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FINAL REPORT OF THE UNITED NATIONS COMMISSION OF EXPERTS
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ANNEX X.B
MASS GRAVES - PAKRAČKA POLJANA,
UNPA SECTOR WEST, CROATIA

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Part One

MASS GRAVE INVESTIGATION AT PAKRAČKA
POLJANA, UNPA SECTOR WEST, CROATIA

I. INTRODUCTION

1. During a March 1993 reconnaissance mission, the Commission became aware of the need to conduct a second mass grave excavation at a site which would probably contain Serb bodies. This second excavation was necessary in order to balance the Ovčara excavation, which would probably be found to contain Croatian bodies. At the same time the Commission was informed by UNCIVPOL members of a number of probable clandestine gravesites near Pakračka Poljana in UNPA Sector West which were believed to contain a large number of Serb bodies. For reasons related to the security of the sites and of potential witnesses, the Commission avoided visiting the sites at that time.

2. In October 1993, when the Commission was in a position to conduct a mass grave excavation, it decided to have Physicians for Human Rights (PHR) conduct a preliminary site survey at Pakračka Poljana to confirm the existence of a mass grave. At the time this decision was taken, it was the opinion of the On-site Rapporteur that the Pakračka Poljana location was the location in the UN Protected Areas (UNPAs) most likely to be the site of a mass grave containing Serb victims.

3. Given a UNCIVPOL member's description of the suspected grave sites, the Canadian War Crimes Investigation Team members operating in Pakračka Poljana, along with the forensic experts from PHR, concentrated their investigation on the line of 17 trenches along the field, and then on the independent graves alleged to be located along the stream at the end of that field.

4. From 20 October to 9 November 1993, the Commission deployed members of the PHR international forensic team, the Canadian War Crimes Investigation Team (WCIT) 1/ and the Dutch UNPROFOR Support Detachment to the area. The numbers of each group's members varied over time, as persons were shifted from the Ovčara site to Pakračka Poljana.

5. The Commission received a particularly high level of support from UNPROFOR during this particular investigation.

6. A lengthy report was prepared by PHR concerning this investigation and two reports were also prepared by the WCIT. The WCIT's Interim Report and the WCIT's Investigation Report follow. The PHR report can be found at Part 2 of this annex.

7. The PHR forensic team reached the following conclusions:

(a) Nineteen individuals (16 males, three females) were buried in nine separate graves in a field south of Pakračka Poljana. The graves were shallow and appeared to have been dug by hand. Leaves found in the bottom of some graves and the clothing on several individuals, including heavy jackets and sweaters, suggests that burials took place in the autumn or early winter;

(b) The area around the graves was used as an execution site. Expended .22 calibre, .25 calibre, 9 millimetre calibre, and 7.62 by 39 millimetre calibre cartridge cases were found adjacent to six of the graves. Expended rounds were also found near some of the bodies or were recovered from clothing. Five of the bodies had their hands tied with rope. Other bodies had their hands together, sometimes in extremely awkward positions, but no

rope was found during the excavations. It is possible that the hands had been bound but that the binding was made of a natural fibre that disintegrated. Fifteen of the bodies exhibited gunshot wounds to the head; two had blunt head trauma; one had multiple gunshot wounds to the arm and leg; and one had massive head trauma;

(c) The nine graves are clandestine burials. The isolated location of the graves suggests that the executioners intended to bury their victims secretly. The graves were within a short distance of a road that could be accessed by a truck or other vehicle. The graves were also adjacent to large, woody vegetation that screened the area from at least one direction; and

(d) There was no indication that the graves had been disturbed since the time of internment.

8. There were 143 items of potential evidentiary significance which were identified, tagged and secured at the Pakračka Poljana site by the Canadian War Crimes Investigation Team.

9. As indicated at some length in the WCIT Legal Report referred to at paragraph 6, although the Pakračka Poljana site was believed to be the site of mass graves containing up to 1,700 bodies, the site was examined with considerable care and the very firmly based conclusion was reached that this belief was erroneous.

10. On 9 November 1993, the 19 exhumed bodies were placed in body bags, together with preservatives, chemicals, and reburied at a site immediately adjacent to an UNPROFOR observation post. Before this step was taken, some consideration was given to the possibility of conducting an autopsy examination of the bodies to establish identification and the cause/manner of death and to the possibility of gathering some additional ante-mortem information by interviewing selected persons in the area. These activities were not undertaken owing to previously expressed RSK concerns that post mortems not be done in Croatia, the difficulty of obtaining a suitable morgue facility, and that the time factor and personnel resources would not permit the intensive effort required to conduct a criminal investigation and to gather all available ante-mortem information.

11. The Pakračka Poljana project was the most successful project in terms of achieving the goal stated in the plan of action. From 20 to 25 October 1993, there was one lawyer and one military police member assigned to this project. This was augmented by additional military police personnel after the suspension of the Ovčara project.

12. The following lessons were learned from the Pakračka Poljana project:

(a) the persons selected to complete this work must have not only the appropriate background and training, but must also use their own initiative to determine on the spot what action should be taken to achieve long-term goals.

For example, Major Pat Olson who acted as the co-ordinator at the Pakračka Poljana site, when it became apparent that there was little likelihood of bodies being in the alleged mass graves, on his own initiative, obtained a backhoe to excavate. He arranged for an international verification team to certify the results of the excavation; and he had a video made of the excavation before the holes were refilled; and

(b) that on-site investigations are absolutely necessary to confirm the validity of allegations. Before this on-site investigation there were allegations up to 1,700 victims were buried at this site. This has been proven untrue. Indeed, some groups have expressed their displeasure at the

investigation establishing that people in those numbers are not buried there. Presumably for propaganda purposes 1,700 is a more useful number than 19. It will be critical from the point of view of prosecution that allegations be proven to have a factual basis. If an allegation like this were to be included in an indictment without the necessary on-site work done to back it up, then the whole credibility of the prosecution could be undermined when the allegation was proven to be untrue. Although 19 is also a shocking number, the discrepancy in numbers is so significant that it could, and probably would, put everything else in doubt. This is the case not only for mass-grave scenarios, but for any prosecution.

13. The support of UNPROFOR was essential to the success of all on-site investigations. It would be extremely difficult to conduct any on-site investigation without such support. The support of the Royal Netherlands Army (UNPROFOR Support Detachment) was essential in connection with the excavation projects and the radiological survey and extremely helpful in connection with all other projects. It is unlikely that a substantial excavation project could be carried out in future without the assistance of a unit similar in composition, equipment and quality to the Royal Netherlands Army.

II. INTERIM REPORT OF THE WCIT

14. To assist the Commission of Experts, established pursuant to U.N. Security Council Resolution 780 (1992), in the execution of its mandate, a War Crimes Investigation Team (WCIT) was provided by Canada. Two of the members of this team, Major P.J. Olson, a legal officer, and Sergeant J.L. Lamothe, a military police special investigator, were assigned to UNPA Sector West to investigate the allegation of a mass grave at the town of Pakračka Poljana. This sub-team was later supplemented by the addition of Warrant Officer S. Murray-Ford, also a military police special investigator. Major J. Holland, a legal officer, headed the sub-team after the departure of Major Olson.

15. The original mandate of the sub-team in UNPA Sector West was to participate in an on-site investigation. They were to ensure that the collection of any evidence relating to mass graves was performed in such a manner as to ensure, to the extent possible, that such evidence would be acceptable to an International Criminal Tribunal established to try individuals accused of having committed war crimes.

16. This report concerns the activities of the sub-team assigned to Pakračka Poljana. As a technical report will be submitted by PHR, which was also assigned to Pakračka Poljana, the purpose of the present report is to give an overview of the investigation. Where an observation of a scientific nature in this report conflicts with any part of the PHR report, the latter report should be given preference. In addition, a report has been completed by the military police special investigators present that will include details as to the precise evidence collected and its manner of collection, recording, and preservation.

A. Background

17. In December 1992, a member of the Royal Canadian Mounted Police attached to the United Nations Civil Police (UNCIVPOL) received an informant's report that there was rumoured to exist a mass grave in the area of Pakračka Poljana. This grave was alleged to contain the remains of approximately 200 Serbs and to be located between Pakračka Poljana and Gaj, in the forest, near the railway tracks.

18. After collecting further information, the UNCIVPOL member concluded that he had located three grave sites in the area. He visited these sites on 9 February 1993. In his report, the UNCIVPOL member described site "A" as the smallest of the three sites. There he observed skeletal remains of at least three bodies and various clothing and debris on top of the ground. He described site "B" as containing two graves, each measuring about five feet by six feet. No human remains were observed at this site.

19. Site "C" was described as the largest site and was observed on 9 February 1993 to contain "two large filled in trenches, each approximately 20 metres by four metres". The UNCIVPOL member reported that each of these trenches was alleged to contain at least 100 bodies. He reported that in the vicinity of these trenches, there were also approximately eight other independent graves, although the number of bodies they were alleged to contain was unknown. The location of these independent graves was described as being at the end of the field in which the trenches were located, along the upper bank of a stream.

20. Subsequent to his 9 February 1993 inspection of sites "A", "B", and "C", the UNCIVPOL member reported that the graves at sites "A" and "B" had been cleared out by unknown parties. He also reported that his inspection of site "C" on 4 May 1993 now indicated that there were not two, but 17 features that appeared to be graves along the length of the field in which the first two trenches were previously observed. His report of 12 May 1993, submitted to UNCIVPOL, speculated that if each of these trenches were graves, and that if each grave contained 100 bodies, then site "C" would contain as many as 1700 bodies.

21. It is noteworthy that a document entitled Death Camps and Mass Graves in Western Slavonia: Marino Selo and Pakračka Poljana, distributed by the Serbian Council Information Centre in August 1993, states that "In Pakračka Poljana, some 1,700 ethnic Serbs were murdered and buried there in 17 large (approximately 20 metres by five metres) and several tenths (approximately two by three metres) graves...". That document suggests that the existence of the graves is known to UN officials and that maps of them "were produced as a result of a long-term investigation headed [by the UNCIVPOL member] and his associates." It appears that the allegation, which began as a report of a grave containing 200 bodies, became significantly enhanced following the initial investigation by the UNCIVPOL member. The estimate of 1,700 bodies seems to have originated with the UNCIVPOL member's calculation, referred to at paragraph 7 above.

22. Given the UNCIVPOL member's description of the suspected grave sites, the War Crimes Investigation Team members operating in Pakračka Poljana, along with the forensic experts from PHR concentrated their investigation on the line of 17 trenches along the field, and then on the independent graves alleged to be located along the stream at the end of that field.

B. The investigation by WCIT and PHR at site "C"

1. The allegation of a mass grave of 1700

23. The WCIT, consisting of Major Olson and Sergeant Lamothe, arrived with five members of PHR at site "C" on 20 October 1993. As a precautionary measure, the area around the first two trenches at the north end of the field was cleared by mine detectors provided by the Jordanian Army Unit located at UN Checkpoint 14. That Jordanian Unit had also been providing security of the site before the arrival of the WCIT and PHR and continued to provide site security for the duration of the investigation.

24. For the remainder of this report, the disconformities in the landscape, initially suspected of being graves, will be referred to as "features". The features identified by the UNCIVPOL member as 17 trenches appeared, on closer inspection, to comprise 23 features, running in a north-south direction along the field, parallel to the road. These features will be referred to as features 1 to 23, with feature 1 situated at the north end of the field.

25. After the area around features 1 and 2 were cleared for mines, Sergeant Lamothe demarcated both features with yellow police tape to indicate that the area was a crime scene and that access was restricted to those involved in the investigation.

26. Once the area was demarcated, Sergeant Lamothe recorded the appearance of features 1 and 2 through still photographs and video recordings. Following this procedure, the team from PHR commenced preparation of a test trench at feature 1. This test trench, measuring approximately one metre wide, by two metres long, by one metre deep, was dug by hand with a shovel. Once this process was underway, a second test trench, at feature 2 was commenced.

27. On 22 October, while the test trenches at features 1 and 2 were in progress, Major Olson led a survey party, consisting of himself, Sergeant Lamothe, and Lieutenant H. Jongen, a veteran member of the War Graves Service (Royal Netherlands Army), on an investigation of the remainder of the features along the field, south of features 1 and 2. The purpose of the survey was to record the approximate dimensions of the features, as well as the distances between the features, and to determine the extent to which these features should be investigated.

28. As the survey party progressed, Lieutenant Jongen prodded the ground to determine where the earth had been disturbed and whether there were indications of objects buried below the surface. At feature 10, the three members of the survey team noted that the disconformity on the surface was more pronounced than that observed at features 3 to 9. That is, the feature was characterized as a mound of earth protruding above the normal level of the surrounding ground and the vegetation covering it was dissimilar to that covering features 3 to 9. Feature 10 was similar in appearance to features 1 and 2, but was approximately four metres long by two metres wide, considerably smaller than features 1 and 2.

29. Lieutenant Jongen prodded the earth with a "pricker", a thin iron rod about a metre long, and made contact with a hard substance below the surface. Upon withdrawal of the pricker, he stated that he smelled the odour of human remains on that device. As a result, a number of forensic experts from the PHR team, including Dr. Clyde Snow, were requested to attend at feature 10.

30. The appearance of feature 10 was recorded by still photographs and by video recordings by Sergeant Lamothe, and the area was explored by metal detector. Within two minutes of digging by shovel, evidence of human remains was uncovered. As a result, Sergeant Lamothe demarcated the area as a crime scene and the Jordanian Army provided site security for this location. By 27 October, the excavation of this feature had been completed revealing two bodies apparently clad in military uniform. The progress of the excavation was recorded by Sergeant Lamothe, using both still photographs and video recordings. In addition, evidence such as cigarette filters removed from the grave and soil samples were placed in evidence bags by Sergeant Lamothe, sealed with tape used for such purposes in police investigations, and marked as evidence. Sergeant Lamothe logged each such piece of evidence in an evidence register and secured the evidence in a locked container. (On 27 October, the two bodies were removed to the temporary morgue facility established at site "C".)

31. While excavation of feature 10 progressed, it became apparent through the test trenches at features 1 and 2 that it was unlikely that those features contained human remains. A conversation between Dr. Marko Šimunović of the PHR and a local boy, and a conversation between Major Olson and the farmer who had farmed that field for the past three years, appeared to confirm Major Olson's view that the series of disconformities running in a north-south direction along the west side of the field may have been a line of defensive trenches dug by the Croatian forces. These trenches were apparently dug between September and November 1991. This supposition is supported by the configuration of the line of trenches, particularly in the apparent regular spacing between the trenches, and the manner in which features 11 and 12 are angles at the edge of a lightly forested area.

32. Further, the suggestion that features 1 to 23 may have comprised a series of defensive military trenches is consistent with the archaeological evidence from the test trenches at features 1 and 2. From the test trenches, outlines of the original trenches could be observed, and it was clear that the dimensions of those trenches were much smaller than the disconformity on the surface of the ground. That the disconformity in the ground is larger than the original trench may be explained by the fact that, in the digging of the original trenches, earth would be thrown in each direction, thereby expanding the area of ground that would later appear to have been disturbed.

33. Inasmuch as there were 23 such features, Major Olson considered it necessary to excavate each one to ascertain whether any or some contained human remains. Without such excavation, it was considered that the allegation of a grave containing as many as 1,700 people could not be effectively determined. The approach adopted was that although these may have been military trenches, they may nevertheless have been used later as graves, particularly in light of the discovery at feature 10.

34. Since the resources for digging by PHR were limited, Major Olson visited Lieutenant-Colonel Cantin, the officer in charge of the Canadian contingent at Camp Polom on 22 October and arranged for the use of a backhoe to excavate the remaining features along the side of the field. Excavation of these features by backhoe commenced on 23 October.

35. As feature 11, located to the south-east of feature 10 was similar to feature 10 in appearance, although somewhat longer, a preliminary examination of that feature was made by shovelling by hand. When no evidence of human remains was encountered, the backhoe continued the excavation of that feature. Following the excavation of that feature, feature 12 was excavated by backhoe. Following the completion of the test trenches at features 1 and 2, the backhoe was employed to excavate each of the remaining features, from feature 1 to feature 23.

36. The procedure followed for the backhoe excavation of these features was as follows:

(a) A member of the Dutch War Graves Service (either Lieutenant Jongen, Warrant Officer Bolle or Sergeant-Major Swerissen) would prod the ground with a pricker to determine the location of the original trench and would indicate to the backhoe operator where to dig;

(b) Depending on the dimensions of the feature, between two and five trenches were dug by the backhoe in each feature in a manner which intersected the original trench;

(c) Each backhoe trench was about two-thirds of a metre in width, about two to three metres in length, and about one metre in depth;

(d) Upon the completion of each backhoe trench, the member of the Dutch War Graves Service present would enter the trench and prod the bottom with a pricker to determine whether the backhoe had dug deep enough to reach the bottom of the original trench (this would be apparent from the density of the earth underneath);

(e) Any irregularities in the surface of the ground in the vicinity of these features were also excavated in this manner; and

(f) The digging of each trench was observed by Major Olson.

37. In total, 78 trenches were dug by the backhoe along the line of features referred to as features 1 to 23. With the exception of feature 10, which was dug by hand, absolutely no evidence of human remains were discovered in any of those trenches.

38. On 26 October, an ad hoc Verification Team was formed to inspect each of the 78 trenches dug by backhoe, as well as the two hand-dug test trenches. As none of the monitors designated by the "RSK" had visited the site, the team was assembled so as to include a level of technical expertise and as wide as possible an international representation. The members of the Verification Team were:

(a) Lieutenant-Colonel T. Kempnaars (Assistant to the Commission, Dutch Army);

(b) Major P. De Jonge (Dutch Army);

(c) Lieutenant H. Jongen (Dutch Army, War Graves Service);

(d) Major Bashir M. Abdel-Rahman (Jordanian Army);

(e) Major P. Olson (Canadian Forces); and

(f) Dr. W. Hagland (American forensic anthropologist with PHR).

39. At the conclusion of the inspection, the members were asked by Major Olson if they were satisfied that the trenches, with the exception of feature 10 and feature 1A (to be discussed in paragraphs 28 to 30), showed no signs of human remains. Each responded that he was satisfied. Each member was also asked whether he felt more excavation was necessary in order to be absolutely certain that there was no mass grave in features 1 to 23. Each responded that no further excavation was considered necessary.

40. On 28 October, Ms. Mercedes Doretta, a member of the Argentinian Forensic Anthropology Team (with PHR) recorded each of the exploratory trenches dug in features 1 to 23 by videotape while Major Olson narrated the process of the excavation for the record. (It should also be noted for the purpose of any future verification of the results of the excavation of features 1 to 23, that the backhoe operators, Mr. Lauri Liimatta and Mr. Erkki Mannisto, were both Finns from the Finnish Defence Construction Service at Camp Polom.)

2. Skeletal remains at feature 1A

41. On 23 October, while the excavation by hand at feature 10 and the excavation by backhoe at the remaining features were progressing, Lieutenant Jongen and Warrant Officer Bolle investigated, by means of the pricker described earlier, the west side of the line of features 1 to 23, closer to the tree-lined road. Less than two metres west of feature 1, they located with the pricker what they believed to be human remains.

42. Members of PHR were called to this feature, referred to as feature 1A due to its proximity to feature 1. It should be noted however, that feature 1A did not appear to be connected in any manner to the disconformity on the surface known as feature 1. In fact, apart from the softness of the earth detected by the members of the Dutch War Graves Service, there were no visible indications that feature 1A had been the subject of previous digging.

43. As excavation progressed at this feature by hand, fully skeletonized human remains were uncovered. The only clothing remaining was a pair of well-preserved "cowboy boots". A preliminary examination of the skull revealed a circular defect which appeared to be a bullet hole. A small item, appearing to be a bullet, was located near the head when the skeleton was exhumed on 27 October. This bullet was seized as evidence by Sergeant Lamothe and packaged and recorded in the same manner referred to in paragraph 17 above.

3. The bank of the stream

44. On 26 October, under the direction of Mr. Eric Stover of PHR, exploration began in the area referred to in the UNCIVPOL member's report as the end of the field, along the upper bank of the stream.

45. By this time, eight additional members of the PHR, including Mr. Stover, had arrived from UNPA Sector East to assist in the growing number of excavations. Also, Warrant Officer Murray-Ford, a member of the WCIT previously operating in UNPA Sector East, arrived at UNPA Sector West. His arrival was extremely timely, as at this point, there were three separate excavations in progress in different areas of site "C" and the demands for access control and evidence collection were increasing rapidly.

46. Examination of the area known as CS 1 (C for site "C" and S for stream) was made by means of pricker, by both the members of PHR and by the members of the Dutch War Graves Service. This examination revealed a grave located close to the stream, although there was little in the topography or vegetation to suggest that this area contained a grave.

47. The excavation of this area, under the supervision of Mr. Stover, revealed two relatively well-preserved human remains. One was laying on the top of the other. The body in the bottom of the grave was laying on its back with arms folded on its front, in what may be described as a common position for burial. However, the body on top appeared to have been placed in the grave in a more haphazard manner. Both bodies were clad in civilian clothing and appeared to be male.

48. Evidence was seized from this grave by Sergeant Lamothe and Warrant Officer Murray-Ford in the manner previously described. The progress of the excavation was recorded by video and still photography.

49. Exploration, in the same manner described in paragraph 33, was conducted in an area along the stream and a few metres to the east of CS 1, on the other side of a small bend in the stream. (The location of this area has been

referred to as CS 2 to CS 7.) This exploration suggested the presence of human remains along the bank of the stream. However, due to the size of the area concerned, the first layer of earth, to a depth of about 15 centimetres, was removed by backhoe.

50. Further excavation of this area by hand revealed what appeared to be five independent yet adjacent graves. In the grave at the east end of the area, known as CS 4 (the graves are numbered in accordance with the order in which they were discovered, rather than in order of their relative positions), four bodies, piled on top of each other, were discovered. Immediately to the west of this was CS 3, containing two bodies, then CS 5 containing two more, CS 2 which also contained two bodies, CS 6 which also contained two bodies, and CS 7 on the west end of the area, which also contained two bodies. In total, 14 bodies were located in CS 2 to CS 7.

51. The terrain around these graves were scanned by metal detectors, which uncovered a number of spent casings, as well as some live rounds, two coins and a wedding ring. The locations of items were plotted, by use of the Computer Assisted Drawing equipment by PHR members, and then secured as evidence, by Sergeant Lamothe and Warrant Officer Murray-Ford in the manner described earlier.

52. As with the remains in CS 1, the human remains discovered in CS 2 to CS 7 were clad in civilian clothing. In one instance, it appeared from the clothing that one of the bodies was that of a woman. Preliminary examinations of the skulls of a number of the remains indicated circular defects that were consistent with bullet wounds.

53. It should also be noted that the manner of placement of the bodies in these graves appeared to be inconsistent. That is, while some appeared to have been haphazardly placed, others appeared to have been in what may be described as a foetal position with their arms covering their heads, as if for protection.

54. As the RSK administration would deny permission to conduct full autopsies on the 19 bodies in the pre-arranged Zagreb facilities, the PHR conducted gross external examinations of each of the bodies between 1 and 3 November 1993. On 9 November, all 19 bodies were reburied on the site in individual body bags. A formaldehyde solution was used inside the body bags in order to inhibit further decomposition of the corpses. The reburial trench was dug and filled-in by the backhoe operated by Mr. Liimatta. The site was marked, recorded and filmed.

C. Summary of investigative procedures

55. As indicated above, before excavation began at a feature, the appearance of the feature was recorded by means of video and still photography. Each area was demarcated by police tape, and access to each area was controlled by Sergeant Lamothe and Warrant Officer Murray-Ford. Areas were also scanned by metal detectors to assist in the location of evidence. Any evidence located in the vicinity, or in a grave, was photographed before removal and then seized, packaged, marked, registered and secured by Sergeant Lamothe and Warrant Officer Murray-Ford in a manner consistent with accepted police procedures in Canada.

56. Each stage in the investigative progress was recorded by both still and video photography and notable events were logged in a daily occurrence book kept by Sergeant Lamothe and Warrant Officer Murray-Ford. These investigators also kept an access log indicating who was present at the scene of the

investigation.

57. At the close of work each day, the excavations in progress were covered by tarpaulins and each site was secured on a 24-hour-a-day basis by Jordanian soldiers.

58. It should be noted that despite the above precautions, one piece of evidence, an Italian 50 lira coin, dated 1974, disappeared between the time it was marked for plotting by computer and the time it was to be collected as evidence. Whether the removal was accidental or intentional could not be determined.

59. The evidence collected by the WCIT military police special investigators was stored by them at UNPROFOR HQ in Zagreb in a secured facility and is at the disposal of the Office of the Prosecutor of the International Criminal Tribunal at The Hague.

D. Additional investigation of surrounding areas

60. As no mass grave of the proportions originally reported to the UNCIVPOL member to exist was located, it was felt necessary to explore other areas in the vicinity. As the members of PHR were occupied with the excavation of the discovered graves, and as the military police investigators were occupied with access control and collection of evidence in connection with these excavations, the further exploration was conducted by Major Olson and Lieutenant Jongen.

61. Inasmuch as the original description of the area containing the graves of 200 Serbs included a reference to a forested area, near the railway tracks, between Pakračka Poljana and Gaj, Major Olson and Lieutenant Jongen concentrated their investigation in the limited areas that matched this description.

62. Major Olson and Lieutenant Jongen explored the area along the stream, parallel to the railway tracks, east of CS 1 by foot. Lieutenant Jongen frequently employed the device referred to as a pricker to determine whether the soil beneath the surface had been disturbed. They drove along the road between Pakračka Poljana and Gaj and walked along a section of the railway tracks between those two towns looking for any area which may have contained graves. Although a number of features were examined, no indication of a mass grave was found. These explorations were conducted on 28, 29, and 30 October.

63. In addition to this exploration, on 30 October, Major Olson and Dr. Hagland searched the area around the soccer field and the railway station in the town of Pakračka Poljana for evidence of any of the smaller gravesites that were referred to by the UNCIVPOL member's informants.

64. On 6 November, Lieutenant Jongen examined a small lane running south from the road between Pakračka Poljana and Gaj located south of the airfield. His examination disclosed that the ground on and around the lane was rocky, hard and undisturbed. It was concluded that this area was unlikely to contain a burial site.

65. Lieutenant Jongen attempted to examine Site "A" and found it to be inaccessible due to poor and mud-blocked roads. Major Holland and Lieutenant Jongen made a second attempt to reach the site, but for the same reasons were unsuccessful.

66. On 9 November, Lieutenant Jongen, accompanied by the On-site Rapporteur

and Major Holland examined Site "B". Extensive probing and examination failed to reveal any evidence of buried bodies.

67. On several occasions, members of the PHR and WCIT further examined the soccer field area referred to earlier. Although a small excavation was made of an apparent disconformity, no evidence of buried bodies was discovered.

68. No examination of the Marino Selo area was conducted due to lack of time and resources.

E. Logistics and support

69. The Dutch Support Unit, under the supervision of Lieutenant Jongen, and under the command of Major De Jonge, provided all necessary transportation and facilities, including decontamination facilities in the field. On short notice, this unit was able to erect a substantial portable morgue near the site of CS 1 for the examination of the exhumed remains from features 10 and 1A, and from features CS 1 to CS 7.

70. The Jordanian Army Unit located at UNPA Sector West provided a number of valuable services. These included mine detection, site security, washroom facilities and, on occasion, translation services. In addition, Major Bashir M. Abdel-Rahman, the commander of this Unit, consented to participate in the ad hoc Verification Team referred to in paragraph 25. Without the co-operation and support of Major Abdel-Rahman and Captain Suleiman Nawafleh of this Unit, the work at site "C" would certainly not have progressed in the manner that it did.

71. Support was also provided by the commander of the Canadian Unit at Camp Polom, Lieutenant-Colonel Cantin. With no prior notice, he arranged, within 24 hours of the request, for the delivery of a backhoe to site "C". As it later became apparent, the Canadian backhoe was out of service due to maintenance problems, but the Canadian Unit arranged for the loan of a backhoe and operator from the Finnish Defence Construction Service Unit. The backhoe and driver were available for as long as was required.

F. Conclusions

72. There was no mass grave containing 1,700 or even 200 bodies, as reported, in the area of Pakračka Poljana investigated by the WCIT and PHR. No such grave was evident within the immediate vicinity of that area, although terrain matching the description given in the informant's account was inspected.

73. The allegation that there may have been as many as 1,700 bodies appears to have roots in the calculation made by the member of UNCIVPOL in May 1993, based on his observation of a series of 17 disconformities in the landscape at site "C".

74. Based on conversations with local residents, archaeological observations, and the configuration of the series of disconformities referred to as features 1 to 23, it appears likely that these disconformities are the result of a line of military trenches dug along the west side of the field, probably between September and November 1991.

75. There were, as the UNCIVPOL member's report suggested, other independent graves in the area, including the graves located at the north end of the field along the stream.

76. Two bodies were located in a single grave on the west side of the field in a feature referred to as feature 10. They appear to have been dressed in military uniform.

77. One corpse, a fully-skeletonized, was located in a single grave on the west side of the field in a feature referred to as feature 1A. Although there were extremely slight traces of clothing evident in remaining single threads of synthetic material, the only identifiable clothing remaining was a pair of reddish-brown cowboy boots.

78. Two bodies were located in a single grave at the north end of the field, along the stream in a feature referred to as CS 1. They appeared to have been dressed in civilian clothing.

79. Fourteen bodies were located in a series of six adjoining graves at the north end of the field, along the stream in a series of features referred to as CS 2 to CS 7. They appeared to have been dressed in civilian clothing.

80. The preliminary examination of a number of the skulls found indicated circular defects consistent with a bullet wound. At CS 2 to CS 7, a number of spent casings and live rounds were found just slightly beneath the surface of the ground within the few metres directly south of this series of graves. Ballistic testing of these items remains to be performed.

1. Recommendations

81. Two factors contributed to an investigation at site "C" of a slightly different nature than that originally mandated. First, because the grave site at site "C" was not of the proportions originally alleged, it was necessary to investigate areas surrounding the site to ascertain whether a larger mass grave was present in the vicinity. Second, with the suspension of the investigation at UNPA Sector East, more members of the PHR became available to work on the investigation in UNPA Sector West. This permitted the graves that did exist at site "C" to be not only located and examined, but also excavated and the bodies exhumed for post-mortem examination. The recommendations that follow arise mainly because the nature of the investigation changed while in progress.

2. Equipment

82. The equipment brought by the military police investigators was both appropriate and in adequate supply. However, there appears to have been some confusion as to the equipment provided for PHR, particularly with respect to excavating instruments such as shovels and trowels. It appears that the PHR were lead to believe that those instruments would be available on site; however they were not immediately present in adequate supply.

83. Therefore, it is recommended that in the future, liaison between the WCIT, PHR, and the support unit will need to establish with certainty and in advance what equipment will be available on site.

84. Major Olson found it necessary on a number of occasions, as indicated above, to perform duties away from the main excavation area in which protection was provided by Jordanian guards. As the guards were not in sufficient number to provide personal protection during those occasions, Major Olson would often be outside the main area, in uniform, in UN vehicles, completely unarmed. As this situation is very likely to recur in any future operation, it is recommended that the members of WCIT be provided with small

arms for personal protection.

3. Personnel

85. There was no shortage of expertise among the PHR with respect to this operation. However, when the additional task of locating further possible graves arose, the PHR were understandably preoccupied with the numerous bodies already located, particularly as these bodies were now to be exhumed. Fortunately, there were present at the site three members of the Royal Netherlands War Graves Service, lead by Lieutenant Jongen, who may certainly be considered experts in the task of locating graves. With a great deal of experience and a minimum of equipment, these individuals were of invaluable assistance in the investigation of possible additional gravesites. Their role in the discovery of the graves at site 10 and 1A had already been outlined.

86. It is therefore recommended that in any future such operations, where there exists any uncertainty as to the location of graves, experts such as Lieutenant Jongen of the War Graves Service, Royal Netherlands Army, be included in the WCIT.

87. The PHR forensic team comprised experts in a number of fields, including archaeology and forensic anthropology. The skills of these members ranged from the physical aspects of excavation, to computer mapping and post-mortem examinations. No change in the composition of this team is recommended.

88. The military police investigators were well-equipped to deal with the demands of access control and evidence collection. It is recommended that any future operations include the presence of at least one such investigator at each excavation site.

89. The original mandate of the legal officer present was to advise on the legal aspects of evidence collection. However, it also became necessary for him to take on the additional role of liaison between the local civilian authorities and local UN authorities in order to facilitate the execution of the mission. It is recommended that, as this dual role is foreseeable in future operations, a legal officer be present as a member of WCIT in such future operations.

4. Location of gravesites

90. There are experts available to assist in the location of graves. There are, however, additional technological means to determine the possible location of mass graves before deploying to the field.

91. Aerial photographs of a region taken before a conflict may be compared with aerial photographs of the same region taken after mass graves were suspected to have been created. These photographs are often available through intelligence services. PHR has suggested that, in future circumstances, it may be possible to obtain this type of assistance from the U.S. Central Intelligence Agency. Such photographs may also be available from the Information Branches of military units operating in the region under UN auspices.

92. It is therefore recommended that, prior to future operations, efforts be made to obtain and compare aerial photographs of a region suspected to contain mass graves.

5. Methodology

93. When the number of PHR forensic experts involved in the excavation of site "C" rose from five to 13, it became evident that there are a number of methods to excavate a grave. While the scientific validity of each one of these methods is not questioned, the differing practices followed by certain members of that group caused some initial concern as to the manner in which evidence should be collected. Although these concerns were overcome through Major Olson's consultation with Mr. Stover of the PHR, it would be preferable in future operations to have standing operating procedures agreed to in advance by PHR and WCIT members.

94. It is therefore recommended that, prior to any subsequent operations, written standing operating procedures be established to indicate a single method of excavation and evidence collection to be followed. As the techniques of excavation differ among scientists, such operating procedures will need to be specific to the scientists involved and therefore may not be effectively completed prior to the selection of the team's members.

6. Support

95. As outlined above, the support provided to PHR and WCIT by a number of authorities was exceptional.

III. INVESTIGATION REPORT OF THE WCIT

96. In March 1993, the United Nations Commission of Experts was made aware of a file containing information regarding the location of a mass grave in the area of Pakračka Poljana, UNPA Sector West. The file contained reports, dated from 16 December 1992 to 27 May 1993, submitted by a member of the Royal Canadian Mounted Police (RCMP), who had been posted with UNCIVPOL in the area concerned.

97. The UNCIVPOL member initiated the above-mentioned file upon receiving a complaint from Mrs. "V" on 2 December 1992. Mrs. "V" reported that her husband, "B", born 25 August 1952, was arrested in her presence, by two Croatian soldiers in uniform, outside the Kutina bus station on 21 September 1991. Her husband was subsequently taken to the village of Pakračka Poljana, after which she never saw him again. Mrs. "V" provided the UNCIVPOL member with the names of seven additional persons, all of Serbian background, from the area of Pakračka Poljana who were also arrested about the same time as her husband. One of the seven was later released; the others were never seen again. The UNCIVPOL member was also informed by the complainant of a rumour that about 200 people, male and female, all of Serbian descent, were arrested around the same area and time. They were taken to the village of Pakračka Poljana and killed. All of them were apparently buried in a mass grave somewhere between Pakračka Poljana and Gaj.

98. Subsequent investigation allowed the UNCIVPOL member to locate three suspected mass graves which he described as follows:

(a) Site "A": located at Grid Reference (GR) 521375 (on a map of Novska, series M709, sheet 2585 IV, scale 1:50,000). This grave allegedly contained five bodies poorly buried under earth and brush. The corpses were believed to have been transported from a previous burial site because of heavy plastic material found at the scene. This site was apparently cleared on 15 March 1993, and the bodies were moved to an unknown location;

(b) Site "B": located at GR 536371, consisted of two graves located approximately 65 feet (19.5 metres) from a hunting cabin in Pakračka Poljana and approximately 15 feet (4.5 metres) apart. Each grave was approximately five by six feet (1.5 metre by 1.8 metre) in dimensions. The depth and number of bodies contained in each was unknown. This site was also cleaned out between 8 and 15 May 1993 and, in place of the site, trees were planted as an obvious ruse for the fresh digging; and

(c) Site "C": located at GR 552362, consisted of two large graves of soft, spongy earth in an open field, and approximately eight solitary independent gravesites, which follow along the bank of a stream and were part of the same field as the large trenches. The large trenches allegedly contained one hundred plus bodies each and measure approximately 100 feet by 20 feet (30 metres by 6 metres). This site was by far the largest and most secure as an UNPROFOR check point, manned by CANBAT ONE at the time, was approximately .1 kilometre from the entrance of the field. Upon a later examination of the field, the UNCIVPOL member noted that what was first thought to be only two large graves, were in fact 17 large graves similar in length, width and soil texture throughout the field. These observations brought him to believe that if the additional 15 trenches were actual graves, and the estimate of 100 persons plus per grave remained the same, the total of bodies would be 1,700 instead of 200.

99. On 15 October 1993, the Canadian team, along with members of PHR, were tasked to conduct a preliminary medicological investigation of a series of clandestine graves near Pakračka Poljana, particularly site "C" as referred to in the UNCIVPOL member's file report. This investigation was described by PHR as Phase I and initially only involved a preliminary site survey in order to confirm the presence of a mass grave.

100. At 12:19 p.m. 20 October 1993, accompanied by Dr. Snow, Dr. Caceres, Dr. Šimunović, Dr. Connor, and Dr. Reveco from PHR, Lieutenant Jongen, Chief Warrant Officer Bolle, and Chief Warrant Officer Heesackers from the UNPROFOR Dutch Army Support Unit, the Canadian team arrived at the JORDBAT UN check point number 14 (hereinafter referred to as CP 14). At that time, the following was noted:

(a) CP 14 is located on a small paved road two kilometres south of Pakračka Poljana's church;

(b) CP 14 is at GR 551363;

(c) This road, if travelled in a southerly direction a distance of 1.5 kilometres from CP 14, would lead to the village of Janja Lipa;

(d) Located on the East side of this road is a field, used for pasture, which was pointed out in the UNCIVPOL member's report as site "C";

(e) The field is bordered to the north by a stream and to the south by the village of Janja Lipa;

(f) Approximately 70 metres south of CP 14, a tractor trail enters the north end of the field. Upon entering the field from that trail, one can

notice, approximately five metres to the right (south), a ground deformity in the field which looks like an overfilled trench covered with overgrown vegetation. This trench (hereinafter referred to as feature C1) is approximately 30 metres long and six metres wide;

(g) South of feature C1 and approximately 10 metres apart is another similar trench (hereinafter referred to as feature C2). These two features are the two suspected mass graves reported in the UNCIVPOL member's report as containing 100 bodies each; and

(h) Both features are elongated north to south, parallel and approximately two metres east to a line of trees separating the field from the paved road.

101. Between 12:28 p.m. and 3:20 p.m. on 20 October 1993, the surrounding area of both features was swept by a team of Jordanians from UNPROFOR equipped with mine detectors. During that time, the Canadian team proceeded to video record and take pictures of the site. Upon the site being declared safe, the PHR team proceeded to conduct a trench survey of feature C1 in the following manner:

(a) Video tapes and still pictures of the site were made and recorded in a photo/video log;

(b) A stake called "Wood Bench" was placed in the ground on the south West end of feature C1. This stake was then used as reference point (Ground Zero) in the taking of all required measurements;

(c) A one metre by seven metre trench was delineated across feature C1 in a west to east direction, with the western end of it being outside feature C1;

(d) This trench was subsequently dug from the outside end (West) and going into feature C1. Upon removing the first layer of top soil on vegetation, it was possible to notice a line demarcation from feature C1 with the appearance of disturbed and undisturbed soil; and

(e) Once the demarcation of feature C1 became easily noticeable, the PHR team proceeded to dig the outside of the survey trench to one metre depth and subsequently excavated towards feature C1 in order to uncover possible human remains.

102. At 5:13 p.m. on 20 October 1993, the trench was covered with a plastic sheet and canvas to prevent accumulation of water during the night. At 5:20 p.m., the Canadian War Crimes Investigation Team (WCIT) left the site, at which time, and for the entire duration of this operation, it was left under constant armed guard surveillance of UNPROFOR Jordanian troops.

103. At 9:54 a.m. on 21 October 1993, the WCIT returned to the site and resumed operations on feature C1. At 10:18 a.m., a second survey trench, similar to the trench being dug across feature C1, was started across feature C2.

104. At 1:45 p.m. on 21 October 1993, excavation of the survey trench across feature C1 was completed to a depth of approximately one metre, at which time the following was noted:

(a) A demarcation of iron deposits could be observed on both walls (north and south) of the survey trench, indicating the contours of feature C1, which had been a previously dug and refilled trench;

(b) A deposit of vegetable substance found at the bottom of the trench was collected by PHR for later analysis, in order to attempt estimation of approximate time of year the trench was refilled; and

(c) There was no corpse or traces suggesting that any human remains had once been buried at that location. Later completion of the survey trench across feature C2 revealed the same findings.

105. On 22 October 1993, accompanied by Major Olson, Lieutenant Jongen and the WCIT proceeded to make a survey of the field south feature C1 and C2. Seven other features, similar in size and distribution across the field, were noted at a distance of approximately 245 metres in line from north to south. These features were numbered C3 to C9.

106. At 2:45 p.m., on 22 October 1993, a tenth feature was located approximately 245 metres south of feature C2 and 437.8 metres south and slightly to the east of CP 14. At that time the following was noted:

(a) This feature was located at the south end corner of a wooded area and very close to the tree line;

(b) It was different from features C1 to C9 as it measured only 3.7 metres long by 2.3 metres wide;

(c) It was protruding 30 centimetres from ground level and the vegetation covering it was overgrown and different from the vegetation in surrounding area; and

(d) Upon probing it with a metal rod, Lieutenant Jongen felt a hard object approximately 30 centimetres deep and noted that the end of his probe smelled of decaying flesh, confirming suspicions that a grave had been discovered. This feature was hereinafter referred to as site C10.

107. The PHR team was subsequently informed of the findings and attended site C10. Between 3:03 p.m. and 3:25 p.m., on 22 October 1993, a check of the site was conducted with a metal detector while the WCIT video taped and took pictures of the site.

108. At 3:25 p.m., on 22 October 1993, PHR team proceeded to dig a probe hole on top of site C10, at which time clothing material was found at an approximate depth of 30 centimetres. At 3:36 p.m., Dr. Snow cut open the clothing and uncovered what was suspected to be human flesh. Upon cutting through the flesh, Dr. Snow found what he identified as a human hip bone.

109. At 4:06 p.m., on 23 October 1993, site C10 was cordoned off and placed under armed surveillance.

110. At 9:25 a.m., on 23 October 1993, an Access Control Point (ACP) was set up at the entrance of site C10. Only involved personnel had access to the site and a record of their arrival and departure was kept in an "Access Control Book".

111. During the course of this operation, numerous items which were determined as possible physical evidence were collected in the following manner:

(a) Each item was photographed and/or video taped prior to being removed from its original position;

(b) An Electronic Surveying Theodolite c/w #SDR33 data collector,

serial #F253137, was used to map most items. This computerized equipment allows a three dimensional recreation of the exact position where the item was found and can be later reproduced on a map draft computer print;

(c) Each item was assigned an evidence number and placed in a sealed evidence bag, which was kept in the writer's custody; and

(d) All evidence numbers were recorded in an evidence log which contains information such as the date and time the evidence is seized, who seized it, a description of the item, and the location where it was found. All evidence logs have been submitted to the Office of the Prosecutor of the International Criminal Tribunal at The Hague.

112. After completion of the field survey, Major Olson concluded that the field contained a total of 22 features similar to feature C1 and C2 (not including site C10). These features could have been mistaken to be mass graves, however, their configuration and position in the field suggested that they could have been old defensive trench positions which had been refilled for unknown reasons. It is very likely that the 17 features that were believed to be mass graves by the UNCIVPOL member were part of these 22 features. In order to ascertain that these 22 features were not mass graves, Major Olson made arrangements to obtain a backhoe which would be used to cut segments across each one of the features.

113. At 11:18 a.m., on 23 October 1993, Mr. Larry Liimatta, UNPROFOR backhoe operator, began cutting trench segments across the features. All suspected mass grave features were subsequently dug by trench segments and it was determined that none of them contained human remains. Trench segments dug by the backhoe from feature C1 to feature C23 (not including feature C10) covered a distance of approximately 730 metres across the field in a north to south direction.

114. At 3:15 p.m., on 23 October 1993, the WCIT was advised that Lieutenant Jongen and Chief Warrant Officer Bolle had located a second gravesite on the north-west side of the field. The WCIT subsequently proceeded to that location and video taped and took photographs of the site, during which the following was noted:

(a) The gravesite (hereinafter referred to as site C1A) was adjacent and west of feature C1, approximately one metre east of the tree line bordering the paved road and 10 metres south of the field entrance trail. Distance from CP 14 to C1A is 75.5 metres;

(b) Some human ribs had been partially uncovered by Lieutenant Jongen and Chief Warrant Officer Bolle at a position which appeared to be the centre of the grave; and

(c) It was later learned that this grave contained only one human corpse which was hereinafter referred to as body C1A-1.

This site was subsequently cordoned off and an ACP was established.

115. On 24 October 1993, Mr. Stover, Dr. Haglund, Dr. Scott, Dr. Calabrese, Dr. Hartley, Dr. Doretti, Dr. Fondebrider and Dr. Schmitt, all from PHR, arrived on site "C" and joined the operation with the other members of the team.

116. Based on their professional experience, Dr. Doretta and Dr. Hartley were respectively assigned the task of video taping and taking photographs of all activities during this operation. It may be noted that approximately seven hours of video tape and 3,000 photographs were recorded during this investigation and have been submitted to the Office of the Prosecutor of the International Criminal Tribunal at The Hague.

117. At 11:31 a.m., on 24 October 1993, WCIT was informed that a second body had been found in site C10. After later excavation of site C10, the following was noted:

(a) The first corpse (hereinafter referred to as body C10-A) appeared to be an adult male, laying on his left side, semi-flexed, with his head to the north, and was wearing what appeared to be a JNA military uniform;

(b) The second corpse (hereinafter referred to as body C10-B) also appeared to be an adult male, laying on his back in an extended position, with his head to the south, and also wearing some sort of military uniform; and

(c) Both corpses appeared to have gun shot wounds to their head.

118. It may be noted that during each grave excavation, PHR compiled an excavation report which provides the following information:

(a) Surface conditions prior to excavation;

(b) Description of soils in grave pit and surrounding matrix;

(c) Description of bodies and skeletons in each excavation;

(d) The position of body(ies);

(e) Artifacts and other associations with the body;

(f) Co-mingling, if any;

(g) Soil and other samples taken and reasons (insects pupae, soil control samples, soil from boots, nut hulls, leaves, etc.);

(h) Description of clothing and shoes, if any;

(i) Description of the condition of the body(ies); and

(j) A note of any potential wounds, trauma, or anomalies.

A rough Forensic Burial Summary report was provided on-site by PHR after each excavation.

119. At 8:22 a.m., on 25 October 1993, Warrant Officer Murray-Ford arrived at the site and assisted in the collection of evidence and as on-site controller as two different sites had to be monitored. Also in attendance were two other members of the UNPROFOR Dutch Support Unit, Warrant Officer Swerissen and Sergeant Jansen.

120. At 1:45 p.m., on 25 October 1993, Warrant Officer Murray-Ford attended the site of a suspected third grave. The location of this grave (hereinafter referred to as site CS1) is described as follows:

(a) If one follows the tractor trail which enters the north-west corner of the field in an easterly direction for approximately 80 metres, it

is branched into a "Y" by a line of trees. The northern (left) branch of the trail then becomes bordered to the south by the tree line and to the north by a small clearing and the stream (see para. 101e. above);

(b) If followed for another 50 metres, the trail enters a small field, which is bordered to the north by the stream curving in a northerly direction. Approximately five metres to the left (north) of the trail where the stream curved to the north (GR 555363) is site CS1; and

(c) Site CS1 is at a distance of 148.5 metres from CP 14.

Upon arrival at the site, Warrant Officer Murray-Ford was informed by Mr. Stover that Lieutenant Jongen had probed the area, detected odours of human remains and had an indication of metal about 60 centimetres below the surface.

Lieutenant Jongen stated that there was a possibility that there were two or more bodies at that location. It was later learned that this gravesite contained two bodies laying on top of each other. The body on top was referred to as CS1-A, and the body at the bottom was referred to as CS1-B. At 2:25 p.m., 25 October 1993, Warrant Officer Murray-Ford cordoned off the site and assumed ACP duties.

121. Between 8:30 a.m. and 9:50 a.m., on 26 October 1993, Dr. Haglund and Lieutenant Jongen probed the area south of the stream, where the trail is bordered to the south by the tree line and to the north by a small clearing and the stream (see para. 120a. above). Dr. Haglund stated that there was indication of five to eight bodies buried at that location, and he wished to excavate the site. This site was hereinafter referred to as site CS2 and was subsequently excavated with a backhoe to a depth of approximately 15 centimetres. During this operation, a human skull and a black-pattern female shoe were uncovered.

122. At 2:36 p.m., on 26 October 1993, Dr. Haglund reported the discovery of another grave covered by a garbage pit, which was subsequently removed with the backhoe. This grave was located approximately five metres West of site CS2.

123. At 2:38 p.m., on 26 October 1993, some empty ammunition shell casings were found in the area of the last discovered gravesite. At that time, the operation of the backhoe ceased, the entire area surrounding these gravesites was cordoned off and ACP was set up.

124. At 9:07 a.m., on 27 October 1993, Lieutenant Jongen, Warrant Officer Swerissen, and Dr. Scott proceeded to sweep the entire area surrounding the gravesites with a metal detector. During this operation, numerous metal artifacts such as empty shell casings, live rounds, a ring, and coins were located and plotted with pinflags.

125. Between 10:09 a.m. and 11:37 a.m., on 27 October 1993, body C10-A and body C10-B were removed from gravesite C10, placed in bodybags, and transported to a tent used as a temporary morgue and located in the small field east of site CS1.

126. At 11:00 a.m., on 27 October 1993, PHR proceeded to remove the only corpse found in gravesite C1A. At that time the following was noted:

(a) The corpse, hereinafter referred to as C1A-1, was almost totally skeletonized, and lay semi-flexed on his left side and head to the south;

(b) Apart from some clothing tags, the only remaining piece of clothing left on was a pair of well-preserved cowboy boots;

(c) What appeared to be an entrance and exit bullet hole was found in his skull;

(d) A nine millimetre bullet was found embedded in sterile earth, directly under the skull. This bullet was found with the help of a metal detector after the removal of the body; and

(e) C1A-1 was placed in a bodybag at 11:40 a.m., and arrived at the morgue at 11:47 a.m., on 27 October 1993.

127. At 1:42 p.m., on 27 October 1993, PHR proceeded to remove body CS1-A from CS1. The body was placed in a bodybag at 2:45 p.m., and transported to the morgue.

128. At 2:50 p.m., on 27 October 1993, Mr. Stover reported the discovery of several human skulls a few inches below the surface of sites surrounding site CS2. It was later determined that this area contained six different gravesites, the locations of which and assigned numbers are described as follows:

(a) All gravesites were located on the south bank of the stream which curved south-east at that location, GR 553363;

(b) Distance from CP 14 to the centre area of these sites is 107 metres;

(c) Gravesites were assigned an identification number in the order they were excavated. Position of the gravesites from north-west to south-east is CS7, CS6, CS2, CS5, CS3 and CS4; and

(d) Each grave contained two bodies with the exception of site CS4, which contained four bodies.

129. At 10:00 a.m., on 28 October 1993, prior to mapping all metal artifacts that had been marked with a pinflag on 27 October 1993, Warrant Officer Murray-Ford and this writer discovered that an Italian lira coin was missing from under its flag. A subsequent metal detector sweep of the area proved negative in its recovery. It was learned from Dr. Reveco that she had picked it up, cleaned it, and replaced it on 27 October 1993. Warrant Officer Murray-Ford recalled seeing the item prior to closing off the site at 3:29 p.m., on 27 October 1993 and noted that it appeared brighter than before. A close examination of the last known location of the coin revealed a circular imprint in the ground, suggesting that it had been picked up instead of being accidentally dislodged. Dr. Hartley, Chief Warrant Officer Heesackers, and Sergeant Jansen all recalled having observed the coin upon leaving the site on 27 October 1993.

130. At 10:37 a.m., on 28 October 1993, still photographs and video of the last location of the Italian coin and a boot heel imprint found close to it were taken. Warrant Officer Murray-Ford requested Major Olson to raise the question with Major Bashir as to whether he could canvas his troops with a view of determining if they recalled seeing it, or if it was accidentally moved by any of them during their tour of guard duty. Subsequent inquiries with Major Bashir proved negative. At 10:45 a.m., on 28 October 1993, the missing coin was mapped as item 3023.

131. A total of 41 empty shell casings of mostly nine millimetre and 7.62 calibre, a 7.62 calibre live round, and an unknown caliber live round were later mapped and collected. The concentration of these items was located south and between site CS7 and CS6. Three .22 calibre empty shell casings were found and mapped on the tractor trail south of sites CS3 and CS4. Also mapped as items found on-site was a gold ring and a Croatian coin.

132. At 12:30 p.m., on 28 October 1993, PHR proceeded to remove body CS1-B from site CS1. During removal, a gold ring was found on its left hand 4th finger. CS1-B was placed in a bodybag and arrived at the morgue at 1:26 p.m., on 28 October 1993.

133. At 11:05 a.m., on 29 October 1993, Major Olson and Warrant Officer Murray-Ford attended the Pakrac Police Station and met with the local Chief of Police, Nikola Ivanec, who provided them with a list of names and dates of birth for 142 reported missing persons in the area. A copy of this list has been forwarded to the Office of the Prosecutor of the International Criminal Tribunal at The Hague.

134. At 12:06 p.m., on 1 November 1993, a brown briefcase was removed from site CS6. The briefcase contained miscellaneous items and the following items:

(a) A "INA" plastic folder containing a document titled "KUPON ZA PRIJEVOZ", mat# 39101908161, dated 17 December 1989, with the name ILIĆ Dušan, 41320 Kutina; and

(b) A blue plastic folder containing personal papers, an unidentified map and a customer card (Clanska Karta) titled, "AUTO-MOTO SAVEZ JUGOSLAVIJE" with the inscriptions "ILIĆ Dušan, Kutina 41320, I.G., Kovačića bb 910, Kutina, 18 November 1978".

135. It may be noted that most items found in the briefcase had the inscription "INA-NAFTAPLIN", which is a gas company in Croatia. All items in the briefcase are listed in an evidence log under number 1378. A 1990 and a 1991 car calendar book was also found underneath the damaged briefcase, suggesting that it was buried later than 1990 and prior to 1992.

136. At 11:43 a.m. and 11:45 a.m., on 2 November 1993, body CS2-A and body CS2-B were removed from site CS2 and transported to the morgue. It was noted that body CS2-A had been in the grave in a sitting position with a blanket around the shoulders and underneath the body, suggesting that the blanket had been used to place the body in the grave. Both CS2-A and CS2-B appeared to have gun shot wounds to the head.

137. At 11:57 a.m. and 12:10 p.m., on 2 November 1993, body CS3-A and CS3-B were removed from site CS3 and transported to the morgue. Both appeared to have gun shot wounds to the head.

138. Between 3:28 p.m. on 2 November 1993 and 11:12 a.m. on 3 November 1993, all four corpses were removed from site CS4 and transported to the morgue. During the time the following was noted:

(a) CS4-C was first removed, identified as an adult male and was found laying on his back on top of CS4-D's legs;

(b) CS4-D was removed, identified as an adult male laying on his back, with his head resting on CS4-B's legs. His trousers were pulled down to his ankles;

(c) CS4-B was removed, identified as an adult female laying on her back, and a shoe was found over the left side of her face;

(d) CS4-A was last to be removed, suspected to be an adult female laying on her back, with her head resting on CS4-B's right shoulder. Her skull had been damaged by the backhoe; and

(e) All corpses were wearing civilian clothing, had their hands tied behind their backs with a similar rope, and had gun shot wounds to their heads.

139. At 11:19 a.m. and 11:29 a.m., on 3 November 1993, CS5-A and CS5-B were removed from site CS5 and transported to the morgue. Both corpses were adult males, found laying on their sides in a foetal position, touching each other at shoulder level, and had guns shot wounds to their head.

140. At 11:42 a.m. and 1:11 p.m., on 3 November 1993, body CS7-A and CS7-B were respectively removed from their graves and transported to the morgue. CS7-A was found laying on his back on top of CS7-B, who was also laying on his back. It was later learned during field autopsies that both bodies were males and that they had received numerous bullet wounds all over their upper bodies. This could explain why most of the empty shell casings found at the site were in front and slightly to the right of site CS7.

141. At 11:55 a.m. and 2:36 p.m., on 3 November 1993, body CS6-A and CS6-B were respectively removed from site CS6 and transported to the morgue. CS6-A was found face down on top of CS6-B, with his sweater pulled over his head. CS6-B was laying on his back. Both appeared to have gun shot wounds to their heads. An unknown calibre live round was found at the bottom of site CS6 with the help of a metal detector. This item was registered under number 1501.

142. At 1:36 p.m., on 3 November 1993, Dr. Connor reported having found a black leather wallet with identification card in the bottom of site CS4. Examination of the wallet revealed that it contained the following items:

- (a) Identification card with photo;
- (b) Driver's licence;
- (c) Car registration;
- (d) Urine test document from Pakračka Poljana Hospital; and

Items were entered in an evidence log under number 1500.

143. Between 1:35 p.m. on 2 November 1993 and 10:47 a.m. on 7 November 1993, Dr. Kirschner conducted field autopsies on all exhumed corpses. All notes during these autopsies were recorded by Dr. Kirschner. Canadian Military Police provided ACP during autopsies and recorded arrival and departure of all persons present in the autopsy room. MCpl McComb, who had arrived on-site, assisted in the operation of the ACP and collection of evidence.

144. All evidence found on corpses during the course of autopsies was collected, and photographs were turned over to the Canadian Military Police for custody. All evidence items were assigned a number and registered in an evidence log. Some jewelry and identification papers collected could provide a greater chance of identifying some of the bodies they were found on. The following is a list of some of these items by evidence log number:

- (a) #1481: black leather wallet with the taped inscription "MILETIC", found in clothing of C10-A;
- (b) #1502: identification card with photo, driver's licence, and registration papers, found in clothing of CS4-C;
- (c) #1509: earring, found on left side of skull of CS4-B;
- (d) #1510: earring, found on left side of skull of CS4-B;
- (e) #1511: gold colour ring, taken from left ring finger of CS4-B;
- (f) #1512: chain with letter "S", taken from neck of CS4-B;
- (g) #1517: black "Darvil" Swiss watch, Ser 7050, found on right wrist of CS2-B;
- (h) #1523: silver "Month" watch, found in right lower suit jacket pocket of CS2-B;
- (i) #1528: pair of eye glasses with brown frame. The frame has tape on both sides and is tied at each end by a red elastic, found in upper left jacket pocket of CS3-B;
- (j) #1530: gold chain with gold miniature soccer ball attached to it, found around neck of CS3-B;
- (k) #1531: brown leather wallet containing identification card with photo and driver's licence, both under the name of Bozo Velebet, found stuck on right rear buttock of CS3-B;
- (l) #1536: gold ring, found of left 4th finger of CS6-A; and
- (m) #1539: black leather wallet with photo identification card found in right rear trouser pocket of CS7-A.

145. It may be noted that two .22 calibre empty casings were also found during the autopsy of CS2-A. One was stuck to the front of his trousers, near the right pocket and one was found in the blanket he was buried with. A partial fingerprint of the right middle, right ring and right little finger of CS6-A was also lifted by Dr. Haglund.

146. At 9:18 a.m., on 5 November 1993, accompanied by Major Holland, Dr. Kirschner, Dr. Snow, Dr. Calabrese, Chief Warrant Officer Heesackers and Warrant Officer Murray-Ford attended the Soccer field and Soccer Club House located north-west of CP 14. This Club House was reported in the UNCIVPOL member's report as having been used to torture people. No evidence was found inside the Club House. A hole containing JNA military clothing, track shorts and some women clothing was found in the field adjacent to the Club House. However, there was no sign of human corpses. Various items of garbage were also located in the pit. Several empty cans of "Lockwoods" beer, with an expiry date of August 1992, were discovered. It is believed that all the garbage may have been found in the Club House and subsequently buried by CANBAT personnel as the Club House had been used in the past by CANBAT troops at the time they were manning CP 14. Measurements, photographs, and a sketch of the Club House were later made. A sample of a sticky substance found on a counter of the Club House was also collected and has been forwarded to RCMP Lab for Benzine testing.

147. On 5 November 1993, attempts were again made by Major Holland and

Lieutenant Jongen to locate other mass graves in the area of site "B" and the lane of Pakračka Poljana and Gaj road. These attempts met with negative results.

148. Between 9:52 a.m. and 3:01 p.m. on 9 November 1993, all bodies were buried at a new gravesite. A video record, photographs, and a sketch marking the exact location of the new grave were made. Bodies were buried in a trench and were placed side by side, starting from the north end of the trench.

149. This investigation had revealed the following:

(a) During the fall of 1991, several persons of Serbian background were arrested around the area of Pakračka Poljana and never seen again;

(b) A report of the existence of 17 mass graves, located in a field near Pakračka Poljana and suspected to contain over 100 bodies each, was made to the UN Commission of Experts;

(c) Between 20 October 1993 and 9 November 1993, an investigation was conducted on-site by the Commission. The investigation revealed that the trenches, reported as being mass graves containing over 100 bodies each, were in fact empty. These trenches are suspected to have been used sometime in the past as defensive positions and were later refilled with earth;

(d) Nine smaller gravesites were uncovered during this investigation and contained a total of 19 bodies;

(e) Evidence at the sites suggested that some of the victims had been shot in or nearby their graves;

(f) A few identification papers and jewelry, which could help in the identification of some of the bodies, were found on the bodies themselves or in the respective graves;

(g) Three of the bodies recovered with ID were reported by witnesses as having been arrested during the fall of 1991 and taken to Pakračka Poljana; and

(h) A confidential report forwarded to the Commission of Experts contains the names of some witnesses and suspects.

150. It is recommended that other measures to be undertaken in respect of this investigation should include the collection of ante-mortem data, complete autopsies, as well as interview of victims, witnesses, and suspects.

Part Two

REPORT OF A PRELIMINARY MEDICOLEGAL INVESTIGATION OF A SERIES OF CLANDESTINE GRAVES NEAR PAKRAČKA POLJANA, FORMER YUGOSLAVIA

I. EXECUTIVE SUMMARY

151. From 20 October to 9 November 1993, an international forensic team, assembled by Physicians for Human Rights (PHR), conducted a preliminary medicolegal investigation of a series of clandestine graves near the village of Pakračka Poljana, in the territory of the former Yugoslavia. The work was carried out on behalf of the United Nations Commission of Experts under a Cooperation Service Agreement concluded between PHR and the United Nations,

with logistical and technical support provided by a detachment from the Dutch armed forces, UNPROFOR.

152. Based on the preliminary medicolegal investigation, the forensic team concludes:

(a) Nineteen individuals (16 males, three females) were buried in nine separate graves in a field south of Pakračka Poljana. The graves were shallow and appeared to have been dug by hand. Leaves found in the bottom of some graves and the clothing on several individuals, including heavy jackets and sweaters, suggests that burials took place in the autumn or early winter.

(b) The area around the graves was used as an execution site. Expended .22 calibre, .25 calibre, 9 millimetre calibre, and 7.62 by 39 millimetre calibre cartridge cases were found adjacent to six of the graves. Expended rounds were also found near some of the bodies or recovered from clothing. Five of the bodies had their hands tied with rope. Other bodies had their hands together, sometimes in extremely awkward positions, but no rope was found during the excavations. It is possible that the hands had been bound but that the binding was made of a natural fibre that disintegrated. Fifteen of the bodies exhibited gunshot wounds to the head; two had blunt head trauma; one had multiple gunshot wounds to the arm and leg; and one had massive head trauma.

(c) The nine graves are clandestine burials. The isolated location of the graves suggests that the executioners intended to bury their victims secretly. The graves were within a short distance of a road that could be accessed by a truck or other vehicle. The graves were also adjacent to large, woody vegetation that screened the area from at least one direction.

(d) There was no indication that the graves had been disturbed since the time of interment.

153. The PHR forensic team is prepared to begin the second phase of the medicolegal investigation of the remains recovered near Pakračka Poljana. This phase will require removal of the bodies from the trench burial, where they were re-interred after exhumation, a preliminary post-mortem examination in a field morgue, and transporting them to an appropriate morgue facility for autopsy. The forensic team intended to return to the site in April 1994 to continue the investigation.

154. To complete the investigation, the forensic team will require the following support:

(a) Ante-mortem Information: PHR is confident that most, if not all, of the bodies recovered near Pakračka Poljana can be positively identified. However, this will require the collection of ante-mortem records of persons believed to have disappeared in the area of UNPA Sector West from 1991 to 1992. Members of the forensic team will also need to interview family members of the disappeared. PHR is prepared to work with the United Nations and all other interested parties to obtain ante-mortem information.

(b) Transportation of the Bodies: To maintain security and chain-of-custody of the bodies and other evidence, UNPROFOR should be in charge of transporting them from the trench burial to a morgue facility in the former Yugoslavia or another country.

(c) Medicolegal Examination Autopsy: The medicolegal examination of the bodies and artifacts will be conducted by a PHR team of forensic specialists in pathology, radiology, physical anthropology, and odontology.

The team will need a facility that has hot and cold running water, adequate space and lighting, ventilation and heating, X-ray capabilities, basic autopsy tables, and refrigeration units for storage of the bodies.

(d) Other Investigations: Witness statements suggest that a link may exist between the graves and a soccer clubhouse, located a short distance from the site. The clubhouse is located next to the soccer field in Pakračka Poljana. It is alleged to have been used as a secret detention centre by the Croatian military and police from August 1991 to March 1992. This period corresponds with the likely time of burial of most, if not all, of the 19 bodies. Moreover, survivors of this centre allege that male and female detainees were executed at or near the centre. An appropriate UN agency should conduct an in-depth investigation of the activities at the Pakračka Poljana soccer clubhouse from 1991 to 1992. To the extent possible, UN investigators should interview local residents and former detainees, who should be asked to provide the names and gender of fellow detainees, their approximate ages, dates of detention, and other relevant information. Such information may help to identify the 19 bodies and return them to their families, and to determine who was responsible for these "murders".

II. INTRODUCTION

155. From 20 October to 9 November 1993, an international forensic team, assembled by PHR, conducted a preliminary medicolegal investigation of a series of clandestine graves near the village of Pakračka Poljana, in the territory of the former Yugoslavia. The investigation was carried out in collaboration with graves registration personnel from the Dutch armed forces and a Canadian team of lawyers and military policemen. A detachment from the Dutch military provided the PHR team with logistical and technical support.

156. Since December 1992, PHR has conducted medicolegal investigations of alleged war crimes in the former Yugoslavia under the auspices of the United Nations Commission of Experts ("Commission"). The Commission is charged under UN Security Council Resolution 780 (1992) to collect and analyse evidence of grave breaches of the Geneva Conventions and other violations of international humanitarian law committed in the territory of the former Yugoslavia.

157. PHR first learned in March 1993 that several clandestine graves might be located near Pakračka Poljana. At that time, the members of the forensic team and a Commission member travelled to Daruvar, in the UN Protected Area of Sector West, to meet with UNPROFOR Civilian Police (CIVPOL). During the meetings, CIVPOL monitors produced reports and photographs from their investigations of several individual and mass graves in the area of Pakračka Poljana and Marino Selo. Most of the information was based on interviews with local informants, including relatives or friends of persons who had reportedly disappeared after being detained by Croatian military or police personnel from August 1991 to March 1992.

158. According to information collected by CIVPOL monitors, members of the Croatian military and police had allegedly abducted hundreds of ethnic Serbs (and some ethnic Croats) and held them in detention centres, where they were interrogated under torture. Some detainees were eventually released in prisoner exchanges and later testified about their treatment in detention. Most of the detainees, however, were allegedly executed by their captors and buried in unmarked graves.

159. Local informants provided CIVPOL monitors with the names of the alleged perpetrators of these crimes. Informants also described the location of several detention centres. One such centre was a building that had served as

a changing room or clubhouse for soccer players in Pakračka Poljana. Survivors of this centre have described the building's interior, noting that door handles had been removed from certain rooms to keep detainees locked in.

160. CIVPOL monitors had information on three possible mass gravesites in the area of Pakračka Poljana. All three sites were within three to five kilometres of one another. In their reports, the monitors referred to these sites as "A", "B", and "C". Site A was reported to be a small, almost completely exposed grave, containing the remains of five bodies. Site B allegedly consisted of two graves approximately five feet by six feet each, containing an unknown number of bodies. Site C was said to be located in a large, open field. It consisted of two trench burials, allegedly containing 200 bodies, as well as several small graves that followed along the bank of a stream in the same field.

161. By May 1993, CIVPOL monitors reported that Site C was all that remained of the three independent sites. In mid-March, Croatian officials had apparently removed the remains from site A and taken them to an unknown location. Site B was similarly tampered with in early May. When CIVPOL monitors visited site B, they discovered trees had been planted over the former graves "as an obvious ruse to mask the fresh digging".

162. On 4 May 1993, CIVPOL monitors visited site C and walked the length of the field. In their daily report, they noted that there appeared to be "not two but 17 elongated mass graves". They speculated that the total number of bodies at the site could be as high as 1,700. ^{2/} The monitors noted, however, that until the trenches were opened, there was no way of verifying if, indeed, they were mass graves.

163. The following report describes the medicolegal investigation conducted by the PHR forensic team and the Dutch graves registration personnel from 20 October to 9 November 1993. Section III on the Archaeological Field Report was written by Melissa Connor, Ph.D.; Douglas D. Scott, Ph.D.; Ivan Caceres-Roque; Luis Fondebrider; and Ralph Hartley, Ph.D. Section IV, Preliminary Post-mortem Examination of Remains, was written by Robert H. Kirschner, M.D.; Eric Stover and William H. Haglund, Ph.D., edited the report.

III. ARCHAEOLOGICAL FIELD REPORT

A. Site Description

164. On 20 October 1993, a five-member PHR team, led by Clyde C. Snow, Ph.D., arrived at site C. Four days later, on 24 October, they were joined by a second PHR forensic team that had been deployed to UNPA Sector East. For several months prior to the team's arrival, site C had been secured and guarded by a Jordanian contingent of UNPROFOR.

165. Site C is located south of the village of Pakračka Poljana. The site is on the south side of the creek named Pakra, directly east of the road leaving town to the south. The area can be accessed by a dirt-field road running east from the paved road. During the excavations, a United Nations checkpoint was positioned on the west side of the road, about 65 metres north of the dirt road.

166. The site area lies about 116 metres above mean sea level (data from a Global Positioning System [GPS] reading of 381 feet). It lies at a latitude of 45 27 72 N and a longitude of 016 59 14 E (this is the position of Datum 2, taken from a GPS reading using the WGS-84 datum). The site area is a very

flat alluvial flood plain, contributing to the Pakra and Bjela drainages. To the south, the houses of Janja Lipa can be seen across the floodplain.

167. Pakračka Poljana is a village surrounded by farmland and pasture. The area north of the dirt field road appears to be used solely for pasture. The area from the field road south to the canal appears predominately used for crops, although cows were also grazing in this area during the investigation. Along the road and the creek bank is a more weedy and woody vegetation, containing tall grasses, bushes, and trees.

168. The PHR team found 23 disturbed areas south of the field road on which the site was entered. These disturbed areas, later designated Feature C1 through Feature C23, matched the trenches described in the CIVPOL reports. During the course of the investigation, the PHR and Dutch and Canadian teams ran test trenches across all of the disturbed areas and found no evidence of human remains. According to a local resident, the trenches had been used as bunkers, during fighting in the area in 1991 and were later covered with earth.

169. However, the forensic team did find nine separate graves at site C, containing a total of 19 bodies. Eight of the graves were along the dirt field road at the north end of the site. The exception, C10, was approximately 386 metres to the south from the field road. South of this grave was a gap in the trees that appeared to be an unused field road. C10 was about 25 metres east of the paved road, separated by a tree-filled depression. The grave was east of the depression, dug into the berm that bordered it. Of the eight graves along the main dirt field road, seven bordered Pakra Creek. The eighth (C1A) was to the south-east of the junction of the paved road and the dirt road, directly adjacent to the trees bordering the ditch along the road. These nine burials corresponded with the graves described in the CIVPOL reports.

170. A soil column, taken from the west wall of the excavation unit around CS1, was sent to the University of Nebraska-Lincoln Soils Laboratory for analysis. The soil is a silt loam to silt clay loam. It is relatively acid near the surface (pH=5.31 at 10 centimetres) and becomes more basic with depth (pH=7.18 at 80 centimetres). The water table was encountered at about one metre below surface in the area of Feature C1 and C2. The combination of changes in the soil pH and moisture with depth may be reflected in differences in the decomposition of the bodies discussed in this report.

B. Methods

1. Electronic mapping procedures

171. The site, associated artifact finds, natural and cultural features, excavation units, grave pits, and human remains were recorded utilizing standard, professionally-recognized archaeological mapping procedures. The mapping procedure was enhanced by the use of an electronic data recorder, which allowed a greater degree of precision in individual measures and data logging. The instrument was a Lietz SET5A total station theodolite with an SDR33 electronic data recorder. Each theodolite shot was recorded on the data recorder and given a previously established identification code. The specific artifact number was provided by the SDR33 used in auto-generate point mode. The electronic data recorder is equivalent to a surveyor's fieldbook.

172. A primary datum was established near Features C1 and C1A. This datum (Datum 1) was given the arbitrary coordinates of N2000/E2000 and an elevation of 100. Datum 2 was established 35 metres south of Datum 1 and was used as an

orientation and backsite datum for all readings taken from this location. Six subordinate datums numbered 3 through 8, were estimated on other site areas to provide clear and unobstructed readings with the theodolite and to minimize distances between the operator and the rodman.

173. The electronic mapping equipment captured raw data, including horizontal angle, vertical angle, slope distance, and elevation, for each reading taken.

Each reading was automatically converted to coordinate position by the SDR33 data collector. Data collected to generate the electronic map included, but was not limited to, locations of: excavation unit boundaries, grave pit outlines, body outlines, physical evidence found with the bodies, physical evidence outside the excavation limits (bullets and cartridges found by metal detecting), and relevant cultural and natural features.

174. Each artifact found in situ was piece-plotted as follows. The instrument was set up on one of the datum points. Distance, azimuth, and coordinate point readings for each location were recorded electronically. Distance was read to the nearest one millimetre and the north and east coordinates were calculated using the tolerance. Grave pit outlines, individual body outlines, and other relevant cultural and natural features were recorded in the same manner.

175. At the conclusion of each day's field investigations, the data collector was downloaded to a Dell 325N laptop computer containing the software MAP. The resultant computer file was then transferred to the software AUTOCAD for storage and final site map production.

2. Photographic recording procedures

176. Photography was conducted at site C using both still and video cameras.

Log books were used to record film numbers and to describe the activity being recorded on film. The information recorded on the forms for each roll included the name of the photographer, the location, site, film type, the assigned roll number, ASA of the film, and the number of exposures available.

Information about each exposure taken included the date, the exposure number, the compass direction of the lens and a brief description of the image being photographed. The log books and film were released to the Canadian military police at the site immediately after each roll of film or video tape was taken from the camera and labelled by the photographer.

177. The main purpose of the video documentation was to record the forensic methods and procedures used in the medicolegal investigation of individual and mass graves. At various points during the investigations, experts in charge of specific areas of the work explained in front of the camera the procedures and objectives of each step. The investigators described the archaeological procedure in use, how evidence was being mapped and collected, and what chain of custody measures had been taken.

178. The Canadian military police began still photography at site "C" prior to the arrival of the PHR photographer on 24 October, when he then took over the responsibility for still photography. At that time, two excavations, C1A and C10, were in progress. Photography during grave exhumation was oriented to five general subjects: (1) the gravesites and their immediate surroundings; (2) the procedures and progress of excavation of soil from above, and around, the bodies; (3) artifacts found during the excavation process, photographed in situ; (4) the completed excavation prior; and (5) process and progress of the removal of the bodies from the grave to body bags.

179. All photographs included a label identifying the grave designation, the date, and the photographer. In each photograph, plastic measurement scales, in metric units, were positioned as a reference. A physical marker orienting the cardinal direction of north was also placed in each image photographed.

3. Surface inventory and metal detecting

180. The surface inventory operations were designed primarily to locate cartridge cases and other physical evidence associated with the deposition of the bodies. This effort was enhanced by the use of an electronic metal detector, a Fisher Model 1235-X with a 30 centimetre diameter coil. A Dutch metal detector used for de-mining was also utilized in conjunction with the Fisher 1235-X. The surface was visually examined concurrently with the metal detector sweeps.

181. During the investigation, the detector operator walked transects across the area being investigated, swinging the detector back and forth over the ground surface. When material was located, either visually or through the detector, a pin flag was placed at the target site. Around the grave sites C1A and C10, a circular area 10 metres in diameter was investigated. In the CS area, the investigations were conducted as east and west linear transects from the treeline, along the stream, and south to the tree line bordering the farm access road.

182. Items determined to be evidence or of questionable association were recorded using the electronic mapping procedures. Each item deemed evidence was collected and bagged by the Canadian military police. Each plastic bag contained one item, which was labelled with the number generated by the SDR33 and sealed by the military police. The physical evidence was retained in their custody at all times.

4. Locating remains by probing

183. Dutch and PHR investigators used wooden-handled, metal probes, .6 centimetres in diameter and approximately one metre long, to probe areas of interest for human remains. Investigators inserted the probes into the ground of suspect areas in an effort to encounter subsurface resistances that could indicate the presence of human remains. Upon withdrawal, the tip of the probe was sniffed to detect malodour that would indicate the presence of decomposing flesh. Positive findings were flagged as potential graves.

5. Excavation of remains

184. Standard archaeological methods and procedures were used to excavate the graves. Once a potential grave was located by probing, the surface was passed over with metal detectors and surface discoveries mapped and collected. A three metres by 20 metres swath of sod, approximately 10 centimetres deep, was removed from the surface areas over sites CS2-7. The sod was cleared to define the extent of disturbed soil that indicated the grave outline. For excavation purposes, the clearing was extended to include a generous area surrounding the actual grave outline. The disturbed area surrounding the remains was totally excavated and bodies numbered, as encountered. Using small hand tools, the forensic investigators further exposed the remains. A pedestal of earth was left in place to support the body. A supportive matrix of earth was left about the head and neck area to ensure intact removal in a single unit. All surface artifacts not directly on the body were electronically mapped, catalogued, and collected.

6. Removal of remains

185. Once the remains were exposed, mapped, and photographed, they were freed from their supporting pedestals and placed on a metal sheet. The metal sheet was then lifted to ground level, where the remains were slid into body bags.

186. Exceptions to this procedure occurred when skeletonized, disarticulated elements of hands and wrists were present. These were removed separately and bagged to be included with the body. A preliminary inventory of observable clothing was undertaken during the excavation and removal process. However, detailed description of trauma, clothing, and artifacts directly associated with the body were deferred until the time of the post-mortem examination of the remains.

187. It should be noted that in the few cases where identification documents were found on or near a body, they were removed, photographed, and preserved.

Pending confirmation of a positive identification based on a complete autopsy, names will remain confidential. After removing the bodies, a metal detector was passed over the grave floor to detect possible metal artifacts, and the soil was probed and screened to detect possible further bodies.

C. Findings

1. Features other than graves investigated

188. As mentioned earlier, the CIVPOL reports identified a number of large trenches along the edge of the field, near the paved road. A series of possible features were identified and investigated. While the PHR team completed excavations at Features C1 and C2, members of the Canadian and Dutch teams examined the site area for the remainder of the disturbed areas described by the CIVPOL monitors. They numbered the areas investigated sequentially, Feature C1 to Feature C23, and then used a backhoe to probe all of them. The Canadian and Dutch teams also probed the creek bank and other areas, including the soccer field north of the UNPROFOR Jordanian checkpoint, to ascertain if human remains were present. These probes were all negative.

189. No human remains were uncovered in Features C1 through C23. Moreover, there was no evidence of any activity related to the mass execution or mass burial of human remains in any of the features. Archaeological test probes on C1 and C2, as well as the extensive backhoe trenching on C3 through C23, found no evidence of any activity related to the mass execution or mass burial of human remains. The temporal relationship of these features to the graves is unknown, but it is likely that they represent a totally different event. Local residents have said that these features were bunkers used during fighting in the area in 1991.

2. Excavation of graves at site C

190. On 22 October, human remains were located in Feature C10, at which time it became known as Grave C10. On 23 October, human remains were found west of Feature C1. This site was then designated Grave C1A. While the excavations were ongoing at Graves C1A and C10, probing for further human remains was completed along the stream bank to the north of the field road. Human remains were located along the stream in a series of seven separate graves. The graves were numbered sequentially as they were uncovered, starting with one. To avoid confusion with the other sequence of numbers, these were given a "CS" designation. The "C", as before, was a reference to site C, and the "S" referred to the location by the stream bank. The bodies, and their relative

depths, are summarized in Table 2.

(a) Grave C1A

191. The grave was located, on 23 October, adjacent to the tree line bordering the road, and west of Feature C1. Slight undulations in the ground surface here had led to the use of a probe. The probe located probable bone and a quick hole with a trowel uncovered two ribs and a human vertebra. The remains were removed from the grave on 27 October.

192. The grave contained the remains of one mostly skeletonized corpse. During removal of the corpse, it was found that tissue remained near the spinal column and chest cavity on the underside of the body. Some tissue and hair also remained underneath the cranium.

193. The skeleton lay on its left side, in a semi-flexed position. The feet were pointed toward the north, the shoulders toward the south. The head was positioned as if looking toward the feet. Some hair was found along the mandible, suggesting the individual may have had a beard. The left arm was positioned with the humerus over the skull, and flexed at the elbow, with the hand under the body. Of the right arm, only the elbow was visible during excavation, with the remainder of the arm underneath the body. During removal, it was found that both hands were together, although there was no evidence that they were tied.

194. Artifacts found with the remains included a wire nail, a tack, a buckle, a nut husk, and a bullet. All were electronically mapped and catalogued as evidence. The wire nail, buckle, and nut husk were found in the pit fill, above the body. These were on the east side of the body, near the right femur. The tack was also in this general area, but at a slightly lower depth. The bullet was located several centimetres below the skull and was only found through the use of the metal detector after excavation.

195. A detailed itemization of clothing and trauma is deferred until the time of post-mortem examination.

(b) Grave C10

196. The grave was located on 23 October and the bodies removed on 27 October. The grave was situated on the western end of site C, in an area dominated by trees and thickets. There is a path 30 metres to the west of C10. A small trench was clearly discernable at the locale prior to exhumation. The grave contained two bodies, C10-A and C10-B, lettered sequentially in order of discovery. The remains appear to have been buried at the same time, C10-B first, followed by C10-A. The grave was elliptical and approximately two metres long, one metre wide, and its maximum depth is 73 centimetres from the present ground surface.

197. The grave soil was yellow and relatively homogeneous, though degrading a bit in coloration. Roots were the only organic material present. There was organic material, different in colour, composition, structure, and consistency, in the above-mentioned soil in the bottom of the grave. It was dark grey, dry, and hard. The grave fill was examined for inclusions, and the soil in contact with the bodies was screened with negative results.

198. The body designated C10-A was on its left side, with its right leg flexed. Its left leg crossed over both legs of C10-B. The head pointed toward the west, with the face looking in the same direction. The right arm

was extended to one side and the left arm was flexed with its hand covering the face. The body of C10-A was in an advanced stage of decomposition. The body identified as C10-A was in direct contact with body C10-B. The leaves in the grave suggest that it was dug in the autumn or early winter.

199. During the investigation, the following artifacts were found to be associated with the bodies:

(a) A rusted screw found at a depth of 53 centimetres, 95 centimetres from the western wall and 40 centimetres from the southern wall;

(b) Several tree leaves, found 54 centimetres deep, 80 centimetres from the western wall and 200 centimetres from the southern wall;

(c) A rusted nail, found deep, 87 centimetres from the western wall and 200 centimetres from the southern wall; and

(d) A cigarette filter, found 52 centimetres deep, 47 centimetres from the western wall and 100 centimetres from the southern wall.

Soil samples were taken from one boot and a control sample from near the boot. Hair and scalp samples were also collected.

200. C10-B was lying face down, with the right leg slightly flexed. The arms were flexed toward the head. C10-B was directly adjacent to C10-A, suggesting burial at the same time. Soil samples were collected from one boot and a control soil sample from near the boot. C10-B was in an advanced state of decomposition.

201. A detailed itemization of clothing and trauma is deferred until time of autopsy examination.

(c) Grave CS1

202. The grave was located on 26 October, and the bodies were removed on 27 October. CS1 was located on the east side of a small stream, within the bend of a large loop made by the stream. It contained two bodies designated CS1-A and CS1-B.

203. Body CS1-A was lying on top of body CS1-B. Both were lying in supine positions with the head to the south and the feet to the north. CS1-A was slightly to the north of CS1-B, so that the feet of CS1-A were roughly above the knees of CS1-B. Conversely, the head of CS1-B was below the upper torso of CS1-A. Both bodies had adipocere present, and the clothing appeared well-preserved.

204. A jacket was located north of the feet of both bodies and at the level of CS1-A. Roots growing through the jacket had maximum diameters of .6 to .8 centimetres. Inside the bottom left pocket of the jacket were what appeared to be two nut husks, similar to the husk in Grave 1A. A cigarette filter and a seed were also found in the pocket. A whiteware ceramic shard was found below the body. It appears to be intrusive, and was probably a fortuitous inclusion in the grave fill. The entire area along the stream bank had been utilized as a trash disposal site for an undetermined period.

205. CS1-B was directly under CS1-A and a little to the north. The individual was buried in a supine position with the same orientation as CS1-A. The hands were together on the front of the body. There was a gold band on the fourth finger of the left hand. The head was turned to the right, or

east. CS1-B was wearing smooth-soled sneakers. The cloth had rotted and the eyelets were removed separately during excavation. Facial hair included a goatee and moustache.

206. To the south of CS1-B, at the bottom of the pit, was a large piece of charred wood. This was present in the pit before it was filled in and lay beneath the jacket. Leaves were also found in the bottom of the pit and appeared similar to the leaves from the trees adjacent to the pit by the stream bank.

207. When CS1-B was removed, a large root was found underneath. This, as well as the soil characteristics, suggested that the pit ended directly under CS1-B.

208. A detailed itemization of clothing and trauma is deferred until time of autopsy examination.

(d) Grave CS2

209. Excavation commenced on 27 October and concluded on 2 November with removal of the bodies. The grave contained two bodies, CS2-A and CS2-B, lettered in order of their discovery in the grave. Backhoe activity had uncovered part of the remains. A balk of soil, 15 centimetres thick, separated the two bodies.

210. The shape of the grave pit was clearly discernable. The measurements of the semi-elliptical grave were 227 centimetres east to west, 103 centimetres at the maximum width, and a minimum width of 94 centimetres. The grave measured 93 centimetres deep from its opening. The soil of the grave walls was yellow and relatively homogeneous, degrading in coloration and with a few roots. The floor of the grave was similar to that described for grave C10.

211. CS2-A was in a semi-seated position on its back with its left leg flexed and the foot underneath the right knee. The right leg was extended with the foot (clad in a boot) pointed to the south. The hands were together and resting on the pelvis. No evidence of binding was evident. The body sat facing south, with the face looking downward and to the south-east. The back was almost perpendicular to the legs. The body rested on a green blanket, which covered part of the left leg. It appears that the body was placed in the grave, perhaps by using the blanket as a carrying device. It also appears the grave was not large enough to lay the body down, so it was placed in a semi-sitting posture and oriented perpendicular to CS2-B.

212. CS2-A showed moderately advanced skeletalization. Post-mortem fractures caused by the backhoe were observed on the skull. The facial area was almost completely missing and it appeared, from fracture lines present, that perimortem trauma destroyed the face and jaw. The body was almost totally covered by clothing, so no other observations are possible.

213. Body CS2-B was west of body CS2-A. The body was found prone in a semi-flexed position. The hands were together, underneath the body, with arms flexed so that the hands were close to the face. No evidence of binding of the hands was evident. The body lay with the head to the west and facing south. CS2-B showed extensive adipocere, and with the exception of the skull, no exposed bones could be seen. Adjacent to the main excavation trench, and in an area previously undisturbed, several cartridge cases were discovered.

214. Clothing and trauma will be further described at the time of autopsy examination.

(e) Grave CS3

215. Excavation commenced on 27 October and concluded 2 November with removal of the bodies. The grave's dimensions were 2.03 metres long and 50 centimetres wide. The soil of the grave pit bottom was composed of a relatively homogeneous material. Some roots were also present. The soil of the walls was a bit darker and less homogeneous.

216. The grave contained two bodies, CS3-A and CS3-B. CS3-A was lying on top of CS3-B with no soil intervening.

217. CS3-A was found in a prone position, with both arms stretched out above the head and the hands together. The body was oriented east-west with the head to the west. The left leg was stretched over the right. The head was face down, and the left side of the face was resting on the left side of CS3-B. The hands covered the head of CS3-B.

218. CS3-B was in a prone position, with the head toward the west and face down. The right arm was flexed toward the head. The left arm was extended overhead. CS3-B was almost entirely covered by CS3-A.

219. A detailed itemization of clothing and trauma is deferred until time of autopsy examination.

(f) Grave CS4

220. The grave is located along the south side of the stream bank to the west of the loop containing CS1. Excavation on CS4 began on 28 October, and the bodes were removed on 3 November 1993. Backhoe activity uncovered the crania, resulting in some damage. The grave pit was irregular in shape, and its maximum dimensions were 1.8 metres by 1.7 metres.

221. The grave contained four bodies (CS4-A, CS4-B, CS4-C, CS4-D), which were intermingled. The order of deposition was not evident until the bodies were removed.

222. CS4-A was the first body laid in the grave pit. The legs were pinned under both CS4-C and CS4-D. The left shoulder was pinned under CS4-B. This individual was sitting in a V-shaped position. The hips were lower than the head and the feet higher than the hips. The legs were spread apart and pointing to the east. The arms were tied behind by a length of rope around the wrists.

223. A piece of printed cloth was found under the skull and may have been the remains of a scarf. The individual appeared to have shoulder-length or longer hair and was wearing ankle-high shoes and support knee-high stockings. A skirt went at least to mid-thigh but was probably longer.

224. CS4-B was the second individual placed in the grave pit. The legs were pinned under CS4-D. CS4-B was in a supine position, with the head pointed towards the south and the feet to the north. The legs were slightly canted to the individual's left (west) with the feet higher than the head. The legs were more or less parallel. The hands were tied behind the back with a length of rope, to be further described by the pathologist. Both feet were clad in shoes.

225. CS4-D was the third individual placed in the grave. The head was on top of CS4-A. The body was supine, extended with the cranium to the west, face looking up. The upper body was slightly flexed to its right (north). The

legs were together, with the feet pointing to the east. The hands were tied together beneath the body, right hand to the outside. The individual's trousers were pulled down to the ankles and the feet were bound in the trousers. Under the trousers, the individual was wearing long underwear, which was still in place on the legs. The belt was still in the trousers and was buckled directly above his ankles. The skull had been hit with the backhoe during removal.

226. CS4-C was the last body laid in the grave. The individual was on the easternmost side of the pit; head to the south and feet to the north. The head was bent down, facing the feet. The body was canted toward the side, left side down and right side up. The right leg was straight and the left flexed, meeting at the ankles. Both hands were tied together behind the back.

227. Following removal of the remains from grave CS4, metal detection indicated a shoe north of body CS4-A. In this area was another piece of patterned cloth that may have been part of a scarf. Under this was a cap with a small bill. Under the cap was a wallet.

228. Further use of the metal detector located a rivet under the hip of CS4-C, near the south edge of the grave. The rivet was attached to several seams, but the clothing was decayed. The rivet was decorated with three, five-pointed stars along one portion of the edge and an ivy branch along the remaining portion of the edge.

229. A detailed itemization of clothing and trauma is deferred until time of autopsy examination.

(g) Grave CS5

230. Excavation commenced on 29 October and concluded on 3 November with removal of the bodies. Probing identified a probable burial site. Two bodies were found side by side, CS5-A and CS5-B. Both bodies were oriented east to west. The grave pit was not clearly discernable until the excavations reached the remains. There, it appeared as an elliptical grave pit, two metres long and 60 centimetres wide, oriented east to west, had been dug. The pit was too short to bury the bodies in extended positions, and both bodies were flexed.

231. Above the bodies and near the north wall of the excavation unit an empty wallet (FS3780) was recovered.

232. CS5-A was found on the left side, in a semi-flexed position. The head was to the east and faced north. The arms were in front of the body, with the hand in front of the stomach, left hand crossed over the right. The legs were flexed at the knees and crossed left over right. The feet, clad in boots, were pointed north and spread apart.

233. CS5-B was lying on its right side, in the foetal position, with the head to the west and looking north. The left hand rested on the right just below the head. The right upper arm was raised slightly above the body, with the lower arm angled down at the elbow to join with the left hand. The legs were flexed at acute angles with the knees to the north. The feet were crossed at the ankles. The head and arms were touching CS5-B's head.

234. In both cases, the hands were found together in an awkward position, but no binding was apparent.

235. A detailed itemization of clothing and trauma is deferred until the time of post-mortem examination.

(h) Grave CS6

236. Excavation began on 29 October and ended on 3 November with removal of the bodies. The site was located using the probe. There was no surface evidence of remains in this location. In fact, the outline of CS6 (2.8 metres long and 80 centimetres wide) was not clearly discernable until the bodies had been nearly uncovered. The grave contained two bodies, CS6-A and CS6-B. This grave pit is the only pit besides CS1 that was longer than necessary for burial of the human remains. A briefcase and several other items were found in the extension at the east end.

237. The shape of the original grave was determined by examining the break in the soil where the grave had been dug. An elliptical shape was seen in the soil. The grave bottom was 55 centimetres from the surface. CS6-B was buried first and immediately covered with dirt. A layer of dirt 10 centimetres deep separated the two bodies.

238. CS6-A was prone with the legs extended and with both arms bent, so that the hands were immediately above the head. The body was oriented with the head to the east. The head was shrouded by cloth that appeared to be a shirt and jacket pulled up over the head. CS6-A was in an advanced state of decomposition. The head and portions of the trunk were partially skeletalized.

239. CS6-B lay in a supine position, with the head leaning to the east and the face looking upward. The right arm was on the chest and the left arm lay by the side. The body was at a slight angle to CS6-A. The head was oriented to the north-east and lay under the mid-section of CS6-A. The feet, clad in boots, were to the south-west and the toes were pointed outward in opposite directions. The hands were tied together.

240. After the bodies were removed, a metal detector indicated a cartridge (FS 1501) under body CS6-B, near the pelvis.

241. A detailed itemization of clothing and trauma is deferred until time of a postmortem examination.

(i) Grave CS7

242. Excavation began on 30 October and ended on 3 November with removal of the bodies. The grave, located underneath a recent trash pile, was discovered through probing. Much of the trash was fresh and was in the early stages of decay. Older trash was scattered along the creek bank and down the bank into the water. Grave CS7 contained two bodies, CS7-A and CS7-B, lying one on top of the other, oriented north to south.

243. CS7-A was in a supine position, with the head to the north and facing up. The left arm was flexed at the elbow and laid on the chest. The right arm was extended down the right side of the body. Both legs were extended.

244. CS7-B was in a supine position, with the head to the north and face up. The left arm was flexed at the elbow over the mouth, and the right arm was flexed over the right thorax. The right hand was underneath CS7-A.

3. Surface artifacts

245. Using the metal detector, team members found and retrieved 41 cartridge cases (Field Specimen numbers 3027-3048, 3049-3051, 3052, 3057-3071) in the

area adjacent to graves CS2 through CS7. Two unexpended rounds were also recovered (FS 3026 and 1503). The calibres represented are .22 calibre rimfire, .25 calibre pistol (including one unfired round), 9 by 18 millimetre pistol, 7.62 by 39 millimetre, one unidentified rimmed unfired round, and one unidentified rimless case dated 1940. The latter cartridge case may be unassociated with the graves, as it was deeper than the other cases, which were usually less than three centimetres deep. Also, it was more oxidized than the other cases.

246. The cartridge cases recovered appeared to fall into two clusters. The larger and more concentrated occurs between CS6 and CS7. Pistol- and shoulder-fired weapons cases were located in this area. The cases and unexpended rounds were found about two metres south of the field road and continued to the edge of the backhoe cut. The soil removal in the cut was done prior to metal detecting, and some patterned data may have been lost. The other cluster is much smaller in size. It consists of three cases, all .22 calibre, found in the road and south of CS4. Other cases were found scattered between the concentrations. All cases were found in, or north of, the field road.

247. Apart from the ammunition components, the metal detector located a wedding band (FS3024) and two coins (FS3023 and 3025) in the same area. One coin disappeared prior to recording. These items may be intrusive trash and unrelated to the graves. However, their locations were associated with the cartridge case concentration, so it was deemed appropriate to collect the specimens. The entire CS area was littered with recent trash. Bits of foil, nails, machine bolts and other debris were evident on the ground surface, as well as located by metal detector. These items were not recorded and were discarded after consultation with the Canadian military police.

248. In addition to the metal detecting around the grave sites, a metal detector search was initiated on the north side of the creek in an attempt to locate bullets that might be associated with the expended cartridge cases found near the graves. The ground was detected for five metres to the north, along the bank opposite the graves, and at selected locations up to 20 metres north of the creek. Trees that lined the creek bank were also swept for metal debris; no bullets were found. A tin of shoe polish and a pair of recently discarded trousers were located. The only evidence of gunfire was a single rotted tree branch. This branch, located due north of CS2 and on the creek's north bank, had a small hole through it that is consistent with a bullet hole. No metallic debris was detected, however.

4. Additional investigations

249. Approximately 200 metres east of CS1, a roughly rectangular hole was located along the south side of the field road and at the tree line. The hole was about 1.4 metres long, east to west, 90 centimetres wide, north to south, and about 90 centimetres deep. The bottom of the hold contained a variety of trash, including a dark green glass bottle. The trash, which appeared to be recent, could not be dated due to the lack of clearly diagnostic temporal features. The hole was probed, but no evidence of human remains were noted. It is unclear if the hole is associated with the graves at site C.

250. On 6 and 7 November, the PHR team undertook a limited investigation of the nearby soccer clubhouse or changing rooms and adjacent field. At the time of the investigation, the building was not in use. The clubhouse had allegedly served as a detention centre at about the time the nearby clandestine graves were dug and the bodies buried. One detainee is reported to have observed a hole being dug to the west of the clubhouse near the soccer

field. This location was identified and briefly investigated.

251. The clubhouse is a brick and mortar structure. The team mapped the building in the same manner as site C. It was noted that door handles were missing from some of the interior doors. Both general and detailed photographs were taken of the interior of the structure. Some time in 1993, the clubhouse had been used by UNPROFOR Canadian troops as a checkpoint. For this purpose, the building had been cleaned and the interior repainted.

252. The depression near the soccer field is approximately 15 metres north-west of the clubhouse. It is a roughly circular depression, about one metre in diameter and about 90 centimetres deep. The fill was removed with a shovel, and at a depth of about 40 centimetres, a concentration of trash was encountered.

253. The trash consisted of used foil jam packets, a yellow plastic detergent bottle, two aluminium beer cans with a "use before August 92" date on the bottom, and clothing. The clothes included underwear (briefs), women's stretch pants, and portions of a man's JNA uniform blouse or coat. Most thread holding the garment together had rotted, leaving only individual pieces. Several small JNA uniform buttons were noted on several pieces. The clothing and beer cans, as well as the depression, were photographed.

254. The depression contained trash, but the specific date of deposition could not be determined. The beer cans indicate that the deposit was created within the last two or three years. There is no definitive evidence to associate the contents with the use of the building as a detention locale, nor is there anything in the pit that indicates the deposition came later. No human remains were found in the depression.

IV. PRELIMINARY POST-MORTEM EXAMINATION OF REMAINS

255. By 4 November, the last of the 19 bodies had been removed from the graves and transported by stretcher to a field morgue within 100 metres of the gravesites. The Dutch government had provided the temporary facility, which consisted of a series of interlinking tents. Equipment for the field morgue was provided by PHR and the Dutch and U.S. governments. On account of the limited facilities, it was decided to conduct a preliminary post-mortem examination of the bodies and re-inter them on-site, until a complete autopsy could be performed in a proper facility.

256. From 3 to 6 November, Dr. Robert H. Kirschner, a forensic pathologist and a member of PHR's board of directors, supervised the preliminary post-mortem examination of the 19 bodies. Dr. Kirschner was assisted by members of the PHR team and personnel from the Dutch graves registration team (UNPROFOR). Chain-of-custody of evidence was maintained with the Canadian military police. For the duration of the post-mortem examination, UNPROFOR Jordanian troops guarded the field morgue on a 24-hour basis.

257. During the preliminary post-mortem examinations of the bodies, the team photographer kept log books, in the same manner described in Section III of this report. The photographer oriented his photographs to four general subjects: (1) the overall body on the examination table prior to physical examination; (2) the overall body after removal of clothing; (3) individual garments, personal adornments, and objects taken from clothing; and (4) features or in situ details of the body that reflect ante-mortem injury or physical restraints. All post-mortem examination photographs included a label identifying the assigned grave and body designation. In some cases, photograph labels included the date and the name of the photographer.

Plastic, metric scales were placed in each image photographed.

258. Pending a confirmation of a positive identification based on complete autopsy, names found on identification documents will remain confidential.

V. FINDINGS AND OBSERVATIONS

259. Based on the preliminary medicolegal investigation, the PHR forensic team concludes:

(a) Nineteen individuals (16 males, three females) were buried in nine separate graves in a field south of Pakračka Poljana. The graves were shallow and appeared to have been dug by hand. Leaves found in the bottom of some graves and the clothing on several individuals, including heavy jackets and sweaters, suggests that burials took place in the autumn or early winter;

(b) The area around the graves was used as an execution site. Expended .22 calibre, .25 calibre, 9 millimetre calibre and 7.62 by 39 millimetre calibre cartridge cases were found adjacent to six of the graves. Expended rounds were also found near some of the bodies or recovered from clothing. Five of the bodies had their hands tied with rope, all in graves CS4 and CS6-B. Other bodies had their hands together, sometimes in extremely awkward positions, but no rope was found during the excavations. It is possible that the hands had been bound but that the binding was made of a natural fibre that disintegrated. Fifteen of the bodies exhibited gunshot wounds to the head; two had blunt head trauma; one had multiple gunshot wounds to the arm and leg; and one had massive head trauma;

(c) The nine graves are clandestine burials. The isolated location of the graves suggests that the executioners intended to bury their victims secretly. The graves were within a short distance of a road that could be accessed by a truck or other vehicle. The graves were also adjacent to large, woody vegetation that screened the area from at least one direction; and

(d) There was no indication that the graves had been disturbed since the time of interment.

260. The PHR forensic team is prepared to begin the second phase of the medicolegal investigation of the remains recovered near Pakračka Poljana. This phase will require removing the bodies from the burial trench, where they were re-interred after exhumation and a preliminary post-mortem examination in a field morgue, and transporting them to an appropriate morgue facility for autopsy. The forensic team intended to return to the site in April 1994 to continue the investigation.

261. To complete the investigation, the forensic team will require the following support:

(a) Ante-mortem information: PHR is confident that most, if not all, of the bodies recovered near Pakračka Poljana can be positively identified. However, this will require the collection of ante-mortem records of persons believed to have disappeared in the area of UNPA Sector West from 1991 to 1992. Members of the forensic team will also need to interview family members of the disappeared. PHR is prepared to work with the United Nations and all other interested parties to obtain ante-mortem information;

(b) Transportation of the bodies: To maintain security and chain-of-custody of the bodies and other evidence, UNPROFOR should be in charge of transporting them from the trench burial to a morgue facility in the former

Yugoslavia or another country;

(c) **Medicolegal examination - autopsy:** The medicolegal examination of the bodies and artifacts will be conducted by a PHR team of forensic specialists in pathology, radiology, physical anthropology, and odontology. The team will need a facility that has hot and cold running water, adequate space and lighting, ventilation, heating, X-ray capabilities, basic autopsy tables and refrigeration units for storage of the bodies; and

(d) **Other investigations:** Witness statements suggest that a link may exist between the graves and a soccer clubhouse, located a short distance from the site. The clubhouse is located next to the soccer field in Pakračka Poljana. It is alleged to have been used as a secret detention centre by the Croatian military and police from August 1991 to March 1992. This period corresponds with the likely time of burial of most, if not all, of the 19 bodies. Moreover, survivors of this centre allege that male and female detainees were executed at, or near, the centre. An appropriate UN agency should conduct an in-depth investigation of the activities at the Pakračka Poljana soccer clubhouse from 1991 to 1992. To the extent possible, UN investigators should interview local residents and former detainees, who should be asked to provide the names and gender of fellow detainees, their approximate ages, dates of detention, and other relevant information. Such information may help to identify the 19 bodies and to determine who was responsible for these murders.

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263. Members of the forensic team were:

(a) Eric Stover, executive director of Physicians for Human Rights, Boston, Massachusetts, USA;

(b) Clyde Collins Snow, Ph.D., forensic anthropologist and senior forensic consultant to Physicians for Human Rights, Norman, Oklahoma, USA;

(c) Robert H. Kirschner, M.D., forensic pathologist, board member of Physicians for Human Rights, and Deputy Chief Medical Examiner, Cook County, Illinois, USA;

(d) Ivan Caceres-Roque, forensic archaeologist with the Chilean Forensic Anthropology Team, Santiago, Chile;

(e) Isabel M. Reveco, forensic anthropologist with the Chilean Forensic Anthropology Team, Santiago, Chile;

(f) Mercedes Doretti, forensic archaeologist with the Argentine Forensic Anthropology Team, Buenos Aires, Argentina;

(e) Burney McClurkan, archaeologist and historian with the Arkansas Highway and Transportation Department, Little Rock, Arkansas, USA;

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(l) Luis Fondebrider, forensic archaeologist with the Argentine Forensic Anthropology Team, Buenos Aires, Argentina; and

(m) Marko Simunovic, M.D., M.P.H., physician and consultant to Physicians for Human Rights, Toronto, Canada.

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Notes

1/ The War Crimes Investigation Team (WCIT) consisted of military personnel from the Canadian Office of the Judge Advocate General, as well as military investigators who were seconded from Canada to the Commission of Experts for this specific mission. Similar teams were also seconded by Canada to the Commission for other missions. Such teams were referred to within the Commission and for the purposes of its reports as the Canadian War Crimes Investigation Team.

2/ The Belgrade-based Serbian Council Information Centre has also reported the figure of 1,700 bodies buried at this site. In its report, the Centre refers to the investigations of mass graves conducted by CIVPOL monitors. See Serbian Council Information Centre, Death Camps and Mass Graves in Western Slavonia: Marino Selo and Pakračka Poljana, August 1993, p. 3.