

## XI. EVIDENCE RETRIEVAL AND ANALYSIS

In the aftermath of the police confrontation and the resulting inferno, personnel from the Police Department, the Fire Department and the Medical Examiner's Office processed the scene, searching for bodies and for evidence. Later, an internationally renowned team of pathologists and a nationally known fire expert also examined the bodies and the evidence in an attempt to determine what happened on May 13, 1985.

While processing a crime or fire scene is always an important task, it was, in this case, a critical one. The unanswered questions here were myriad. On May 14, 1985, it was not known whether any MOVE members had been killed in the morning gun battle, whether they all had died in the fire, or whether any members other than Ramona and "Birdie" (Michael Ward) had escaped. Indeed, it was not even known how many people had been in the compound before the fire. Because police thought that MOVE may have had tunnels leading away from the compound, there was some question whether MOVE members may have escaped altogether. Additionally, rumors that police had shot at MOVE members in the alley during the fire raised questions about whether the police had killed MOVE members or otherwise acted criminally.

In addition to the questions concerning the deaths of MOVE members, almost nothing was known about the cause and origin of the fire on May 13, 1985. The satchel charge was supposed to have been a non-incendiary device, yet it touched off a fire

destroying an entire city block. Because MOVE had claimed to have explosives and had threatened to burn down the block, there were serious questions as to the cause of the fire, including whether MOVE may have contributed to its magnitude. Finally, the intelligence available before the confrontation about MOVE's weapons and fortifications was minimal. Thus, answers to questions about everything from the number, identity and fate of the people in the house, to the number and kind of weapons possessed by MOVE and the extent of fortifications inside the house, might be found in processing the scene -- if the fire, which burned at temperatures exceeding 2,000° F, did not itself destroy all of the evidence.

We will first discuss the evidence retrieved from the scene and the factual conclusions which the evidence suggests. Next, we will discuss serious instances of incompetence which typified the retrieval process itself.

On the morning of May 14, 1985, personnel from the Mobile Crime Detection and the Homicide units of the Police Department, together with personnel from the Fire Marshal's Office, began to process the scene. At the Fire Marshal's request, personnel from the Federal Bureau of Alcohol, Tobacco and Firearms (ATF) also assisted on Osage Avenue. The Philadelphia Medical Examiner's Office did not assist at the scene that morning; although the Fire Marshal twice requested the presence of a Medical Examiner,

Chief Medical Examiner Marvin Aronson refused to come or to send an assistant until a body had been recovered.

Because the fire was yet smoldering on the morning of May 14, 1985 -- smoke was still rising from the debris and fire fighters were still directing hoses on the scene -- digging was delayed until the afternoon. In the interim, the Fire Marshal met with police and fire personnel to determine who would have responsibility for various tasks. Additionally, the Fire Marshal ordered that the entire scene be photographed, including the party (fire) walls, to determine whether MOVE had breached them, as was thought. Finally, before the actual search for bodies and evidence was begun, a crane was used to knock down the party walls, which were unstable and would have posed a risk to anyone digging inside the compound.

Digging began in the afternoon. The intense fire had reduced the Osage Avenue homes to nothing more than debris, smoldering in piles up to six feet deep within the party walls. A crane with a clamshell/bucket apparatus was used to scoop up material from inside the MOVE compound and deposit it onto Osage Avenue, where police and fire personnel would sift through it with rakes or shovels. After police and fire personnel had sifted through the objects dumped by the crane onto Osage Avenue, the material would then be taken by truck to two remote locations where it would be sifted again at a later date.

The foregoing process was pursued until about 4:00 p.m., when someone noticed a human leg dangling from the crane's scoop.

The crane operator duly dropped the leg back where it had been removed from, and police and fire personnel continued the search using shovels and rakes. About 4:20 p.m., a body was uncovered. (The Medical Examiner's Office later determined that these were actually the remains of two people.) At 5:00 p.m., then Assistant Medical Examiner Robert Catherman, M.D., arrived and helped with the search, both supervising the excavation and digging himself. By 7:30 p.m., when the search was suspended because of nightfall, six bodies had been recovered, all found in what had been the attached garage, all within inches of the floor.

The search resumed the following morning. The crane was used to move piles of bricks and heavy pieces of metal from the back of the house; the remainder of the search was again conducted with shovels and rakes. However, the crane was used in the front of the house to remove debris. Shortly before noon the crane dumped a bucket of material containing a body onto Osage Avenue. Digging was suspended until the arrival of Assistant Medical Examiner Robert Segal, M.D., at 12:30 p.m. Four more bodies were recovered that day. No other bodies were recovered at any later date, although some additional bones were recovered in the later-conducted remote-site sifting operation.

In total, eleven bodies (or, more accurately, human remains including eleven pelvises) were recovered from the debris. Some portions of some bodies and most portions of other bodies were completely consumed by the fire; nevertheless, all eleven were eventually identified. The Medical Examiner's Office identified

six of the bodies. Subsequently, Dr. Ali Hameli and two other forensic pathologists confirmed those identifications and additionally identified the remaining five bodies, either beyond a reasonable doubt or with a high probability of accuracy, using FBI fingerprint records, Army records, dental x-rays, birth records, x-rays of the children taken in the course of a child-abuse investigation, examinations of bone and teeth remains, blood-type determinations and information on who was thought to be in the house on May 13, 1985.

The bodies were identified as Vincent Leaphart (also known as John Africa or "Ball"), James Conrad Hampton, Frank James, Raymond Foster, Theresa Brooks, Rhonda Harris (Michael Ward's mother), Phil Africa, Tomaso ("Boo") Africa, Delicia Africa, Zanetta Dotson and Katricia Dotson ("Tree"). (Phil, Delicia, Zanetta and Katricia were juveniles ranging in age from approximately eleven to fourteen years old; Tomaso was thought to be seven to nine years old.) The Medical Examiner's Office and Hameli's team apparently disagreed only as to the identification of Katricia Dotson: In Segal's opinion, the remains identified by Hameli as belonging to Katricia, who was almost fifteen years old, actually belonged to a female who was at least eighteen or nineteen years old, and so could not have been Katricia.

All but two of the bodies were found heaped together in the garage, just inches from the concrete floor. Two bodies, those of Vincent Leaphart (John Africa) and Frank James Africa, were found at the front of the house and at a higher level than the

bodies in the garage. Leaphart was found in the porch area; James, although also found in the front, had a foot or more of debris under him than was under Leaphart, indicating that the two men may have been at different levels in the house when they died.

Although Hameli and Segal were in substantial agreement as to the identity of the bodies, they disagreed as to the causes of death. Segal initially concluded that all of the victims except Leaphart had died because of the fire, from smoke inhalation, carbon monoxide poisoning, and/or thermal burns. Segal acknowledged the necessarily limited evidentiary basis for some of his initial cause of death determinations. For example, he initially concluded that Body B-1 (a pelvis and partial thigh identified by Hameli as the remains of Katricia Dotson) had died from thermal burns and smoke inhalation. Segal made this cause of death determination "purely by proximity. She was found with all of the others together in the basement ... and it seemed reasonable to draw that conclusion. It certainly [could be] legitimately argued ... that I have overstepped to draw that conclusion...." More substantial remains existed for the other bodies, and the Medical Examiner's Office was able to perform more definitive testing on these remains. Segal explained that the cause of death determinations were based on the evidence he had, not speculation about evidence he did not have. Thus, given evidence (such as toxicology reports) that the people in the basement were alive during the fire and the absence of evidence that any of them died from anything other than the fire, it seemed reasonable to assume that

they died because of the fire. Nevertheless, he subsequently ruled that there was insufficient evidence to establish the cause of death for Zanetta and Katricia Dotson.

Segal ruled the cause of Leaphart's death unknown. No carbon monoxide was found in Leaphart's headless body. Because his head was never found (the evidence suggested that it may have exploded in the heat or burned completely), causes of death resulting from injuries to his head could not be ruled out. Moreover, because neither carbon monoxide nor soot was detected in Leaphart's body, Segal concluded that it was thus less reasonable -- although still not unjustifiable -- to think that he died because of the fire. A conclusion that he died prior to the fire would be consistent with testimony we heard from Angelucci. Angelucci told us that, after he and the other insertion team members had demolished portions of the party walls that morning, he observed what appeared to be a lifeless body in a crawl space area within the MOVE compound. Angelucci was unable to determine from his vantage point in 6217, however, whether the body's head had been severed and whether gunfire or the force of the explosions had caused death. Connor also told us that he thought "there appeared to be a body up there with an arm hanging down" but that, because the crawl space was dark and hazy, he could not be sure. (Although there also was no evidence of soot in the airways of Frank James (the other body found in the front of the house), Segal did not think he died from injuries sustained in the early morning explosions

because there was no evidence of this in James' essentially intact body.)

By contrast, Hameli concluded that no exact causes of death could be definitively stated for any of the eleven because, among other reasons, body samples were of poor quality, lab results were too imprecise and, in many instances, vital segments of the bodies had been completely consumed by the fire. Nevertheless, Hameli concluded that all eleven died as a result of injuries sustained during the events of May 13, 1985, whether from chemical injuries (such as carbon monoxide poisoning), thermal injuries (burns), physical injuries (such as debris falling on the victims) or injuries caused by metallic projectiles such as firearms ammunition.

While Segal acknowledged the difficulties and potential inaccuracies in determining the exact causes of death, he nonetheless explicitly rejected as a possible cause of death injury from firearms ammunition (i.e., gunshot wounds). One metal fragment consistent with double-ought ("double 0") buckshot or lead in a jacketed bullet was found in Delicia Africa's arm, three were found in Rhonda Harris' foot, and two were recovered from John Africa's torso. (A metallic object the size of a .50 caliber bullet was also recovered from Frank James' remains; however, it was later determined by the New York Police Department's Crime Lab and the FBI that the object was not a bullet but a piece of plumbing which had become embedded in his body by the force of an explosion.) Segal and Hameli both testified to the not-unexpected



presence of buttons, nails, screws and other foreign metallic objects and fragments in the bodies. Segal testified that although a few of the specimens recovered by Hameli were consistent with double-ought buckshot, the distribution of these fragments absolutely refuted any conclusions that anyone died from a gunshot wound on May 13, 1985. Segal explained:

I have done a fair number of autopsies in my career and I've seen a fair number of people shot with double ought buck, and I have never, to the best of my recollection, ever seen anybody hit with only one buckshot and the rest miss. That doesn't happen. Buckshot is fired from a shotgun. There are nine balls coming out [of] the muzzle of that gun. If it's magnum loaded, it may be twelve or fifteen. They're coming out in a group ... and as they continue to fly, they spread out. And when you kill somebody with double ought buck, you find five, six, seven, eight, nine, ten, fifteen holes in them, and you recover that many ... double ought buck, from that individual.

To say that one spray [sic] double ought buck hit a person and killed them is not likely. To say that it should happen three times in one scene is extraordinary. It's beyond my ability to conceive mathematically and statistically. There [was] plenty of double ought buck in that house, I'm sure, and as far as I am concerned, they were just another piece of debris that got into those bodies when the house collapsed....

Even if you remotely want to say that maybe one of these double ought buck did get there by being fired at the person, there is no evidence that the double ought buck got through the muscle into any of the internal organs.... [T]here was enough of [the] bodies ... to identify the damage that would have occurred, and there was no evidence that these people received anything that resembled being shot to death. In my opinion, the double ought buck in these cases are of no more concern from the cause and manner of death

standpoint than the nails and screws and dripping lead from the pipes and all the other metallic and non-metallic debris that was recovered from these bodies.

Segal similarly testified that although some buckshot might pass through a body, he had never seen someone shot with double-ought where some of the shot did not remain in the body.

Finally, Segal admitted that ruling out gunshot wounds as a cause of death was, of course, more problematic when certain body parts were missing. For example, because Raymond Foster's head was never recovered, Segal could not definitively state that Foster had not died of a gunshot wound to the head. Nonetheless, he observed that because three different labs found carbon monoxide in Foster's system, Foster was necessarily alive during the fire. Thus, if he were shot, it would have been during the fire, which Segal thought an unlikely scenario. Segal again emphasized that his determinations were made using the evidence he did have (e.g., that Foster was alive during the fire), not speculation about evidence he did not have. Segal did, however, rule out the possibility that Foster's head had been shot off. He testified that he had performed autopsies on people shot with almost every conceivable kind of weapon, and although some guns could badly mutilate a head, none would ever blow it off completely.

In addition to recovering the remains of eleven bodies, police, fire and other personnel at the scene also recovered weapons and ammunition belonging to MOVE. Despite MOVE's boasts that it had better weapons than in 1978, police recovered the remains of only

five weapons: A .38 caliber Charter Arms revolver and a twelve-gauge Mossberg pump-action shotgun were found in the front porch area, and a .22 caliber bolt-action rifle, a .38 caliber Smith and Wesson revolver and pieces of a Mossberg shotgun were found in the garage area. Additionally, many spent and unspent rounds were recovered, some from MOVE's weaponry and some from weapons fired by police. (Some bullet specimens also were found which could not have been fired by the police or by any of the weapons which were found inside the compound, including bullets for a Luger and for a .45 caliber gun.) From this evidence, firearms experts were able to determine that MOVE fired at least eighty-eight rounds (sixty-four from the .38 caliber revolvers, five from the .22 caliber rifles and nineteen from the shotguns). However, no definitive totals can be calculated, as other pieces of ammunition may have burned completely in the fire, or may have been overlooked (because of their small size) in the sifting operation.

As with the recovery of the bodies, the evidence of weapons recovered from the compound has raised unanswered questions. MOVE boasted of its arsenal and officers told us that the gunfire they received through the 6223/6221 party wall on the morning of May 13, 1985 was unquestionably from automatic weapons. Additionally, Tursi identified the weapon fired by the armed male in the alley as a semi-automatic .22 caliber rifle, not a bolt-action rifle. Finally, some of the bullet specimens found inside the compound could not have been fired by the few weapons found inside

the compound. However, no weapons other than the five noted above were found in the alley or in any of the houses from 6227 to 6213 Osage Avenue, none of the weapons recovered from the compound was capable of firing either in an automatic or semi-automatic mode, and none was ordinarily capable of firing through a brick party wall.

We have considered three possible explanations for these discrepancies. One explanation we considered was whether MOVE may have possessed other weapons (such as automatic and semi-automatic rifles, .45 caliber guns and Lugars) which disintegrated completely in the fire. Although Officer Edward Jachimowicz, a firearms identifications expert in the Philadelphia Police Department, told us that this was possible he did not think that automatic weapons would disintegrate completely. A second explanation is that the remains of other weapons were missed in the less-than-fastidious sifting operation undertaken, the details of which are discussed below. A final explanation accounting for the automatic fire received by the police in 6223 Osage Avenue is that they were actually being hit with "friendly fire" from police in Post One. Officer James Berghaier testified that, although he initially thought that his team was being fired upon by MOVE, he later thought that they may have been receiving police gunfire. Officer William Klein and Lieutenant Frank Powell, however, vehemently disagreed. Further, Klein explained that the trajectory of the bullets was consistent only with being fired from the MOVE house itself.

The remaining evidence uncovered at the scene was not particularly illuminating. A 55-gallon drum containing liquid (later identified as kerosene) was found in the garage, and several five- and one-gallon cans were found outside the perimeter of the house in the driveway. Additionally, police found papers and sandbags lining the basement walls and blankets covering some of the bodies. Finally, police, fire and Medical Examiner's Office personnel found a variety of animal remains (dog and chicken bones), pieces of the gun port and various other objects of little evidentiary value. No evidence was found of any tunnels and, indeed, Michael told us MOVE had not dug any.

A final matter of concern to us is the manner in which the scene was processed. The testimony we heard revealed a lack of coordination among various City agencies and a lack of care in searching for evidence. We will here discuss several specific instances of improper or questionable methods of evidence retrieval which occurred.

Numerous problems were occasioned by the absence of an established protocol for processing a large fire/crime scene such as this. Evidence retrieval was supervised initially by Fire Marshal Roger Ulshafer. Although the Medical Examiner's Office is responsible for investigating (among other cases) all homicides, suicides and suspicious deaths, Chief Medical Examiner Marvin Aronson refused two requests by the Fire Marshal to come to the scene or to send

an assistant. Hameli was critical of this decision. He told us that ordinarily in these cases the Medical Examiner's Office is in charge of investigating the scene and recovering the bodies, although other agencies will, of course, assist. Catherman told us that this was Aronson's normal approach to a "case of this kind," and was not critical of Aronson's initial decision not to go to the scene in the morning. However, Catherman did go to the scene later that afternoon, even though he knew that decision might be contrary to Aronson's wishes. Similarly, Segal, who was critical of Aronson's decision that no one should go to the scene, went to Osage Avenue on May 15, 1985, despite Aronson's initial disapproval.

Fire Marshal Ulshafer was also critical of the Medical Examiner's failure to come to the scene. He told us that although the Fire Marshal's Office usually processes fire scenes (sending any bodies to the Medical Examiner's Office), in unusual circumstances such as this the Medical Examiner would be in charge and absolutely should have come to the scene.

Because of the absence of a specific protocol for processing scenes such as this, the evidence retrieval was not well-coordinated among the various offices, and appropriate care was not taken. Catherman found many people walking around the scene when he arrived, but told us that this did not upset him because he regarded it as a fire scene, not a crime scene. Additionally, he found that some body parts already had been placed in Fire Department body bags when he arrived, so he was not able to direct their

excavation. Finally, he testified that, had he regarded it as a crime scene rather than a fire scene, he would have been more careful to note where evidence was found. Having heard this testimony, we recommend that City officials establish procedures and protocols to be followed for evidence retrieval and analysis at major crime scenes where there is multi-agency involvement.

Numerous other instances of less than careful processing of the scene became apparent from the testimony we heard, despite the Fire Marshal's initial organizational efforts at the scene (such as assigning tasks to personnel from various agencies, requesting additional personnel from City and federal offices and ordering numerous photographs to be taken). To insure the safety of those digging inside the compound, the unstable party walls were removed before any digging was undertaken. However, removal of the walls was accomplished by knocking them down with a crane. Most of the bricks fell into the compound, further burying (and perhaps damaging) critical evidence. The crane was then used to scoop debris -- including bodies and other evidence -- from within the compound and dump it onto Osage Avenue, where police and fire personnel raked through it. As a result of this procedure, some of the bodies were damaged, and the exact locations from which these bodies (and at least one of the weapons) were unearthed could not be determined. Hameli was critical of this method of evidence retrieval:

Q. Based on your experience as a Medical Examiner, is the use of a clam shell at the scene appropriate use of equipment?

A. No, the answer to that question is definitely no. One has to keep in mind that it was a very difficult scene of course to investigate.... [T]he entire building actually collapsed. Everything from the top went down to the basement floor where actually the remains ultimately were found. The proper way [to investigate these] cases is to do layer by layer ... removal of the debris.... [A]s you arrive at the point where the remains are found there should be stakeouts and numbers ... and pictures [should] be taken and notes be written.... [T]hen the whole thing [should] be moved. But unfortunately, the maximum care was not given in this particular case.... [U]sing the clam shell, for instance, [caused] some post-mortem ... limb fractures and some mingling of some segments of the bodies which made ... the identification difficult for the Medical Examiner's Office and also ultimately [made it] difficult for our team to conduct our work.

In contrast to this orderly method of evidence retrieval outlined by Hameli, an almost careless method of retrieval was pursued at the scene. Although numerous pictures were taken, many of the bodies were first photographed after they had been placed on litters instead of when they were first uncovered. Similarly, many of the photographs were taken after the objects had been scooped up by the crane and dumped onto Osage Avenue. This was so even though some of the objects were visible to personnel at the scene before the crane scooped up the objects. In those cases, personnel would simply tell Crime Lab officers where the debris had come from, and the officers would make a note of the information. However, many of the pictures themselves were not labelled until two months after the incident. Moreover, the evidence itself was sometimes removed from the compound in lots -- for example, a shovel-full of bones -- and then



was labelled as a lot; individual pieces were not separated or labelled. (Catherman said that the bodies could not be separated at the scene.) Additionally, three entirely separate labelling systems were employed by the Police Department, the Fire Department and the Medical Examiner's Office in recovering the bodies: the Medical Examiner labelled the bodies A through K, with some sub-numbering, and the Mobile Crime Unit numbered the bodies, with some sub-lettering. (Thus, for example, Katricia Dotson was identified by the Police Department as Body 2A, by the Medical Examiner as Body B-1, and by the Fire Department as Body 11. This discrepancy in labelling was not discovered until two-and-one-half days after the processing had begun.) The lack of specification in labelling was repeated in the tagging of scoops of debris removed from Osage Avenue. After police had raked through the debris, it was sent for further remote-site sifting, labelled only with an indication of whether or not it had come from 6221 Osage Avenue; no further specification was made of where inside the compound the material had come from.

Two final matters of concern to us are whether the bodies, once removed from the scene, were expeditiously and properly examined. Hameli told us that the bodies were not kept in constant refrigeration and, in fact, were kept unrefrigerated for seven or eight days awaiting examination, so that by the time his team received the bodies, they were in very poor condition. His team subsequently moved them to a separate refrigeration facility. Both Catherman and Segal objected to this criticism. Segal told

us that, to the best of his knowledge, there was no problem with the refrigeration while his office was examining the bodies. He pointed out that the refrigeration problems only arose when Hameli had the bodies moved to another refrigeration facility which had not been used for several years. The bodies were put in that facility before it had been activated long enough to have brought the temperature as far down as it ought to have been. This refrigerator was then locked and Segal's team had no further access to it. Catherman repeated this explanation, but added that the facility was at an improperly high temperature for only twenty-four hours, which was not enough to make a difference. The bodies were simply in bad shape from the beginning.

Lastly, Hameli said that the Medical Examiner's Office did not submit toxicology specimens for analysis in sufficient time to yield accurate results. Segal, however, disagreed. He explained that the delay was reasonable because other aspects of the autopsy took priority, and that the delay did not make any difference (although he recognized that some people may disagree with that).

Unfortunately, it is impossible to gauge accurately the effect of these numerous instances of careless or unprofessional processing of the evidence. Had the scene been processed in a more meticulous manner, perhaps -- and only perhaps -- there would have been complete agreement among the pathologists that causes of death had been definitively determined, and perhaps additional weapons or other probative evidence would have been recovered.

We are satisfied, however, that the evidence was not so mishandled as to preclude accurate answers to the truly critical questions, such as whether MOVE members or children were killed by police gunfire in the area.