shop staff in Edinburgh.
- 5.16 Concluding, Mr. Dickson suggested that the corporate approach used had been very beneficial in overcoming the problems faced. It had been an exercise which brought out the best in everyone.

6. Operations - Chief Superintendent [REDACTED]

- 6.1 [REDACTED] opened his report by stressing the importance in any Major Incident of immediately establishing a rendezvous point (R.V.) which is clearly defined and easily found. Its siting will depend on the type of incident, but it could be at the outer or inner cordon. It must be in direct contact with the Control Centre or main Police Station, but should not be part of the Control Centre. Ideally it should be in an area with an abundance of vehicle parking facilities and a large hall close by wherein personnel can be held.
- 6.2 The Officer in Charge of the R.V. point should be of a rank commensurate with the size of the incident and should have sufficient personnel to provide support, administration and communications between him and the Control Centre; to control the arrival, parking and despatch of vehicles and personnel, and to link with those being held in any holding area.
- 6.3 The establishment of an R.V. point for all emergency services requires to be addressed by the Incident Commander at an early stage. Often the nearest Police Office is identified as the centre of control for the incident, however the longer the situation runs the establishment of the R.V. point is one which must be addressed. Control of the R.V. point obviously rests with the designated Officer in Charge who is regarded as part of the Operations Team albeit he is physically detached. On behalf of the Incident Commander he should regard himself as an offset point at which to centralise the various aspects of resource and vehicular movement.
- 6.4 Deployment of personnel requires transportation and only by communications will this be achieved in a structured manner. Consideration should therefore be given to appointing an officer as R.V. Point Marshall to pull together these various functions. He should be responsible for ensuring that transport for departing personnel is properly utilised and all personnel detailed for departure are accounted for even although this should be established by resource supervisors themselves and the personnel control officers.
- 6.5 Resources will wish to move forward as soon as they arrive making a structured approach more difficult to achieve. The Officer in Charge of the R.V. Point must direct that only dedicated supervisors move forward for further instruction and that the resources continue to remain in the holding area.

- 6.6 The establishment of an accessible and identifiable R.V. Point can not be overstressed for it is the first location that resources attending will arrive at. If they find an element of command and control there, then their subsequent input to the incident will endeavour to match this professionalism.
- 6.7 On Military Aid to the Civil Power, [REDACTED] said the first 48 hours of assistance can be regarded as voluntary, but after that if aid is still required, the Chief Constable must follow guidelines set out for obtaining Military Aid to the Civil Power. It should be noted that assistance of say 150 personnel could be provided by 50 Army, 50 Navy, and 50 RAF Officers. Military Aid to the Civil Power is regarded as a tri-service response.
- 6.8 It is good practice to clearly identify the proposed tasking of the Military in line with their skills. It is unlikely that military assistance will be given to provide personnel for mortuary duties, medical scribes, etc. It is important that the Ministry of Defence is made aware that the assistance requested cannot be provided by non-military sources.
- 6.9 While military units are self sufficient in terms of transport, equipment, administration, etc and can provide themselves with any accommodation required for resting their personnel in the early stages, it should be remembered that in the longer term and depending on the proximity of military bases, accommodation may be required.
- 6.10 It should be appreciated that there is much the military can do in large scale disasters and it is good practice for Police Managers to have a clear picture of such resources.
- 6.11 Next, [REDACTED] made reference to the initial response by the two Search and Rescue (SAR) co-ordination centres in the United Kingdom, one of which is based at Edinburgh. Each Search Centre is capable of sending Search and Rescue Helicopters from various Royal Navy and Royal Air Force Bases within its control area. In addition to their Search and Rescue function, these helicopters will transport Mountain Rescue Teams, Medical Teams, Equipment, Operational Personnel and readily perform many tasks within their capabilities. It is important that Incident Commanders be aware that SAR Helicopters will arrive very quickly and probably bring resources. Such an influx of personnel in the early stage requires direction and structured guidance.
- 6.12 A second response is likely to come from the Army who may not arrive as quickly as the Search and Rescue Resources but they will be in post within a matter of hours and will attend as if Military Aid to the Civil Power has been authorised. The Army will arrive able to sustain their units, whereas the RAF and Royal Navy support resources will take longer to become established. It is likely that the Rescue and Coordination Centre will be regarded by the Tri-part Service input as the focal point of their control structure until it can be localised at the scene.



- 6.13 It is likely that a Senior Military Officer will be despatched to the locus to assume 'hands-on' command. It is imperative that this Officer, who assumes command of all Military Assistance, becomes part of the Operational Team maintaining close contact with the Incident Commander. However the Air Salvage and Transport Flight from RAF Abingdon have a special arrangement with the Air Accident Investigation Branch who automatically action them to any incident where they are involved. In such circumstances that flight is controlled by the A.A.I.B.
- 6.14 While the scale of the disaster will dictate the input of Search and Rescue Helicopters numerically, these must be subject to a degree of Air Traffic Control, whereby the possibility of accidents is minimised. While they are under the control of the Military, it is advisable that the Incident Commander bears this point in mind.
- 6.15 If the military input is fairly extensive it is good practice to designate a holding area for them outwith Incident Control and actively encourage their commanders only to attend Incident Control.
- 6.16 Military transport and communication systems can assist if required and it is of great benefit for the Police personnel control officer and the traffic transport controller to establish open and direct communications with their counterparts in the military, thus keeping themselves apprised of numbers of personnel and vehicles.
- 6.17 [REDACTED] then made reference to the voluntary organisations such as SARDE, WRVS, Samaritans, and Salvation Army, who will all arrive in large numbers, sometimes uninvited and difficult to control. It is important to make them fully aware that they must follow the Chief Constable's directions while in the area. Also in view of the large numbers of people working it is worth appointing a Medical Liaison Officer.
7. Police Liaison - Chief Superintendent [REDACTED].
- 7.1 [REDACTED] opened by saying that the role of Police Liaison Officer is not defined in any Force Orders, however the experience of Lockerbie was that a Police Liaison Unit with Senior rank capable of making decisions without referral was essential to the efficient running of any incident. The Incident Commander did not have time to deal with the many agencies involved and the Unit diverted these pressures from him.
- 7.2 The main criteria for selection of staff for this unit is local knowledge of the area, the personnel and the various organisations assisting in the emergency. At Lockerbie the Unit was manned by a Chief Superintendent, Inspector and Sergeant, supplemented by a Constable as required. The three Senior Officers had all at some time been stationed at Lockerbie and had first class local knowledge.

- 7.3 In reality the Police Liaison Unit was the contact point where all agencies, including Police came when a problem whether it was logistical, administrative or otherwise, arose. In this incident the Unit was not set up until a.m. on 22 December, and not fully operational until late that night. There is wisdom in initiating the Liaison Unit from the start.
- 7.4 It was not possible for the Liaison Unit Commander to hold a full meeting each day with the contact points in various organisations. However regular contact with the various organisations negated the need for this.
- 7.5 The variety of requests made to the Unit was extremely wide and [REDACTED] gave a number of examples. He then commended the Regional Emergency Control Administration Centre and made particular mention of the Regional Emergency Supplies Officer, the Social Work Department and the Planning Department, though they were not utilised fully as the Police had maps officers in the Incident Control Room. The Planning Department staff are the professionals and it is worth looking at this situation for the future. The Property Services Department were valuable in arranging furnishings and equipment for the Lockerbie Incident Control Centre, the Community Education Building, and the alteration to and subsequent refurbishing of the Ice Rink.
- 7.6 It took considerable liaison to ensure that private owners were given satisfaction after their willingness to assist, particularly at the Ice Rink where they deprived their business clients of the use of the premises to assist the emergency services. The Unit performed an important function in reassuring the owners of private property which had been utilised that it would be returned to them in at least as good a condition as taken.
- 7.7 [REDACTED] referred to the work of the Community Liaison Group, the School Staff and the Fire Service who the Unit liaised with regularly. Particular mention was made of the School Meals Organisation and WRVS who worked very closely together. Their work kept moral high with an excellent supply of meals at all times. Supplying numbers of personnel who required feeding at various times was a function of the unit, however obtaining even approximate numbers was often very difficult but the attitude of the volunteers was of great assistance. Likewise the Salvation Army was supplied with numbers and feeding points out in the field and were of great practical assistance.
- 7.8 Mention was then made of the work of the Hill Search and Rescue Teams and Dog Teams. For practical purposes these organisations worked under the Operations Room or for the Sector Commanders direct. There may have been advantage and time saving if a list of agencies working was supplied each morning and passed to the Liaison Unit prior to the teams reporting for duty.

- 7.9 The arranging of telephone lines and fax machines was a continuous task of the Liaison Team and British Telecom Staff. The system adopted here was that BT would not work unless it was arranged through the Police Liaison Unit. This ensured that the work was authorised, allowed the unit to account for lines and log telephone numbers, and most importantly prevent duplication.
- 7.10 Prior to the setting-up of the body release unit the only contact for information for the Religious representatives - Rabbis, Priests, and Ministers, was through the Police Liaison Unit. The advantage of talking to a Senior Rank was obtained when these people were being pressurised by the members of their faith to expedite body release.
- 7.11 The role of supplying Police Officers to various tasks often fell on the Liaison Unit and although no additional staff were allocated to it, at times as many as 30 men had to be organised in various tasks alien to Liaison duties. The need for a Senior Officer in Charge of allocation of all personnel from the many Forces was evident. It was not always feasible to utilise men in the numbers supplied, i.e. support units or sections. In many instances one or two men were required for a job or to assist to make up numbers when a particular task had to be completed. The Liaison Unit fell heir to organising the supply of these men without the assurance that they would not be required by their local Commanders.
- 7.12 It was found that items which were being supplied through the Liaison Unit in the early days were later being obtained, by-passing the unit. Also duplication was occurring. Fortunately the co-operation between the Unit and other outside agencies was such that if an order was placed, a check was then made with the Unit in order to avoid this.
- 7.13 There may have been some confusion between the name 'Police Liaison Unit' and the various Force 'Police Liaison Officers' in the Operations Room. The title of one should be changed.
- 7.14 [REDACTED] questioned the need for a Quartermaster being separate from the Liaison Unit as this meant there were two separate sources of supply under the Police umbrella. Many of the stores held by the Quartermaster were also available via the Regional Council Emergency Administration Unit and it would appear that the function of Quartermaster should come under the Police Liaison Officer.
- 7.15 The Liaison Unit was the contact for other services requiring information, however information to the Unit was on occasions sparse. Information should be collated on nightshift by the Operations Room to be published in time for the dayshift to digest.

7.16

██████████ finished his presentation by saying that while the overall Police Liaison Unit was essential and very effective he recommended -

- 1) A Police Liaison Unit should be defined in Force Standing Orders.
- 2) The Police Liaison Officer should be of high rank with positive decision making powers.
- 3) The staff employed in the Unit should have good local knowledge of the area with previous face to face contact with the local personnel in the various emergency services.
- 4) The Quartermaster should be part of the Police Liaison Unit.
- 5) A Senior Officer should be nominated as responsible for allocating all personnel engaged on the Incident.
- 6) The flow of information to the Police Liaison Unit should be regular and continuous.
- 7) To avoid confusion between the 'Police Liaison Unit' and the 'Force Liaison Officers' in the Operations Room a redesignation of title should be considered.
- 8) With regard to paperwork, while everything was logged on HOLMES the Liaison Unit kept no logs of their own. HOLMES had a back-log so records were not kept up to date. A Clerk is required to do the logging in the Liaison Unit.

## 8. Traffic Management - Superintendent ██████████

8.1 Superintendent ██████████ opened by making reference to the problems which existed with the blockage on the A.74 and the general congestion in the area. Also the number of small roads, often single track, which had to be negotiated in the area during the course of the incident.

8.2 Of particular importance early on was keeping open access roads. The public assisted controlling traffic on the night of the incident for the simple reason that they were all that was available in the early stages. However the A.A. and R.A.C. are available to respond to major incidents and on this occasion the A.A. soon had 32 vehicles and officers on points until the Police took over. Access to Lockerbie was a problem and also in Dumfries 13 miles away in the region of the Infirmary. Diversion routes had to be set up. Abandoned vehicles in Lockerbie presented a problem and the A.A. were of assistance in removing these. Another problem was the identification of diversionary routes and the initial problem of making signs for these. However both the Local Authority and A.A. assisted although it was found that the A.A. signs were rather small.

- 8.3 On the single track roads which were being used during the incident one-way systems required to be devised and this involved working with the military and the local authority, and maps of the area had to be obtained.
- 8.4 It is worth noting the need to publicise and advise via the media the main blockages on the A.74, contraflows etc in operation particularly at holiday periods.
- 8.5 Superintendent [REDACTED] re-emphasised [REDACTED] earlier comment about clearly defined and easily found parking and rendezvous points. The traffic transport control was initially sited at Lockerbie Police Station and then moved to Lockerbie Incident Control Centre.
- 8.6 Appreciation was offered for the assistance given by the other Forces during this incident though some difficulties had to be overcome. Maps are very important when using people from other forces and these should be readily available. Communications with other Forces did cause difficulties and had to be overcome. Traffic management relied on liaison with Forces, outside Agencies and the Military for good communications and support.
- 8.7 Transport was often needed quickly. While coaches are suitable for conveying personnel to Lockerbie these were not suitable for taking them out to the locations required. The transport department and roads department were of great assistance providing personnel carriers, Mini Buses, vans and drivers. These were fully utilised right up until the end of January, and at one stage they were using up to 40 vehicles. Hire vehicles were also used and certain motor companies provided demonstrator cars for the purpose of the investigation.
- 8.8 As there were between 120 and 150 vehicles at any given time, a card administration system had to be devised for controlling the vehicles. This allowed traffic administration to deal with all requests for vehicles properly.
- 8.9 Superintendent [REDACTED] concluded that the aims of traffic management to ensure control of traffic in the area, allow free flow of traffic and ensure the availability of transport as and when necessary, had been achieved.



9. Victim Processing

- 9.1 Superintendent [REDACTED] opened this report. During the first 24 hours only 3 bodies were delivered to the mortuary which had been established at the Town Hall. While delay can be attributed in the main to the task of charting the bodies, and having these photographed, the lack of suitable transport for conveying the bodies to the Mortuary was also a contributing factor. The labels which had been attached to the bodies were at times unintelligible due mainly to the effect of dampness. The Victim Identification Form which had been approved by Interpol was not applied to all cases and in fact Form B which is specifically for use at the location of finds of a body was only used on a few occasions and its omission caused unnecessary problems.
- 9.2 The first designated Mortuary at the Town Hall, High Street, Lockerbie, was totally unsatisfactory as it was on 3 separate floor levels. All floors were required to facilitate the Mortuary work which rendered transferring of bodies between these a most hazardous task. A total of 80 bodies were delivered to this Mortuary by which time a second more suitable mortuary was established at Lockerbie Ice Rink.
- 9.3 All bodies were delivered to the Town Hall via the entrance in Bridge Street and a screen was erected in order that transfer could be carried out discreetly. The only other entrance was utilised by staff of the various agencies to access/egress the building.
- 9.4 Police Officers were positioned at both entrances for security purposes. A number of offices used by local authority personnel, social workers and Religious Groups were located in the building. A kitchen was used to prepare snacks for personnel employed within the hall, and an anti room used as a meeting place/venue. The main hall was the first resting place for the deceased brought in from the various sectors.
- 9.5 Due to difficulties in receiving bodies into the main hall because of the stairs, a hoist was later introduced.
- 9.6 The public soon became aware of the Mortuary location and floral tributes were placed on the pavement outside which further advertised the hall's function. It naturally attracted relatives who were searching for information and it was necessary to have social workers present to deal with these people.
- 9.7 Superintendent [REDACTED] was particularly critical of the embalming process which should have been carried out elsewhere than in the Town Hall where the rest of the mortuary functions were being carried out.

- 9.8 An administration system was set up to handle the body processing at the Town Hall. Bodies had to be examined immediately upon delivery in order to establish if they had been properly documented, thereafter a mortuary number was applied to each body to determine it by order of arrival and to simplify mortuary administration. The bodies were laid out in the main hall in numerical order and sheets of corrugated cardboard of a size to cover the full length of the body bag were placed over the bodies and numbered in large print as appropriate. Victim Identification Forms were introduced to administer the processing of the bodies but it was established that the forms as they related to the Pathological Examinations had been superseded and were therefore unsuitable for the purpose. Nonetheless the Victim Identification Forms were found to be of value for the purpose of the external examinations though these could be improved upon.
- 9.9 External examination of the bodies was conducted by two and subsequently three teams of Police Officers working with Pathologists and technicians. The Police Officers totalled 7 per team, each officer having dedicated duties as writers to complete the appropriate sections of Victim Identification Forms, stripping of bodies, labelling and recording of productions, and photographing of bodies. While it was initially proposed to change team members on a daily basis because of the distasteful task they had to perform this did not take place and the Mortuary benefitted from the expertise which the continued participation by the same nucleus of officers provided. Following external examination the bodies had to be carried on stretchers for the purposes of X-ray, Post Mortem, Odontology, Fingerprinting and Embalming. Because of the logistics this was an awesome task and there was a requirement to re-deploy the Police/Military personnel involved in fairly sizeable numbers and with regular interchange.
- 9.10 Following pathological examination the bodies were handed over to the staff of Kenyons for the purposes of embalming.
- 9.11 Daily briefings were held within the Mortuary attended by the Pathologists and representatives from the Police, Procurator Fiscal Service, Kenyons, Pan Am, and other interested parties. These allowed the Police to explain certain problems, for instance the need for corroboration in Scots Law. Updates were regularly provided from the Mortuary to the Incident Control Centre.
- 9.12 When the Ice Rink became available and was used as the main mortuary bodies had to be transferred there from the Town Hall. This was carried out well but it is not a practice recommended for the future.
- 9.13 Superintendent [REDACTED] opened his comments by saying that while every Force has plans for a temporary mortuary these tend to be basic premises identified for use for a short time, before the bodies are removed to a proper mortuary. In the Lockerbie situation there were too many bodies and it was necessary to create full mortuary facilities and procedures. It was necessary to establish a Production Line in the Mortuary to cover body

reception/logging, storage in numerical sequence, external examination and photography, X-ray, Post Mortem Examination, Odontology Examination, and then back to the numerical storage. Thereafter the procedure followed on to Kenyons for embalming and placing in rough coffins for storage, then following authorisation by the Procurator Fiscal, the placing of the bodies in proper coffins for release. While it is recommended that the first stages should be carried out in the same building, embalming should be done elsewhere.

- 9.14 The Town Hall was not a good choice. It was in the Town Centre, with the problem of traffic flow round the building. It is an old building with small rooms and stairs. The building was shared with others which made security very difficult. Finally even though the heating was switched off and the windows opened, the smell from the bodies, body fluids and embalming was almost unbearable.
- 9.15 In contrast the Ice Rink set up, while not ideal, provided a lot of advantages. It is a large building, all on one level, which is particularly valuable, and stands on its own at the outskirts of Town. Little security was needed as compared with the Town Hall. It had a large Car Park which could accommodate a line up at busy times. It was well away from the media interest. The entrance at the rear with large double doors provided that bodies could be loaded discreetly. It allowed storage of bodies on the ice and it was possible to set up an Administration system in a separate room away from the stored bodies. The Mortuary does not need to be an Ice Rink but it should be on one level.
- 9.16 An early problem encountered was that while ice helped to keep down the body smells, some of the bodies were freezing stiff. This was resolved by placing them on wooden pallets. The Ice temperature was kept at 0° while the air temperature was kept warm enough to make the working conditions comfortable.
- 9.17 Following the procedures at the Ice Rink, the bodies were removed to Dexstar for storage prior to removal. One problem which was encountered later on was the need to re-X-ray the bodies which necessitated cleaning-off of the embalming fluids. This was a particularly unpleasant job.
- 9.18 Superintendent [REDACTED] then mentioned what he considered to be the most important facet of this operation, the personnel involved. Prior to attending at the Ice Rink many had heard horror stories and were apprehensive. He stressed the importance of having them fully briefed before going in and allowing them to pull-out if necessary. Health and safety was another facet and it was important to stress this to officers to ensure they were properly briefed and wore proper clothes for the work. There had been an excellent supply of protective clothing throughout except for a short time at the beginning. A lot of manpower is required for this work. Only key personnel were allowed to do more than one or two tours of duty and the team spirit which built up amongst them was very important. However it is essential to monitor the health and safety and personnel aspects.

- 9.19 Finally, referring back to the Town Hall, Superintendent [REDACTED] said that this was most useful when it was being used as a Chapel of Rest. It attracted the media focus and VIP attention thus allowing the proper mortuary work to be carried on elsewhere.
- 9.20 Detective Inspector [REDACTED] reported on body identification. The Procurator Fiscal was present throughout and he laid down the accepted methods of identification from the outset. He instructed that fingerprint evidence would be sufficient to identify bodies. However not everyone is fingerprinted and it often took time to get the necessary fingerprints for comparison. Another problem lay in that the lists of passengers held by Pan Am were very inaccurate and incomplete. It took time to get the necessary accurate information which then had to be put into HOLMES.
- 9.21 Victims came from 23 different countries and odontology records took some time to recover. Every body was charted by odontologists.
- 9.22 Only five people were identified by visual identification and this was actively discouraged as it was seen as particularly harrowing for relatives.
- 9.23 Nine people were identified by photograph or some particular scar, etc., and only eighteen people were identified by odontology alone. Seventy eight victims were identified by odontology and fingerprints. One hundred and thirteen victims were identified by odontology and other methods such as clothing. Only thirteen victims were identified by fingerprints alone, with fingerprints together with other methods accounting for 17 victims.
- 9.24 A problem was caused by the impact of bodies on the ground which on occasions resulted in height being varied between 6" and 9". This initially caused some confusion.
- 9.25 The group carrying out this work started out with four men and was eventually enlarged to become a 12 man operation. A great deal of work was involved in obtaining descriptions from different agencies.
- 9.26 Following identification, a report on each victim had to be prepared to the satisfaction of the Procurator Fiscal. This involved compiling a complete file on each person. Registration of the deaths was also carried out by the Police and this took a considerable amount of time, with the last victims (those missing presumed dead) not registered until 17th January, 1989.



- 9.27 D.I. ██████ spoke on the need to ensure that each victim was free of disease to facilitate the export of the body to the home country and of the work entailed in obtaining cremation certificates where this was intended by the relatives.
- 9.28 Particular pressure was put on by various agencies, including religious groups, to hurry up the process of body identification and release. Detective Inspector ██████ stressed the need for this not to be hurried and emphasised his agreement with the Chief Constable's principle that accuracy is paramount.
- 9.29 Superintendent ██████ reported on the work of the Casualty Bureau. The Bureau was set up and fully operational by 2344 hours on Wednesday 21 December, 1988. It was staffed by 27 Police Officers using 11 incoming lines. However this proved to be inadequate and the following day moved to larger premises at Police Headquarters in Strathclyde with an increased staff of 35 Police Officers and 28 Civilian Staff. 40 external telephone lines and 40 internal lines were made operational. The Casualty Bureau remained in operation until 14 January, 1989.
- 9.30 Superintendent ██████ made reference to the problem of the lack of trained staff, particularly civilians.
- 9.31 Over 2,500 calls were received reporting persons missing and possibly involved in the incident. These calls resulted in the creation of 2,021 missing person reports of whom approximately 25% were suggested as possible plane passengers. Allowing for the magnitude of the incident a relatively low number of calls was received and pressure on the Bureau was obviously lessened by the initial calls taken by the EPIC Centre and locally in Dumfries & Galloway.
- 9.32 Although the enquiry was dealing with the death of 270 persons the Casualty Bureau was dealing with over 2,000 outstanding missing person enquiries, all of which required the person to be established as involved in the incident, or safe and well and the enquiry terminated. A problem highlighted by Superintendent ██████ was the fact that the passenger list changed almost hourly over the first few days.
- 9.33 Superintendent ██████ commented on the welfare aspects for staff working in the Casualty Bureau, particularly the civilian staff who were not used to dealing with distressed relatives telephoning and she commended the use of coffee breaks, morale boosters, etc. She also commented on the need to have a television for information purposes as news items about the Lockerbie Incident inevitably generated a surge of enquiries.
- 9.34 Although Strathclyde had purchased the CRISIS package two years previously this was the first occasion it had been used in an actual incident. There were reservations about its use at the outset. However it was obvious that the card system of a Casualty Bureau could not cope.



- 9.35 The fact that both HOLMES and CRISIS were set up at the same time helped to foster the impression that they were one and the same thing, or at least they interfaced. The only similarities are that both are computer packages by ISIS and use the same McDonnell Douglas hardware. CRISIS is the aid to the Casualty Bureau in the same way that HOLMES is an aid to a major enquiry. Unfortunately due to misunderstandings about the function and abilities of CRISIS, much useful information obtained with regard to potential victims was retained to await input to HOLMES. Information required for CRISIS is shorter and more concise than is required for HOLMES.
- 9.36 A strict division of inputting was made necessary by the distance between the incident and the Bureau. The input of missing person details was done in Glasgow and the input of casualty information was done at Lockerbie. Therefore the Casualty Bureau carried out its normal functions of searching, suggesting possible matches, informing next of kin of the identification and of body release when confirmed. Fax machines were invaluable in this respect and information was not released to next of kin until confirmation had been obtained by Fax.
- 9.37 A number of problems were present throughout the running of the Bureau. Firstly the EPIC Centre was unknown or unheard of to most of the people involved and they were uncertain of its remit. Likewise Pan Am, a commercial concern, was used to inform relatives. This is alien to the Police and led to a number of people querying why they were being informed by Pan Am, rather than by the Police. The lack of trained personnel in CRISIS also presented a problem although the officers who were HOLMES trained or had some form of keyboard skills adapted very quickly. Although there were officers who had CRISIS skills they had no Casualty Bureau training or experience, and those who had Casualty Bureau training had no CRISIS training. The forms normally used were found to contain insufficient detail for the incident and when more suitable Interpol forms were later used the personnel in the field were unfamiliar with them. With regard to software, the CRISIS package requires some flaws to be ironed out. For instance it did not appreciate that citizens of one country could be either white or black.
- 9.38 Superintendent [REDACTED] then commented on the distance between the Casualty Bureau and the incident at Lockerbie. While on occasion face to face contact between the Officer in Charge of the Bureau and the Officer in Charge at Lockerbie could have resolved some of the problems of understanding, separation from the incident meant fewer visitors to the CRISIS Centre which was an asset to the working of the Bureau.
- 9.39 Finally Superintendent [REDACTED] commented that the Casualty Bureau requires to link in and work with the Victim Identification under strict control. There is no room for free spirits. A mould has to be set and adhered to.

9.40 The Report on this area concluded with Superintendent [REDACTED] outlining the body release procedures. Once a Death Certificate had been issued in respect of a victim, a copy was passed to the Deceased Release Processing Unit which made enquiries with the organisations based at the Control Centre in order to establish if any of the victim's next of kin or relatives/friends with "power of attorney" were resident within the United Kingdom. In this regard the Social Work Department, Pan Am, Religious Groups, American Consulate, and the Police Relative Enquiry Team were all of assistance. This avoided the embarrassing situation of notifying relatives in America whilst the next of kin was resident within the United Kingdom.

9.41 If local enquiries revealed that a relative other than the next of kin was to represent the next of kin's interests then this information was recorded and a request made to establish if this person had 'power of attorney' over the future funeral arrangements.

4.42 Superintendent [REDACTED] outlined in some detail the procedures carried out, including offering of counselling service to relatives, the necessity of obtaining faxed authority, the need to inform the mortuary staff and procedures to be followed once a body had been authorised for release, the notification given to HOLMES, and the information provided to the Information Officer for Press purposes.

9.43 Viewing victims was resisted as far as possible and if the relatives insisted they were required to sign a disclaimer which had been prepared for the purpose.

9.44 Superintendent [REDACTED] mentioned the problems of meeting other agencies on a regular basis when they had no self contained room to do so and he recommended that a room should be set aside in any future event; of maintaining good control over the notification of identified victims; and of pressurisation from the Religious Groups present at the Incident.

9.45 Concluding this section it was recommended that a working party should be established to examine the workings of a system of such magnitude, particularly with regard to body processing and devising proper administration procedures.

10. Relatives of Victims - Mr. P. Newell, Deputy Chief Constable

10.1 Mr. Newell opened by commenting on the tremendous pressures from relatives to recover the bodies of their loved ones and obtain personal belongings, and of the fact that when such a catastrophe occurs many people will, for varying reasons, come to the locus of the incident. At Lockerbie the influx of relatives was added to by the usual spectators and noseyparkers.

- 10.2 Accommodation for relatives was provided within the Lockerbie Academy. Whilst this was a problem with regard to security it was a distinct advantage so far as interviewing by investigating Officers was concerned. Each family was allocated a Social Work "Buddy" and it was found that the nomination of a small number of Police Officers as a Relative Liaison Group under the command of a Detective Inspector was of immense benefit.
- 10.3 Because it became apparent that there was a dearth of information regarding recovery and identification of bodies it was found necessary for a very Senior Officer in Uniform to address the relatives on a daily basis. This was the function of the Deputy Chief Constable and the authoritative briefing given was quickly found to be extremely worthwhile in allaying many of the fears and, just as importantly, precluding complaints being made by relatives.
- 10.4 Later, as directed by the Chief Constable, the Deputy Chief Constable and three other Senior Officers went to America and addressed over 300 relatives at four different venues in connection with the return of personal effects of their loved ones. These visits were judged to be necessary because of the lack of information being disseminated to these people by their own authorities in this respect. They were extremely well received and worthwhile.
- 10.5 Concluding Mr. Newell emphasised that it would be foolish to ignore the presence of relatives at such a disaster scene or to ignore their wants either then or afterwards.

## 11. Open Forum - Morning Session

- 11.1 The Chief Constable invited those present to take part in discussion, raising any questions they wished.
- 11.2 Chief Superintendent [REDACTED] Tayside Police, posed the question whether a National Major Incident Plan should now be formulated. Mr. Boyd said that ACPO and ACPO(S) are agreed that we should get together to maximise professional knowledge and technical expertise by making the best of the knowledge available. Mr. Newell commented on the difficulty of getting the eight Forces in Scotland to have common orders due to differences and different situations. However once things at Lockerbie had been concluded they would be passing on any information to other forces. Mr. Dickson also commented that ACPO(S) have a group formulating contingency planning in relation to Aircraft Disasters and that this was looking at broad principles which can be applied to most situations. Mr. Boyd then commented that this incident is not only the largest Air Disaster in this country but also the largest criminal enquiry. A lot of rules have had to be changed as the incident progressed. He also mentioned the possibility of a training college being set up for civil emergencies which emphasised the need to work in tandem with other agencies, as at Lockerbie. Concluding discussion on this point Mr. Boyd paid tribute to all the Forces who had taken part in this incident. It had been a tremendous advert for the British Police.



11.3 Chief Superintendent [REDACTED] Northumbria Police, enquired about the stage at which Mr Dickson was chosen to be Incident Commander and whether it was a conscious decision to select that Officer. Responding the Chief Constable said that it was a conscious decision as there are only two ACPO Ranks in the Dumfries & Galloway Force and Mr. Dickson was a known and able officer who possessed the qualities required. While the Chief Constable of Strathclyde had offered two Assistant Chief Constables and two Chief Superintendents to allow them to alternate, it was decided within 48 hours to retain ACC Dickson and Chief Superintendent [REDACTED] as continuity was very important.

## 12. Property

12.1 Superintendent [REDACTED] opened this section by relating how he had been given his remit with minimal briefing and how he had managed to overcome initial difficulties to obtain staff.

12.2 Premises then presented a problem. With Lockerbie being such a small town he asked his staff to identify suitable property and they set out to find premises. They located the Dexstar premises where the factory was closing down. This was almost tailor made for their purpose of storing property with over 1800 square metres of floor space surrounded by Offices. It even had fork lift trucks. At first it was thought the premises might be too big but this was found not to be so.

12.3 Aircraft parts provided another storage problem and initially garage premises were used for two weeks before C.A.D. Longtown was identified with some 2½ acres of space under one roof. The MOD readily provided these premises.

12.4 Security of the Dexstar premises proved to be a problem. To keep unauthorised people out, a system of authorisations was developed. Security was provided on a 24 hour basis and additional secure stores were created with safes while other areas were created for retaining forensic material for examination. Security was therefore aimed at preventing any further terrorist incident, to safeguard the valuable property, to protect the Productions, to minimise interference from the Press and to keep access to a minimum. Similarly, security at CAD Longtown was provided by MOD Police, a system of authorisations devised and a secure storage unit created.

12.5 An Administration System was set up. Internally, to deal with enquiries at the Stores, and externally to deal with mainly relatives. Forms were designed to meet requirements.

12.6 The HOLMES System was introduced and while there were initial doubts about the sophistication of its property facility it was made to work. This proved to be particularly valuable for identification purposes and over 12,000 entries are contained on it.

- 12.7 The organisation of the Property Store was devised so that it fitted with the Sectors where the property was recovered.
- 12.8 There was concern regarding the possibility of a secondary device and to eliminate this sniffer dogs were used along with an X-ray machine obtained from Customs & Excise.
- 12.9 While searching, priorities were to identify any bomb blast material which might require further forensic examination, to secure all available information for identification, and to identify and secure valuables.
- 12.10 As the majority of the passengers were non-British, dealing through Consuls was the norm and occasionally difficulties arose with International Law, dual claims on property, etc. Attempts were made to resolve these, but if they failed then the Procurator Fiscal was consulted.
- 12.11 One aspect of the release of property has been the cleaning before return to relatives. This has been carried out by volunteers in a laundry set up at the Dexstar premises. Environmental Health Officers examine property to see if it is able to be returned. If it is to be condemned then the procedure is to seek authorisation from relatives for its destruction. Where property is to be released the prior approval of both the Procurator Fiscal and the Senior Investigating Officer is obtained.
- 12.12 Health and Safety has been given a very high consideration and this extends to all the areas including the welfare of staff who are given regular rest periods.
- 12.13 Concluding, Superintendent [REDACTED] summarised the following points:
- 1) Do not underestimate the size of premises needed.
  - 2) Have a dedicated staff from the outset to deal with the property. They will build up expert knowledge.
  - 3) HOLMES. - The property facility had to be enlarged to deal with the volume. The HOLMES facility should be checked and upgraded in this regard.
  - 4) Security is important.
  - 5) The Administration system needs to be good from the start.
  - 6) Health and Safety is an important area which requires attention.
  - 7) Use the intelligence of everyone involved in your staff. Everyone has a contribution to make.
- 12.14 Detective Chief Inspector [REDACTED] continued this report by saying that his Productions Team joined work with Superintendent [REDACTED] Property Team on 3rd January with the remit to identify articles which might be retained as Court Productions. His team consisted of a Detective Inspector, two Detective Sergeants and 15 Detective Constables. These, he split into two areas. The first at



Dexstar dealing with luggage and other property and the second at Longtown dealing with aircraft parts.

- 12.15 At Dexstar items were X-rayed and then examined by the Productions Team to see if there was anything of interest. If so the item was sealed in a plastic bag and sent to RARDE for examination. Even if the X-ray examination showed nothing the item was checked for blast damage externally, then every bag checked internally. Identified items were placed for storage except for those which had been found to have been in the pallet area where the explosion had taken place and these were kept separate as Court Productions.
- 12.16 Of the luggage recovered, only 40 items have not been identified to date and this includes smaller bags etc which had been contained in cases and hand luggage.
- 12.17 All deceaseds' clothing was put into bags and put through the X-ray machine, then sent for forensic examination if necessary.
- 12.18 At Longtown two Detective Officers and four Uniform Officers were involved in receiving, documenting and placing in Sector areas the aircraft parts recovered. During the first few weeks these officers worked with A.A.I.B. Staff concentrating on the blast area of the aircraft and the blast-damaged pallet. Work also involved examining the many skips full of small pieces of aircraft and twelve officers spent a total of nine weeks checking through this piece by piece and were successful in recovering a number of evidential items.
- 12.19 Between Longtown and Dexstar over 2000 items have been sent to RARDE for forensic examination. This includes bags of clothing which if found to be blast damaged were not opened in any way but despatched as they stood, to assist the Scientists.
- 12.20 Detective Chief Inspector [REDACTED] identified the following points for consideration:-
- 1) A Productions Team needs to be involved from the start of the incident. It requires to be a dedicated team separate from the property team.
  - 2) Production labels. - Three types were used but none were adequate for the job. Consideration should be given to waterproof type of production label with better ties attached. These should be placed within plastic bags.
  - 3) Property. Gathering together of material and putting it into one bag together with other items is wrong. This can lead to the wrong association of property to people.
  - 4) The recording of Grid References is very important and requires to be done accurately at the time.
  - 5) A small team knowing exactly what they are doing can be more advantageous than a larger team.

- 6) Anti-tetanus injections should be given to all staff at the start of such an incident.
- 7) All staff should be made aware of radioactive material on the aircraft and the proper way of handling it.

13. C.I.D.

- 13.1 Detective Chief Superintendent [REDACTED] opened by saying that 'International' was the central feature of the investigation. It is a massive murder which the United States see as only second in importance to the murder of President Kennedy.
- 13.2 It was imperative due to the scale of the incident, to get the organisation correct and Mr. Boyd's five principles set the template in this regard. Likewise the C.I.D. Interface Format had been very good and the decision to introduce HOLMES at the start a correct one. Despite the incompatibility of HOLMES and CRISIS it had worked in a first class manner. It had never been tested to the extent it was being at Lockerbie.
- 13.3 Personalities of the people involved were important and liaison with the FBI in America, the BKA in Germany and the other agencies involved had been very good. It is important to recognise that legal constraints apply in different countries and abroad. They do different things in different ways. Particular reference was made to the situation in Germany where a State Prosecutor is in charge of the Pan Am investigation.
- 13.4 As an example of the requirement for correct structures and communications systems Mr. [REDACTED] made reference to the different agencies involved initially holding different indices and records for their own purposes. Pan Am, Kenyons, and others held information which the Police required. A meeting was held and the necessary information then became available.
- 13.5 Another problem lay in the other agencies being unaware of the need for corroboration and other evidential requirements of Scots Law. At RARDE the explosives experts are of world renown, but had no knowledge of the legal requirements of Scots Law. This was easily resolved.
- 13.6 The enquiry is a team effort which is coming into its own with the focus narrowing down and certain lines of enquiry being pursued. With the assistance being given at present continuing it will be possible to successfully resolve the incident to the most satisfactory conclusion. However flexibility is essential and nothing can be taken for granted. The need exists in every area to spell out exactly what is required and to make sure what you want is done by those concerned. In this regard everything in connection with the enquiry continues to be controlled from Lockerbie.

However the investigation is fraught with politics with many interests in it from many quarters.

- 13.7 The enquiry has broken new ground in technology and in the sphere of International Investigations. While there are legal problems, things are going well and everyone is working together in a collaborative and constructive way. The dedication of the investigation team is seen when people are reluctant to return to their own Force though this is on occasion necessary to ensure good management of resources.
- 13.8 Finally, [REDACTED] commented on the role of the Procurator Fiscal as a core member of the team. He said that his presence had been beneficial to the enquiry throughout and excellent relations had been maintained.
- 13.9 Detective Superintendent [REDACTED] Deputy Senior Investigating Officer, opened by saying that the Sector principal which had been devised had been shown to be sound. There had been a need for dedicated specialists within each sector with fatalities and these consisted of Pathologists, Doctors, Odontologists, Forensic Scientists, Identification Branch Officers and Photographers. Each team completed the overall requirements of examination, identification, registration and recovery of all aspects of evidence and property.
- 13.10 He then referred to the requirement for standardisation of forms to assist presenting the written evidence, the on-going registration and evidence gathering. Corroborated evidence of body identification by, a minimum, of two acceptable and recognised methods coupled with as early an identification as possible is essential for the benefit of the relatives and the criminal investigation.
- 13.11 A CID Secretariat is essential and should be established immediately. The Senior Investigating Officer and his Deputy should not be exposed to continual interruptions by direct access of the numerous visitors seeking advice and direction. An outer office to prevent direct access is essential.
- 13.12 On numerous occasions the format changed in the investigatory field, even on a daily basis, to accommodate whatever crisis or pertinent aspect existed at that time and required immediate attention. Flexibility should always be provided for.
- 13.13 Press Liaison is essential and the introduction of the Police Press Liaison Officer and the Scottish Information Officer were both invaluable in relating to the media and to the politicians. Here another aspect of flexibility was shown as the Lord Advocate took the unusual step of releasing information on the enquiry. Such action in the face of recognised practice in an unusual enquiry should be remembered for the future.



13.14 Prior to this incident there were no specialists in aircrafts being blown up. A lesson learned concerns the wrongful assumption that all the specialists called in to assist are fully conversant with what is required in their experience and expertise. The Disaster is a criminal enquiry and requires certain procedures to be adopted to ensure the continuity of evidence. [REDACTED] gave some examples to illustrate his point and said it can never be assumed that specialists have previous experience in such a Disaster when it is a criminal act.

13.15 The immediate introduction of a co-ordination team of Detectives to assess, identify and record all information on a daily basis and to progress evidence, is essential. The Senior Investigating Officer and his Deputy had difficulty in trying to co-ordinate all data, whilst facing an incessant barrage of daily questions and requests.

13.16 The format of daily evening briefings and morning sector briefings was successful, particularly as the Senior Investigating Officer due to the pressure of work was unable to conduct such briefings as would be the norm in the average murder enquiry.

13.17 [REDACTED] recommended that a C.I.D. Aide Memoire, setting out the main consultative principles agreed on through the Policy file, would realise some merit especially in such a protracted and complex enquiry in the future.

13.18 [REDACTED] also commended the presence of the Procurator Fiscal as an integral part of the investigation. It was a new format which proved to be highly successful and should be part of any future similar disaster investigation. Easy access to discuss problems was extremely helpful and allowed the Procurator Fiscal to be kept fully conversant with the ongoing enquiry.

14. Sector Command - Detective Chief Inspector [REDACTED]

14.1 Detective Chief Inspector [REDACTED] said that Sectorisation had formed the basis of the search organisation and allowed each Detective Chief Inspector (DCI) to establish firm lines of demarcation and areas of responsibility.

14.2 Every Sector was different, presenting different problems for the Team Leader and searchers. In this respect co-ordination was very important. It was essential to have a D.C.I. in charge of each Sector with the uniformed and CID Officers blending together to do the task in hand.

14.3 The first briefing of Officers who ultimately became Sector Commanders (D.C.I.'s) took place at 8 a.m. on Thursday 22 December 1988, within Lockerbie Academy. At this briefing Detective Chief Superintendent [REDACTED] laid out the remit to search and recover all

bodies; recover all wreckage, and recover all baggage and property, while, in the first instance treating the matter as murder and carrying out all enquiries accordingly with regard to obtaining photographic and forensic evidence.

14.4 Sectorisation stood the test of time, even though the total area was in due course extended to include additional Sectors. The initial Sectors comprised a D.C.I., one Detective Inspector, two Detective Sergeants, and 8 Detective Constables, assisted by a Uniform Inspector, 2 Sergeants 12 Constables, and a technical support team of medical, photographic, forensic, Scenes of Crime, A.A.I.B., Army and RAF personnel.

14.5 Debriefings were held each evening when the Sector Co-ordinator reported the day's events, the current position and requirements for the following day for each sector.

14.6 The following should be borne in mind for the future:-

- a) Sector Teams once appointed must remain constant with the same CID Officers, Support Personnel and Uniform personnel. The daily changing of Uniform Officers wasted a lot of time in briefing.
- b) It is essential that local Officers are attached to Sectors to provide local knowledge.
- c) Communications required to be improved. RAYNET is not the answer. Their operators were not conversant with the difficulties encountered or the Police jargon used. Latterly the Team Leaders used Cellnet telephones.
- d) Detective Chief Inspectors are the correct choice for Sector Commanders. While the Uniform Inspectors were ideal for the search aspect, the preservation of evidence was more a C.I.D. function.
- e) Body bags had no handles and were continually bursting.
- f) Production labels were found to be totally unsuitable for this type of work and were being constantly wasted by body fluids and other contaminations.
- g) Difficulties were encountered where a partly clothed body was recovered as on occasions articles of clothing which were lying near to the body were being placed in the body bag. It soon became clear that these should not have been attributed and caused various problems of identification.
- h) Similarly, personal papers and wallets found near to bodies should not be wrongly attributed and placed in the wrong body bags.

15. H.O.L.M.E.S - Detective Inspector [REDACTED]

15.1 Detective Inspector [REDACTED] opened his comments by saying that HOLMES refers to the Home Office Large Major Enquiry System and the Lockerbie Enquiry is a particularly large enquiry with which the HOLMES system is coping competently. He then gave a brief chronology of the setting up of HOLMES and the stages in which it developed.



- 15.2 Soon after the explosion on board Pan Am 103, Mr. Boyd contacted Strathclyde Police requesting the assistance of their HOLMES System. By Road and Helicopter equipment was transported to Lockerbie Academy and by lunch time the following day, Thursday 22 December, 15 terminals were operating, linked to a computer in Pitt Street, Glasgow. By the following day a further 6 terminals were in operation. Initially all worked 24 hours per day. HOLMES Staff were drawn from Strathclyde and Lothian & Borders Police Forces and local typists were used. Although Strathclyde use McDonnell Douglas hardware and Lothian & Borders use Honeywell, the whole point of HOLMES is that all Forces work to the same system and standards therefore it became relatively straightforward for all staff to quickly form into a team. This displays that standard training works.
- 15.3 The principle thrust in the early hours was to input details of potential victims from Passenger Lists and also to try and record a sequence of events. It was in the former task that the first problems lay as the Passenger List provided by Pan Am contained inaccuracies and lacked detail.
- 15.4 A problem lay in the CRISIS Casualty Bureau which worked in the same room as HOLMES but on a separate Data Base. The information input into HOLMES was not searchable on CRISIS and vice-versa. Duplicate input was necessary and to ensure accuracy a fail-safe system of document flow had to be developed. This was made difficult by the fact that one half of the CRISIS set-up was located in Glasgow. However it was not just that most of the information from CRISIS had then to go onto HOLMES but also some of the information being received by HOLMES had to be input to CRISIS. This problem is already being looked at and some form of merging of the two systems is the minimum required so that at least only one input is necessary.
- 15.6 It was the Chief Constable's policy from the start that everything should go through HOLMES which would then form the information base for the enquiry right to the end. Latterly the policy worked, however due to the enormity of the organisation initially it was impossible for everything to reach HOLMES. This difficulty was faced by deploying a Dumfries & Galloway HOLMES trained officer to the main hall where many of the units worked in the early days. He ensured that all relevant information was copied to HOLMES.
- 15.7 The Metropolitan Police set up its own enquiry, initially concentrating on Heathrow, using a HOLMES system at New Scotland Yard. Running an enquiry on two separate and unlinked Data bases is courting disaster and eventually the London Incident Room closed, the computer tape was flown to Glasgow, loaded on to the Strathclyde Holmes System and linked as a Dormant Incident. Any enquiries outstanding at that time were re-created onto the live Lockerbie based Incident. The London terminals were linked to Glasgow and a liaison officer sent from Lockerbie to London. Since then London has been working as a satellite of Lockerbie. You must not work one incident on two Data bases and if, for some reason, two are created one must be closed at the earliest opportunity.

15.8 Two other satellites were created in America and Germany, and it has been found valuable to have computer terminals available locally for both the issuing and receiving of enquiries. Communication is much more efficient by computer. It provides documentation as the basis for an enquiry more clearly than Fax and more effectively than telephone messages. The HOLMES unit has been running in Washington since 9 January and in Meckenheim, West Germany, since 20 February. In addition to allowing research of the Data-Base, the on-site computer offers the facility to manage enquiries much easier. Not only is allocating work more efficient but the reception and recording of results of enquiries can be quickly received onto this system. Without on-site terminals documents received in the USA would have to await the next courier before being transported to Scotland. Now documents can be registered in the USA and Germany and become immediately available.

15.9 A small HOLMES team was established in the property store to create computer records of all property recovered except aircraft parts. It was not known what would be required for evidential purposes and total input was the only answer. Where property is identified it is linked to the nominal record of its owner. Information as to where found, by whom and where stored is also recorded. Although the manual records kept at the property store are comprehensive, the computer data base is word searchable and therefore the staff there will have a continuing role in identification of property for some time. In respect of aircraft parts only those of evidential value are recorded on the HOLMES system.

15.10 Detective Inspector [REDACTED] provided some statistical data on the operation of HOLMES and concluded by saying that computer capacity was clearly not a problem and even if it were additional capacity could be added. All other Incidents had been taken off this particular HOLMES computer to maximise the processing power for this Incident.

15.11 Concluding, Detective Inspector [REDACTED] said many things have been learned by the HOLMES team which will be passed on to the developers of the system so that when it comes to be used again in such circumstances, others can learn from our experiences.

16. MUTUAL AID

16.1 Debrief reports on Mutual Aid were provided by representatives of Forces as detailed below -

16.2 Lothian & Borders -  
Following some background comments Chief Inspector [REDACTED] enumerated the points of note arising from the Lockerbie Incident:-



- 1) The Lothian & Borders initial Mutual Aid response was very good with Senior Officers being at Lockerbie before midnight on the first night;
- 2) The Mutual Aid Forms were found to be a good record of the staff deployed at Lockerbie.
- 3) It is important when providing units of mutual aid to try to keep the groups of officers together.
- 4) Consider only briefing the Senior Officers and then allowing them to brief the men.
- 5) Debriefing. Bus journeys home should be used to tell the men what had happened during the day.
- 6) The Force Liaison Officer should be at least of Superintendent rank and have a staff officer with responsibility for welfare. They should be situated in the Control Room and have overlapping leave.
- 7) Have officers with local knowledge in every team.
- 8) Inform the Liaison Officers as soon as possible of the resources needed for the following day.
- 9) The types of job to be done the following day should be communicated so that the right officers are selected and provided for the work.
- 10) The quality and quantity of clothing issued and the wearing of uniform needs to be looked at in such events.
- 11) Body bags were of poor quality and particular difficulties arose when being used over rough terrain.
- 12) Communications between helicopters and those on the ground were difficult. Specialist radios should be purchased or obtained via the Civil Defence budget. A Cellnet or something similar should also be utilised on buses transporting personnel.
- 13) While PSV's are adequate for transporting personnel to/from Lockerbie they are not suitable for doing the work of transferring to and from the Sectors. Other transport such as Mini Buses and personnel carriers should be utilised.
- 14) Evening debriefs are important.
- 15) As the Senior Officers tend to work longer hours it is important that they should have their own transport.
- 16) Different divisions in different Forces were using different ways of selecting officers to work at Lockerbie. This needed to be looked at and a uniform system devised if possible.

Central Scotland -

16.3 Inspector ██████ said there had been a policy decision to deploy an Inspector, two Sergeants and 17 Constables by rail, due to difficulties in road transport at that time. The train was held for the officers and a special stop was made at Lockerbie to allow the officers to disembark. Similar arrangements were made for the return journey.

16.4 Using the same officers all the time was important and Inspector ██████ used two serials of twenty men working on alternate days at

Lockerbie, with the other day being taken as a day off. This met with no criticism from the Officers involved. Similarly, good communications were appreciated and he kept the men informed of what was going on.

16.5 The Central Scotland Underwater Unit of 11 Officers was detailed to assist. They encountered many problems including access to difficult areas, health and safety and the fact that their own bus was not used after the second day. However advantage was obtained by using Mini Buses driven by Traffic Officers. The severe wear and tear which occurred on their equipment because of prolonged commitment was another problem. The use of helicopters and landrovers for transporting to some loci was commended. Map reading skills require attention. Officers deployed at Lockerbie had to acquire these during the incident, however it may be a point for future training.

16.6 Concluding Inspector [REDACTED] said Central Scotland came equipped to help without asking if required, as they could not get through on communications, and they had done this successfully.

Grampian -

16.7 Detective Chief Superintendent [REDACTED] said that his Force had only made a small contribution by providing a Mountain Rescue Unit, CAT machine, which was ideal for use in rough terrain, plus some officers to man it. They stayed for 48 hours when they were stood down. However it is a comment on their commitment that the officers wanted to stay longer and were happy to be even a small part of the exercise.

16.8 At this point Mr. Boyd explained the reason for requesting assistance from Grampian Police, was due to the military notifying him they were withdrawing their staff for Christmas and he had felt it necessary to carry on the recovery of bodies exercise during that time. In the event the RAF reconsidered, but the contribution of the Grampian Officers was gratefully received.

Cumbria -

16.9 Acting Superintendent [REDACTED] said that his Force had been the first outsiders to arrive and had done so uninvited as they had been unable to contact Dumfries & Galloway. Once there the officers on the ground had felt frustration as, like many other Forces on stand-by, they were waiting and keen to assist and had much to offer. He said it is to be remembered that the Scotland/England border is not a physical barrier.

16.10 Acting Superintendent [REDACTED] also commented that sending the same officers repeatedly can have its drawbacks, particularly if they are performing mortuary duties continually. He felt this was a matter for future consideration.



Northumbria -

- 16.11 Superintendent [REDACTED] said that his Force's involvement had been confined to the search of their own area, particularly the Kielder Forest. The search and recovery operation involved both the use of helicopters and ground support staff over a 29 day period when over 2,500 items of personal property were recovered. At the peak over 450 searchers were used. He particularly commended the assistance given by the Fell Rescue Teams who were better searchers than the Police, particularly in bad conditions, and able to provide experts to assist the Police.
- 16.12 Mistakes were made and should be learned from. Helicopters should have been used earlier, particularly for transporting personnel. Also communications were a problem, though this was eventually overcome.

British Transport Police -

- 16.13 Superintendent [REDACTED] said that his officers had made a small contribution, commensurate with their resources. Dog handlers had been early on the scene with six officers deployed for the first few nights. Also support units had been used to assist in the exercise. He said that all the officers involved had praised the running of the operation.

Ministry of Defence Police -

- 16.14 Chief Inspector [REDACTED] reported that the MOD Police at Longtown had become aware of the incident as it happened and when confirmed immediately despatched three officers with a Police dog at 2040 hours. A total of 17 officers were provided on the first night. Further MOD Police assistance was provided at RAF Carlisle which Rescue Helicopters used as a re-fuelling base. Extra areas were prepared for the reception of these and off duty Police Officers were called in to provide assistance with 14 officers being despatched from RAF Carlisle to Lockerbie. Chief Inspector [REDACTED] then detailed the assistance given by the MOD Police.
- 16.15 MOD officers were mainly held on stand-by while at Lockerbie and it was felt they could have been doing more. However, in hindsight, it is clear that there was little that could be done especially as it had been established that there had been no survivors from the aircraft or the affected houses.
- 16.16 Many officers were critical of the media as they roamed especially in the Rosebank Crescent area.
- 16.17 The Commanding Officer at RAF Carlisle was on stand-by and had a considerable amount of equipment which might have been useful in the operation. It would have been advantageous for him to have been located at Lockerbie Incident Control Centre.

16.18 Concluding his up-date, Chief Inspector [REDACTED] said that all the Ministry of Defence Police Officers had performed well and had been pleased to be able to assist in the operation at the outset and also with the work involved in storing the wreckage of the aircraft at CAD Longtown.

Scottish Crime Squad -

16.19 Detective Superintendent [REDACTED] said that the Scottish Crime Squad is a Mutual Aid Unit which responded to the enormity of the disaster with an initial 8 officers being deployed. This peaked at 24 officers and is now continuing with 8 officers being involved in the investigation.

16.20 There may be some benefit in using the expertise of the drugs wing of the Scottish Crime Squad in the searching for small items and consideration should be given to this in any future incident.

16.21 He said that the Scottish Crime Squad were pleased to be involved and felt a part of the team.

17. Communications - Inspector [REDACTED]

17.1 Inspector [REDACTED] commented on the various communications problems which existed. Firstly, the damage to telephone lines because of the crash was aggravated by the congestion on telephone lines in the area. Cellnets and Vodaphones were used but these congested very quickly. Likewise telephone lines to Headquarters blocked. The lack of ex-directory telephone numbers meant they were unable to telephone out. Immediately British Telecom gave 50 lines to Lockerbie. However to do this they had to cut off a number of 'phones in Lockerbie and this aggravated the problems of people contacting the Police to enquire if people were safe following the crash. Within 24 hours British Telecom provided a second Cellular phone system and within 36 hours there was a 3,000 line exchange system in position. In all 223 telephone lines were installed and Radio Pagers were also provided. Inspector [REDACTED] commended the excellent work of British Telecom which met the need to have instant communications in the situation.

17.2 Dumfries and Galloway only had one VHF radio channel per area of the Force. Outside Forces attending could not communicate with them or with their own Forces. There was a lack of equipment to do anything about this situation and it was aggravated by the huge area to be covered by the search. The solution will be partially provided by the new WARC installations however it is also suggested that all Forces carry the frequencies of all other Forces to allow them to change when entering the other Force area. In the Lockerbie situation Strathclyde Police provided the use of a VHF frequency station which gave contact with traffic mobiles and RAYNET was an excellent help with over 80 operators working for many hours up until 31 December. Eventually this function was taken over using Strathclyde and Dumfries & Galloway radios although even these had problems. The new frequencies will help this situation.



17.3 Fax machines are a thing of the future and there are 11 in use in L.I.C.C. They have been of great value while Telex was little used. Inspector [REDACTED] also commented favourably on the satellite links for HOLMES which were requested and provided.

17.4 It was suggested Cellnet and Racal need to dedicate a cell for emergency services use in such a crisis in future.

18. Media - Superintendent [REDACTED]

18.1 Superintendent [REDACTED] said an important advantage in dealing with the press at the Lockerbie Incident was clear unfettered access to the Chief Constable. It was invaluable in assisting him to know policy and what was ongoing. He then outlined his introduction to the Incident when he attended at Lockerbie on a voluntary basis and found Scottish Information Office staff already in situ. A Press Office was established and the nearby Masonic Hall made ready for conferences.

18.2 The incident attracted media from all over the world and at the peak between five and six hundred journalists were at Lockerbie. A policy was developed for being pro-active rather than re-active. The area of the incident was too big to keep the media out so it was decided to keep them fully briefed.

18.3 Another Policy area was the briefing by an ACPO(S) spokesman. [REDACTED] performed this role and it was vitally important as everyone judged Lockerbie on the media reports on it. It is essential to make sure that the person handling the media is fully briefed and able to answer all questions.

18.4 The time difference between here and America caused a problem with journalist from America wishing to do interviews at different times of the day to fit it with US time.

18.5 Staffing was provided by experienced Strathclyde Officers assisted by Dumfries & Galloway Officers of whom two were deliberately selected as being local people. However for a future event the suggested minimum number of staff required is 36 officers working in 3 shifts to provide an adequate 24 hour service demanded by calls being received day and night. Expertise in the information office field is also required.

- 18.6 It was decided not to grant individual interviews and only hold conferences. However to assist the Press some event was arranged each day which would provide the Press with information and footage. Organising such things as Press coverage of the recovery of the nose cone involved a lot of effort and liaising with Government Departments.
- 18.7 The Scottish Information Office provided valuable back-up to the Police and were particularly professional and expertise in getting things organised. However it should be noted they have no remit to speak for the Scottish Police Service.
- 18.8 One difficulty highlighted related to a press conference when a four page hand-out was prepared for the media, and they were taken to Dexstar and to Longtown. The main purpose was to let relatives know that rumours of property being destroyed were incorrect. However this was lost when the Senior Investigating Officer provided information about the IED being contained in a radio. The message regarding the property was completely lost as the media concentrated on the bomb in the radio aspects. This is a lesson to be learned for the future.
- 18.9 Concluding Superintendent [REDACTED] said that disasters follow a certain pattern and the actions of the media, VIP's visits, etc., will always take place. The media know exactly what is going on and the problems which are being dealt with. However the media need to be given full attention and doing this paid dividends at Lockerbie.
- 18.10 The Chief Constable then endorsed the points made by Superintendent [REDACTED] saying that he was grateful for the work done but pressure was still on from the media trying to get access to information held by the Investigation Team at Lockerbie. Following discussion with the Lord Advocate it had been decided that no information would be divulged to the press regarding the on-going investigation at present and this had now been accepted by the press. Any national contingency plans needs to have a chapter on the media and the handling of it.
19. Open Forum - Afternoon Session
- 19.1 Mr. Boyd invited those present to ask any questions or raise any points relative to the debriefing.
- 19.2 Inspector [REDACTED] of Lothian & Borders asked Mr. Newell what value had been obtained from the VIP visits to the locus. Mr. Newell responded that the visits of these people provided a morale boost for the local people, Police and other Emergency Services working on the incident. They are also important as the V.I.P.s are able to appreciate what is being done and the scale of the problem.



19.3 Chief Superintendent [REDACTED] then commented on the sophisticated equipment which the Press now used, including directional microphones and zoom lenses. It is a worth bearing in mind that the press can now literally see round corners and there are different standards of pressmen. Responding, Mr. Boyd said he had from early on emphasised the crucial importance of all officers behaving in a professional manner at all times.

19.4 Superintendent [REDACTED] from Strathclyde raised the question of whether consideration was given to victim identification being a 24 hour process. The Chief Constable said that at the start fingerprint records, dental records and medical records had to be obtained from all over the world and so it was not necessary to devote more resources to the victim identification team until this information began coming in. It was certainly not needed in the first few days. [REDACTED] said that while American agencies tend to take fingerprints for many reasons these are not held by a single central body and the sheer logistics dictated the pace that Victim Identification was carried out.

20. Closing Remarks

20.1 Closing, Mr. Boyd stressed that this meeting had been an Interim Operational Debriefing on the initial stages of the Lockerbie Air Disaster. An International Criminal Enquiry to detect the persons responsible for the murder of 270 people was ongoing. More things will be found in the future, but it is important to record the findings to date in order that these can be taken on board. He said that it is intended to have a further debriefing at some time in the future to be arranged.

20.2 Finally Mr. Boyd thanked everyone for attending and for their very valuable contributions.

## MAIN POINTS FOR CONSIDERATION

1. The Force Headquarters/Control Room should have a sufficiency of un-listed telephone numbers to ensure all lines do not become blocked by incoming calls. (Para 4.2)
2. Establish correct management structure, with appropriately high ranks in charge of duties, in early course. (Para 4.3, 5.8)
3. Identify suitable premises for the Command Post early on. (Para 4.4)
4. Proper and professional handling of Media from outset. (Para 4.5)
5. VIPs require to be given every attention and consideration. (Para 4.7, 19.2)
6. Offers of assistance and unrequested assistance arriving, all require to be dealt with. (Para 4.9)
7. Importance of briefings to communicate policy and achieve proper management, and of developing a proper briefing system, as soon as possible. (Para 6.10, 5.11, 9.11)
8. The police must utilise all available assistance in such events. They cannot handle these disasters alone. (Para 5.9)
9. Benefit of using Raynet. (Para 5.12 - conversly see Para 14.6)
10. Problems of over-resourcing can occur but is preferable to a lack of resources. (Para 5.13)
11. The importance of having sound principles as guidelines for action. (Para 5.16)
12. Importance of establishing a clearly defined and easily found R.V. point with adequate facilities and communications and proper staffing at an early stage. (Para 6.1 - 6.6)
14. Obtaining Military Aid to the Civil Power - procedures to be followed, type of assistance provided; best utilisation; requirements of Military - should all be considered. (Para 5.9, 6.7-6.10)
15. Utilisation of Search and Rescue Helicopters. (Para 6.11, 6.14)
16. Importance of Senior Military Officer becoming part of the operational team. (Para 6.13)
17. Establish a designated holding area for military with only Commander attending the Control Centre. (Para 6.15)
18. Maximise use of Military Transport and communications systems. (Para 6.16)
19. Ensure all Voluntary Agencies are aware of Chief Constable's directives and work accordingly. (Para 6.17)

20. With large numbers involved at a disaster site consider appointment of Medical Liaison Officer. (Para 6.17)
21. Value of having a Police Liaison unit with sufficiently high rank in charge. It should be established immediately, staffed by officers with local knowledge. (Para 7.1, 7.2, 7.3, 7.16)
22. A controlled and co-ordinated arrangement for obtaining goods and services. (Para 7.9, 7.12)
23. To avoid confusion some aspects of nomenclature require attention. (Para 7.13, 7.16)
24. Provision of all stores, including those held by the Quartermaster, to come under the Liaison Unit. (Para 7.14, 7.16)
25. Ensure the Liaison Unit is kept fully briefed. (Para 7.15, 7.16)
26. Need for Senior Officer to be made responsible for allocation of personnel. (Para 7.11, 7.16)
27. Assistance with traffic diversions can be provided by AA and RAC and by the local authority. Utilise the media to publicise diversions. (Para 8.2, 8.4)
28. The importance of maps and good communications, particularly when utilising personnel from other Forces and agencies. (Para 8.6)
29. While coaches are suitable for transporting personnel to the area, other more flexible means are required for transport within the disaster area. (Para 8.7, 16.2)
30. Devise a system to manage traffic administration effectively. (Para 8.8)
31. More durable and weather resistant labels for bodies are required. (Para 9.1)
32. The embalming process should be carried out separately from the other mortuary procedures. (Para 9.7, 9.13)
33. Necessity to establish a proper administration system within the mortuary. (Para 9.8, 9.13)
34. Review of Victim Identification forms and similar Mortuary documentation to see if these can be improved in light of experience. (Para 9.1, 9.8)
35. Dedicated teams of Police Officers working on mortuary duties build up 'expertise.' (Para 9.9)
36. It is important to have a sufficiency of personnel to enable regular interchange while on mortuary duties. (Para 9.9)
37. Important consideration must be given to identifying premises for use as a temporary mortuary with particular regard to location away from town centre, construction all on one level, parking, access and security. (Para 9.14, 9.15)



38. Personnel, their welfare and health and safety aspects, all require particular attention in the mortuary situation. (Para 9.18)
39. Difficulties can arise in identifying victims, in obtaining fingerprints and dental records and, in this case in getting an accurate passenger list. (Para 9.20)
40. Confusion was caused as impact of bodies with ground resulted in height being varied between 6" - 9". (Para 9.24)
41. Accuracy is paramount in body identification and should not be compromised. (Para 9.28)
42. A sufficiency of trained casualty bureau staff is important. (Para 9.30, 9.37)
43. The Casualty Bureau should be aware of news broadcasts as these generate enquiries with them. (Para 9.33)
44. The difference between CRISIS and HOLMES must be made clear to all concerned early on to avoid misunderstandings and mix-ups. (Para 5.35 - See also Item 79, Para 15.4)
45. The value of Fax machines was realised in this investigation. (Para 9.36, 17.3)
46. Forms used in the Casualty Bureau should be reviewed. (Para 9.37)
47. Some shortcomings were identified in the CRISIS software and this should be reviewed. (Para 9.37)
48. Strict guidelines need to be set out and adhered to in Casualty Bureau work. (Para 9.39)
49. Viewing of bodies by relatives should be resisted. (Para 9.43)
50. The establishment of a working group to examine victim processing procedures on a large scale is recommended. (Para 9.45)
51. Relatives attend at the locus and caring for their needs is important, including the provision of information. (Para 10.1 - 10.5)
52. While detailed National Major Incident Plans may not be achievable, the experience of Lockerbie must be publicised and learned from. (Para 11.2)
53. The selection of key personnel and continuity are important. (Para 11.3)
54. Identification of suitable premises for storage of property requires early consideration. The size of premises required should not be underestimated. (Para 12.2, 12.3, 12.13)
55. Security requires to be given high priority. (Para 12.4, 12.13)
56. Utilise a dedicated team from the outset to deal with property. (Para 12.13)



57. The capability of the HOLMES system to handle large volumes of property should be examined. (Para 12.13)
58. A sound administration system is required to handle property. (Para 12.13)
59. Health and Safety of officers in a Property Store requires attention. (Para 12.13)
60. A dedicated production team is required from the outset. (Para 12.20)
61. Waterproof, stronger production labels with better ties are required. (Para 12.20, 14.6)
62. Gathering of property from the locus must be handled very carefully and be properly and accurately recorded. (Para 12.20, 14.6)
63. Health and Safety aspects of property and production handling need consideration. (Para 12.20)
64. It is important to get the organisation and structure of the criminal investigation correct. (Para 13.2)
65. Liaison is central to the criminal enquiry. Appreciation of other legal systems is important in an International Investigation. (Para 13.3)
66. Do not assume everyone is aware of the requirements of Scots Law. (Para 13.5)
67. Great benefit can be derived from having the Procurator Fiscal working with the investigation team. (Para 13.8, 13.18)
68. The sector principal with dedicated specialists working in each worked well. (Para 13.9)
69. Early proper identification of victims is important for relatives and the criminal investigation. (Para 13.10)
70. Standardised forms for use in many aspects should be considered. (Para 13.10)
71. A CID Secretariat is essential and should be established immediately. (Para 13.11)
72. Ensure all 'specialists' are aware of exactly what is required of them and do not make assumptions about their expertise. (Para 13.14)
73. A co-ordination team should be introduced early in the investigation. (Para 13.15)
74. Regular briefings are important in enquiries of such scale. (Para 13.16)

75. A CID Aide Memoir may be of value in future protracted and complex enquiries. (Para 13.17)
76. Sector teams must not be continually changed. They should each have a local officer attached. (Para 14.6 - conversely see Para 16.10)
77. Body bags should be improved. (Para 14.6, 16.2)
78. Standard HOLMES training has been shown to work. (Para 15.2)
79. The interface of HOLMES and CRISIS requires to be addressed. (Para 15.4)
80. Only one HOLMES data base should be used. (Para 15.7)
81. The international linking of HOLMES proved successful with many benefits. (Para 15.8)
82. Endeavour to keep units of Mutual Aid together. (Para 16.2)
83. Brief only senior officers and allow them to brief men. (Para 16.7)
84. Importance of debriefing and keeping men informed. (Para 16.2)
85. Appropriate rank and assistance for liaison officers. (Para 16.2)
86. Clothing needs examined, particularly the wearing of uniform. (Para 16.2)
87. Communications require further examination and possibility of specialist radios being purchased via the Civil Defence Budget. (Para 16.2.)
88. Utilise expert 'Fell Rescue Teams' when searching rough terrain. (Para 16.11)
89. Use of helicopters to transport personnel is worth considering. (Para 16.12)
90. The expertise of the drug wing of the Scottish Crime Squad could have been used for searching for small items. (Para 16.20)
91. Provision of emergency telephone lines was achieved by cutting off normal users and this can have adverse side-effects. (Para 17.1)
92. Need for Forces to be able to easily change to operate on the radio frequencies of other Forces. (Para 17.2)
93. Consider Cellnet and Racal dedicating a cell for emergency service use in the future. (Para 17.2)
94. The Police response to the press should be pro-active keeping them fully briefed. (Para 18.2)
95. Press briefings should be by a fully informed ACPO rank officer. (Para 18.3)

96. To staff a major incident press office on 3 shifts over 24 hours, a total of 36 staff is suggested, some with expertise in the information office field. (Para 18.5)
97. Structure and arrange press conferences in such a way so as to deliver the message you wish to put across. (Para 18.8)
98. Giving appropriate attention and consideration to the Media at major incidents pays dividends. (Para 18.9)
99. Any National Contingency plan should devote attention to handling the Media. (Para 18.10)
100. Given the sophistication of press capabilities, all police officers must at all times behave in a professional manner. (Para 19.3)