**SCENE:**
In response to a call from the Metropolitan Police Department, I responded to the scene on 21 June 1984, arriving 0707 hours. On arrival, I met with Corporal Lerner, Sergeant Maxell, and other personnel from the Metropolitan Police Department, including Detective Gates and Detective Crost.

After a brief review of the circumstances, I examined the body at approximately 0715 hours. The head, neck, and upper chest were covered with a reversed portion of flower print fabric. The nude body was supine on the bed with the head directed southeast and the feet northwest. The arms were by the sides. The bilateral hands had been previously placed in brown paper bags. No insect activity was apparent.

The body had well-developed rigor mortis in the jaw and extremities. Positionally appropriate developing blancheable violaceous livor mortis was on the positionally dependent body. The body was cool (ambient temperature) on palpation.

The area of the chest had multiple puncture wounds with minimal surrounding skin surface blood. A handled instrument (determined subsequently to be a screwdriver) protruded from one of the lower chest wounds and was secured on scene by the Police Forensics Unit. The remaining body surfaces were minimally soiled.

On careful examination of the eyes and inner lips, multiple focally coalescent petechial hemorrhages were observed in the palpebral and bulbar conjunctivae. Similar hemorrhages were not readily apparent within the oral cavity on the labial or gingival mucosae. Two defects on the left side of the torso had surrounding blood but were not further explored in order to preserve any potential evidence and detailed examination was referred to the morgue facility.

On completion of my examination, I departed the scene at 0733 hours.

**REASON FOR EXAMINATION:**
Pursuant to the State Death Investigation Act, an autopsy is performed on the above decedent at the Medical Examiner Office commencing at 0850 hours on June 21, 1984.

In attendance, observing the examination, are Detective Gates, Corporal Lerner, and Intern Jeff Coleman (Metropolitan Police Department).

Assisting with the examination are Forensic Pathology Assistant Robert Michael and Medical Examiner Investigator Bruce Swell (Medical Examiner Office).

The body is identified by body labels, Transport Service, and County Coroner's Office.

**RECEIPT:**
Received in a zippered white body bag with the zipper pulls secured by a black plastic zip tie and with identification tags "Doe, Sandy 17 yo W/F" and "Sandy Doe June 21, 1984 0745" affixed to the zipper pulls is the unembalmed, 68 inch, 112.4 lb. body of a well-developed, well-nourished white female consistent with the reported age of 16 years.

**EVIDENCE OF INJURY:**
Wounds, detailed in the case photographs, are herein summarized.

The body surfaces are variably lightly soiled with dried bloody fluid, most prominent on the torso, associated with the defects (see below).

Dried and drying bloody fluid is on the dorsal right elbow area, extending to the adjacent forearm and brachium.

A small quantity of red-pink froth issues from the bilateral nares, lightly soiling the adjacent cheeks, right greater than left. A small quantity of pink fluid issues from the mouth and is within the oral cavity.

A 2.52 inch horizontal by 2.01 inch vertical group of 11 stab wounds, arbitrarily designated A-K, is centered on the upper inner quadrant of the left breast adjacent to the sternum:

Wound A is a 0.24 inch horizontal by 0.16 inch vertical defect at the upper inner corner of the group. The circumferential abrasion border is 0.04 inch. A faint 0.3 inch purple contusion is adjacent to the wound edge. A crescentic 0.78 inch diameter red abrasion, ranging from 0.04-0.08 inch wide, concentrically surrounds the 9-12-1 o'clock wound edge. Internally, fresh blood is associated with the wound track. The wound extends ~3-1/2 inches through the chest wall to the anteromedial left upper lung lobe. The track is directed right, down, and back. A significant associated radio-opaque foreign body is absent.

Wound B is a 0.24 inch horizontal by 0.21 inch vertical defect at the upper outer corner of the group. The circumferential abrasion border is 0.03 inch. A 0.71 inch purple contusion is adjacent to the wound edge, extending to and contiguous with contusion associated with wounds C and D. Internally, fresh blood is associated with the wound track. The wound extends ~3 inches through the chest wall to the anterior left upper lung lobe. The track is directed right, down, and back. A significant associated radio-opaque foreign body is absent.

Wound C is a 0.24 inch horizontal by 0.24 inch vertical defect at the upper outer portion of the group, below wound B. The circumferential abrasion border is 0.03 inch. A 0.63 inch purple contusion is adjacent to the 9 o'clock wound edge, extending to and

contiguous with contusion associated with wound E. Internally, fresh blood is associated with the wound track. The wound extends ~2-7/8 inches through the chest wall to the anterior left upper lung lobe. The track is directed right, down, and back. A significant associated radio-opaque foreign body is absent.

Wound D is a 0.25 inch horizontal by 0.24 inch vertical defect at the upper outer portion of the group, below wound B. The circumferential abrasion border is 0.04 inch. A 0.08 ovoid red abrasion is 0.39 inch lateral of the 3 o'clock wound edge. Internally, fresh blood is associated with the wound track. The wound extends ~2-3/4 inches through the chest wall to the anterior left upper lung lobe. The track is directed right, down, and back. A significant associated radio-opaque foreign body is absent.

Wound E is a 0.26 inch horizontal by 0.24 inch vertical defect at the upper inner portion of the group, below wound A. The circumferential abrasion border is 0.04 inch. A 0.87 inch circular purple contusion surrounds the defect, extending to wound F. Internally, fresh blood is associated with the wound track. The wound extends ~3-1/2 inches through the chest wall to the anteromedial left upper lung lobe. The track is directed right, down, and back. A significant associated radio-opaque foreign body is absent.

Wound F is a 0.24 inch horizontal by 0.23 inch vertical defect at the upper inner portion of the group, below wound E. The circumferential abrasion border is 0.03 inch. A 0.63 inch irregular ovoid faint purple contusion surrounds the defect. Internally, fresh blood is associated with the wound track. The wound extends ~3-1/4 inches through the chest wall to the anteromedial left upper lung lobe. The track is directed right, down, and back. A significant associated radio-opaque foreign body is absent.

Wound G is a 0.23 inch horizontal by 0.23 inch vertical defect at the mid portion of the group, below and lateral to wound F. The circumferential abrasion border is 0.03 inch. A 0.43 inch irregular ovoid faint purple contusion surrounds the defect. Internally, fresh blood is associated with the wound track. The wound extends ~3 inches through the chest wall to the anterior left upper lung lobe. The track is directed right, down, and back. A significant associated radio-opaque foreign body is absent.

Wound H is a 0.21 inch horizontal by 0.21 inch vertical defect at the mid portion of the group, lateral to wound G. The circumferential abrasion border is 0.02 inch. A 0.16 inch irregular ovoid faint purple contusion is 0.18 inch from the 10:30 o'clock wound edge. Internally, fresh blood is associated with the wound track. The wound extends ~2-1/2 inches through the chest wall to the anterior left upper lung lobe. The track is directed right, down, and back. A significant associated radio-opaque foreign body is absent.

Wound I is a 0.25 inch horizontal by 0.24 inch vertical defect at the lower inner portion of the group, below wound G. The circumferential abrasion border is 0.04 inch. A 0.74 inch circular purple contusion with red abrasion concentrically surrounds the defect. Internally, fresh blood is associated with the wound track. The wound extends ~3-1/2 inches through the chest wall to the anteromedial left lower lung lobe. The track is

directed right, down, and back. A significant associated radio-opaque foreign body is absent.

Wound J is a 0.23 inch horizontal by 0.22 inch vertical defect at the lower outer portion of the group, lateral to wound I. The circumferential abrasion border is 0.04 inch. Internally, fresh blood is associated with the wound track. The wound extends ~2-7/8 inches through the chest wall to the anterior left lower lung lobe. The track is directed right, down, and back. A significant associated radio-opaque foreign body is absent.

Wound K is a 0.24 inch horizontal by 0.23 inch vertical defect at the lower outer portion of the group, lateral to wound J. The circumferential abrasion border is 0.04 inch. Internally, fresh blood is associated with the wound track. The wound extends ~2-3/4 inches through the chest wall to the anterior left lower lung lobe. The track is directed right, down, and back. A significant associated radio-opaque foreign body is absent.

Additional associated external wounds include:
The left anterior earlobe has a 0.71 inch group of 7 separate abrasions with associated purple contusion. A corresponding 1.67 inch purple contusion is on the posterior left pinna includes:

0.36 inch laceration with red abrasion on the posteromedial earlobe
0.08 inch laceration
0.18 inch superolateral red abrasion with heavy associated purple-blue contusion

The corresponding left mastoid area, behind the ear, has a 1.36 inch group of purple contusion with :

0.18 inch horizontal linear red abrasion
0.19 inch horizontal linear red abrasion (parallel)
0.37 inch reversed “C” red abrasion

A 0.1 inch superficial abrasion is on the medial right forehead, above the medial eyebrow.

A 0.5 inch red abrasion with associated contusion is on the forehead, between the eyebrows, slightly left of midline.

A faint 3 inch faint purple contusion is on the lateral left forehead.

Coalescent petechial to 0.2 inch hemorrhages involve the bilateral palpebral and bulbar conjunctivae, right greater than left.

The facies have diffuse, variably prominent petechial to less than 0.05 inch faint hemorrhages.

A 0.35 inch abrasion with contusion is on the upper left lip at the vermillion border. The upper and lower labial frenula are intact. Rare petechial to 0.1 inch blood is on the right

upper inner lip mucosa; additional petechial blood is absent on the labial, gingival, and buccal mucosae.

The left lateral neck has a faint 0.87 inch horizontal by 0.16 inch vertical purple-blue contusion.

A 0.4 inch horizontal by 0.02 inch vertical superficial incised defect is on the anterolateral right #3 distal phalanx. Fresh blood is associated with the wound track. The track extends 0.02 inch through the skin surface but injures no vital structure. The wound is directed up; direction is not assessed due to the nature of the wound.

Multiple red abrasions on the dorsal right arm at the elbow include:
- 1-1/8 inch superolateral
- 3/4 inch lateral
- 7/8 inch (dorsal)

The dorsal left elbow has a 3/8 inch group of red abrasions.

The medial top of the right foot has a 3/8 inch red abrasion.

The top of the right foot, over the #2-3 metatarsal area, has a 1/4 inch red abrasion.

The medial top of the left foot has a 3/4 inch red abrasion.

A faint urine odor is at the area of the external genitalia. The perineum is intact. The vaginal mucosa has no identified gross blood or trauma. A small quantity of white viscid material is within the vaginal vault.

The anal tone is typical. The anal sphincter and the adjacent skin surface and rectoanal mucosa lack identified gross blood or trauma.

Associated internal findings include:
~1200 ml of liquid blood are within the left hemithorax.

The left lung is atelectatic; the right lung is correspondingly hyperinflated.

The post-evisceration neck musculature has multiple hemorrhages including (inches):
- 0.3 inch right sternohyoid (faint)
- 0.7 inch deep right sternohyoid
- 0.6 inch right thyrohyoid
- 0.4 inch faint left stylohyoid

0.9 inch right prevertebral mid cervical
0.5 inch inferior left paravertebral lower cervical

The typically moderately pliable, partially calcified hyoid, thyroid cartilage, and cornua are grossly palpably intact. A 0.6 cm soft tissue hemorrhage is adjacent to the superior left thyroid horn.

The reflected scalp has multiple galeal-subgaleal hemorrhages including (inches):
4-1/2 anterior forehead, extending to left temporal area
2 intraparenchymal left temporalis muscle
1-1/2 left parietal
3 group lower left parietal

The calvarium and floor of the skull are intact. Epidural, subdural, and subarachnoid blood are absent. A 1/2 inch faint subarachnoid hemorrhage is on the left frontal brain.

The left anterior tongue tip has two separate 1/8 inch intraparenchymal contusions.

**PROFFERRED WEAPON:**
Recovered from the body (from what is subsequently designated wound I) at the scene by the Metropolitan Police Department and examined during the course of the autopsy is the proffered weapon: a Phillips head screw driver with a 3.6 inch long by 0.25 inch grey metal blade. The intact 4 inch handle is a maximal 0.63 inch diameter at the base, adjacent to the blade.

**EVIDENCE OF MEDICAL INTERVENTION:**
Significant perimortem therapeutic marks are absent.

The bilateral hands are within manila envelopes, secured at the distal forearms with clear tape.

**EXTERNAL EXAMINATION:**
The body is palpably cold following refrigeration. Full rigor mortis is well-developed in the jaw, digits, and extremities. Livor mortis is indistinct.

The body is clothed in a black T-shirt (pulled above breast level and to upper back level; left upper neck area at seam ripped along seam). The left lateral shirt has two pairs of defects corresponding to the wounds.

Personal effects include a tarnished watch with a white band (correct time displayed; right wrist).

Additional materials free within the body bag include:

1. Portion of cigarette butt filter (originally from anterior left chest, within shirt)
2. Opened 1 cc insulin syringe bag (by right lateral chest)

The normocephalic, symmetric head has typically distributed black scalp hair ranging to ~1/2 inch. The corneae are clear. The irides are brown. The equal pupils are 1/8 inch. The non-injected, nonicteric palpebral and bulbar conjunctivae lack additional lesion. The patent ears and nares have no lesion. The bilateral ears are previously pierced (old) with a 1/4 inch keloidal scar on the dorsal bilateral earlobes. The lips, gums, and tongue are moist. The dentition is in good repair; the oral cavity is without lesion. A yellow metal "C" crown is on the #9 tooth. The #7 tooth is absent (old). The facies lack prominent hair. Sparse healed scars on the face range to 1/8 inch. A 3/8 inch hypopigmented scar is on the lateral right face, just below the angle of the jaw. The typically indistinct thyroid eminence is midline. The symmetric neck is without note.

A dark slightly curly hair is on the right face, adjacent to the mouth.

A hair fiber is on the anterior nose.

A loose hair fiber is below the right eye.

The anterior torso lacks prominent hair. The chest has a mildly increased anteroposterior diameter and is without lesion. The symmetric pendulous breasts lack palpable mass or expressible discharge. Multiple striae scars are on the bilateral breasts. The mildly protuberant, non-tympanic symmetric abdomen has no palpable organomegaly or lesion. A healed vertical 3-1/2 inch linear scar spans the infraumbilical-suprapubic abdominal midline. The external genitalia are without note. The perianal skin lacks prominent soiling. Multiple hyper- and hypopigmented perianal tags range to 3/4 inch. The anal tone is slightly lax. The anorectal area has no lesion and contains a small quantity of light brown fecal material. The anorectal area lacks identified significant lesion.

A loose hair fiber is on the left upper peristernal chest.

The symmetric bilateral upper extremities have moderately long to long, slightly irregular nails with a small quantity of black dirt underneath. The bilateral dorsal hands and forearms have superficial incidental healed scars ranging to 1-1/4 inch on the dorsomedial left. The bilateral brachia have striae scars, extending to the upper chest and axillae. The axillae are prominently hirsute.

The symmetric lower extremities are typically hirsute with hairs on the shins ranging to 1/2 inch. Significant pretibial edema is absent. Multiple striae scars are on the bilateral anterolateral thighs, extending to the buttocks and flanks. Multiple striae scars are on the abdomen, extending to the flanks. Sparse healed scars on the bilateral thighs range to an

oblique 1-3/4 inch scar on the anterior right thigh. The skin of the bilateral medial thighs, at the intertriginous fold is diffusely mildly hyperpigmented with indistinct borders. The skin of the bilateral knees is diffusely moderately hyperpigmented with indistinct borders. Healed scars on the bilateral knees and shins range to an irregular 5 inch group on the anterior right shin and an oblique 2-1/2 inch group on the proximal left shin. A healed vertical indistinct 1-3/4 inch scar is on the anterior left ankle. The moderately long to long, irregular toenails have variably prominently discolored nail plates with prominent dirt underneath. The soles of the feet are soiled with dirt.

The back lacks additional significant gross lesion.

**INTERNAL EXAMINATION:**
The following excludes the described findings. The soft tissues and typically positioned, acutely congested viscera lack unusual odor, atypical color, or significant decomposition. The 1.2 cm yellow-pink panniculus lacks significant identified gross lesion.

**Cavities:**
The serosal cavities have the usual smooth glistening tan-pink mesothelium with focal fibrous adhesions at the left ovary-uterus; the remaining cavities lack adhesion. The cavities have no significant excess fluid accumulation. The mediastinum, retroperitoneum, and hemidiaphragms are without note.

**Cardiovascular:**
The 230 gram heart has a smooth glistening epicardium with a typical quantity of usually distributed subepicardial fat. The typically coursing right dominant vasculature has focal tunneling of the proximal segment of the anterior descending coronary artery to a maximal 0.3 cm intramyocardial depth for a 3 cm length; the mid anterior descending coronary reassumes a typical subepicardial course distally. The vessels are widely patent. The valves, chordae tendineae, and papillary muscles are otherwise without note. The ventricular wall thicknesses and chamber diameters are appropriate. The firm red-brown myocardium is without lesion. The typically exiting great vessels have widely patent, typically positioned coronary ostia. The aorta, venae cavae, major cervical vessels, and major pelvic vessels lack significant identified gross lesion.

**Respiratory:**
The post evisceration neck musculature, typically mildly pliable, calcified hyoid, thyroid cartilage with cornua, and cricoid, and remaining neck structures lack additional significant identified gross lesion. The typically branching tracheobronchial tree has a smooth glistening tan-pink mucosa without additional lesion. The usually formed 330 gram right and 290 gram left lung have smooth glistening visceral pleurae with negligible subpleural anthracosis. The typically well-aerated right and atelectatic left lung have tan-pink to focal medium purple-red (posterior) parenchymae which issue a small quantity of pink-white froth which otherwise lacks discrete gross parenchymal lesion. The pulmonary vasculature is without note.

**Hepatobiliary:**
The 1390 gram liver has a smooth glistening capsule and a sharp edge. The firm medium red-brown hepatic stroma lacks significant fibrosis or other significant focal gross stromal lesion. The hepatic vasculature is without note. The typically positioned gallbladder contains ~10 ml of green viscid bile without stone; the ductular system is grossly patent.

**Lymphoreticular:**
The thymic remnant, tan-pink to purple-red lymph nodes, and 40 gram purple-red spleen lack discrete gross lesion.

**Endocrine:**
The pituitary, dark red-brown thyroid, bilateral adrenals, and tan-pink lobulated pancreas have no significant identified gross lesion.

**Gastroenteric:**
The typically formed tongue, esophagus, gastroesophageal junction, serosal stomach, and gastric mucosa are without note. The gastric lumen contains 10 grams of partially digested food including minimally digested portions of white meat. The small and large bowel have no significant identified gross lesion. The rectum contains a small quantity of light medium brown formed stool.

**Genitourinary:**
The 100 gram right and 90 gram left kidney have smooth red-brown cortices with distinct corticomedullary junctions. The pyramids and calyces are without note. The right renal pelvis is mildly dilated, extending to the adjacent ureters. The otherwise typical renal pelves drain typically to the ureters, which flow unobstructed to the bladder. The empty urinary bladder has a smooth grey-pink mucosa without lesion. The tan-pink vaginal mucosa, tan-pink exocervix, tan-pink endometrium, tan-pink myometrium, bilateral fallopian tubes, and bilateral ovaries lack significant identified gross lesion.

**Neurological:**
The reflected scalp, calvarium, floor of the skull, tan-grey dura mater, and smooth, glistening leptomeninges lack additional significant identified gross lesion. The cerebrospinal fluid is clear. The 1210 gram brain has a typical overall gyral pattern. The symmetric hemispheres have a distinct grey/white matter demarcation and lack external or parenchymal lesion, inclusive of the major intraparenchymal grey matter structures. The cerebellum and brainstem have no surface or tissue lesion. The typically coursing cerebral vasculature is without note.

**Musculoskeletal:**
The systemic musculature has appropriate tone. The typically calcified axial and appendicular skeleton have the usual age related changes but are otherwise without note. The intact vertebrae, ribs, pelvis, and extremity long bones are without note.

**ADDITIONAL PROCEDURES:**

1. Left chest blood (grey stopper tube x2 – for toxicology)
2. Femoral blood (grey stopper tube x1 – for toxicology)
3. Clothing (transferred)
4. Blood stain (reference – transferred)
5. Pubic hair combing (transferred)
6. Plucked pubic hair (transferred)
7. Plucked scalp hair (transferred)
8. Oral slides (transferred)
9. Oral swabs (transferred)
10. Vaginal slides (transferred)
11. Vaginal swabs (transferred)
12. Anal slides (transferred)
13. Anal swabs (transferred)
14. Right and left fingernail clippings (transferred)
15. Right and left breast swabs (transferred)
16. Right and left neck swabs (transferred)
17. Right and left buttocks swabs (transferred)
18. External genital swabs (transferred)
19. Tissue sections (held for 6 months)
20. Sectioned viscera (released within body)
21. 35 mm case photographs (retained)
22. 35 mm scene photographs by Metropolitan Police Department (reviewed)
23. 35 mm scene photographs by Medical Examiner's Office (retained)
24. X-rays x3 (retained)
25. Past medical records (reviewed)

**DIAGNOSES:**

1. Strangulation
2. Multiple sharp force injuries
3. No additional significant somatic disease

**OPINION:**

The victim died from strangulation with multiple sharp force injuries.

The proffered weapon is consistent with the stab defects (A-K).

The reviewed postmortem left chest blood toxicology is negative for ethanol and other alcohols; negative on general therapeutic and abused drug screen (including cocaine/metabolite, amphetamines, barbiturates, benzodiazepines, cannabinoids, and common opioids).

No additional trauma or somatic disease contributed significantly to death.

**CAUSE OF DEATH:**
Strangulation with multiple sharp force injuries

**MANNER OF DEATH:**
Homicide