GLENN N. WAGNER, D.O.

CHIEF MEDICAL EXAMINER (858) 694-2895 STEVEN C. CAMPMAN, M.D. CHIEF DEPUTY MEDICAL EXAMINER (858) 694-2895

MEDICAL EXAMINER'S DEPARTMENT

5570 OVERLAND AVE, STE 101, SAN DIEGO, CA 92123-1215 $\,$

http://www.sdcounty.ca.gov/me/

AUTOPSY REPORT

Name: RONGWEI ZHANG ME#: 2018-1189

Place of death: Vulcan Mountain Age: 23 Years

N 33 08 24 W 116 34 25

Julian, CA 92036 Sex: Male

Date of death: May 10, 2018; 2037 Hours

Date of autopsy: May 15, 2018; 1145 Hours

CAUSE OF DEATH: MULTIPLE BLUNT FORCE INJURIES

Contributing: THERMAL INJURIES

MANNER OF DEATH: ACCIDENT

AUTOPSY SUMMARY:

- I. Multiple blunt force injuries.
- II. Multiple thermal injuries (no soot in airways).
- III. Natural disease:
 - A. Focal moderate single vessel coronary artery atherosclerosis.
 - B. Mild interstitial fibrosis of heart.
- IV. Toxicological testing not contributory.

<u>OPINION</u>: According to the investigative information, the decedent was a male involved in a plane crash on Vulcan Mountain in Julian. The crash was reported on May 10, 2018 at 2037 hours with an accompanying brush fire.

The site was unable to be accessed until May 11, 2018 due to weather and rugged terrain. Two other males were found in the wreckage (San Diego Medical Examiner's case number 2018-01187 and 2018-01188). Death was confirmed at the scene without medical intervention due to extensive thermal injuries. The decedent was found amongst the plane wreckage. The plane was not intact and the wreckage was spread out. There were no reports of a distress call at the time of the incident. The plane was reported to be a twin engine Beechcraft Duchess with tail number "N803FC" that belonged to the Scandinavian Aviation Academy Flight School at Gillespie Field. The plane was reportedly simulating a cross-country flight and was returning from Apple Valley. On board were reported to be a flight instructor and two male students.

The autopsy documented a male with extensive charring over 100% of the body surface area. There were numerous blunt force injuries identified. There were no significant amounts of soot in the airways. Natural disease included moderate single vessel coronary artery atherosclerosis (50% arterial narrowing).

Toxicological testing detected no ethanol or common drugs of abuse.

Based on the autopsy findings and the circumstances surrounding the death, as currently understood, the cause of death is **multiple blunt force injuries** with **thermal injuries** contributing, and the manner of death is **accident**.

ROBERT STABLEY, M.D. Deputy Medical Examiner

Date signed:

The autopsy was performed at the Office of the San Diego County Medical Examiner on May 15, 2018 beginning at 1145 hours.

<u>IDENTIFICATION</u>: The body is identified by a Medical Examiner's identification tag bearing the name "Plane Doe #3" and the Medical Examiner's case number affixed to the outside of the body transfer pouch.

<u>WITNESSES</u>: Assisting with the autopsy is Forensic Autopsy Specialist Stephen Hannum. There are no outside observers.

<u>CLOTHING AND PERSONAL EFFECTS</u>: No clothing or personal effects are present at autopsy. In the body transfer pouch is a plastic bag with multiple calcined bones.

<u>EVIDENCE OF MEDICAL INTERVENTION</u>: There is no evidence of medical intervention identified at autopsy.

EXTERNAL EXAMINATION

Injuries are fully described in the "Evidence of Injury" section below. The body is that of male with a body weight of 64 pounds. The body is well preserved, with the exception of extensive thermal injury, is cold, and has not been embalmed.

The head is injured. The scalp hair is not identified. There is extensive thermal injury of the head and face which precludes examination of the eyes and face. The teeth are natural.

The chest is symmetrical. The abdomen is flat.

The extremities are essentially symmetric and normally formed. The fingernails and toenails are not identified.

The genitalia are those of an adult male.

<u>SCARS AND OTHER IDENTIFYING MARKS</u>: Examination of the body for identifying marks and scars is not possible due to extensive thermal charring of the body.

<u>TATTOOS</u>: Examination for tattoos is not possible due to extensive thermal injuries and charring.

<u>POSTMORTEM CHANGES</u>: The body is cold. Rigor mortis and livor mortis are not evaluable due to extensive injury.

EVIDENCE OF INJURY

All injuries are described based on standard anatomic position. The order of injuries does not correlate with severity.

BLUNT FORCE INJURIES OF HEAD:

There is a type I hinge fracture of the base of the skull with multiple fractures of the anterior cranial fossae and middle cranial fossae.

BLUNT FORCE INJURIES OF TORSO:

There are multiple lateral rib fractures with associated chest wall hemorrhage and coagulated blood in the left hemithorax (hemothorax with thermal effect).

There is a complete dislocation of the lumbar spinal column between the 3rd and 4th vertebrae (L3-L4) with associated spinal cord transection.

The spleen is lacerated and fragmented.

BLUNT FORCE INJURIES OF EXTREMITIES:

Radiographs show fractures of the left humerus and femur.

THERMAL INJURIES:

There is charring of the body over 100% of body surface area. The brain is exposed due to thermal fractures of the calvarium. There is extensive thermal injury of the torso to expose soft tissue and chest contents. Many of the internal organs show thermal coagulation. No soot is in the trachea; there is focal mucosal sloughing in the trachea. There is a pugilistic posturing of the upper extremities at the elbows, wrists, and multiple finger joints and of the lower extremities at the knee joints.

INTERNAL EXAMINATION

There is some thermal effect of all internal organs and will not be further described.

<u>BODY CAVITIES</u>: The right pleural, pericardial, and peritoneal cavities contain normal amounts of serous fluid and are without adhesions. All body organs are present in their normal anatomical position. The diaphragm is intact.

<u>CARDIOVASCULAR SYSTEM</u>: The 200 gram heart has a normal shape and is contained in an intact pericardial sac. The epicardial surface is smooth with minimal fat investment. The coronary arteries arise normally with widely patent ostia and are present in a normal distribution, with a right-dominant pattern. Cross sections of the coronary arteries demonstrate focal 50% eccentric luminal narrowing of the proximal left

anterior descending coronary artery with partially calcified atherosclerotic plaques. The myocardium is homogenous, red-brown, and firm. The valve leaflets are thin and mobile. The walls of the left ventricle, interventricular septum, and right ventricle are 1.2 cm, 1.2 cm, and 0.2 cm thick, respectively. The endocardium of the heart is smooth and glistening. The aorta gives rise to three intact and patent arch vessels and contains minimal atherosclerosis. The renal and mesenteric vessels are unremarkable. The pulmonary arteries are normally developed, patent and without thrombus or embolus.

<u>RESPIRATORY SYSTEM</u>: The upper airway is clear of debris and foreign material. The mucosal surfaces are smooth, yellow-tan and unremarkable. The pleural surfaces are smooth, glistening and unremarkable bilaterally. The right lung weighs 300 grams. The left lung weighs 290 grams. A small amount of anthracotic pigment is seen. No focal lesions are noted.

<u>HEPATOBILIARY SYSTEM</u>: The 1070 gram liver has an intact smooth capsule covering a congested, tan-brown parenchyma with no focal lesions noted. The gallbladder contains less than 5 ml of green-brown, mucoid bile; the mucosa is velvety and unremarkable. The extrahepatic biliary tree is patent without evidence of calculi.

<u>LYMPHORETICULAR SYSTEM</u>: The fragmented 50 gram spleen has a smooth capsule covering red-purple, moderately firm parenchyma; the lymphoid follicles are unremarkable. Lymph nodes in the hilar, periaortic and iliac regions are not enlarged.

GASTROINTESTINAL SYSTEM: The esophagus is lined by gray-white, smooth mucosa. The gastric mucosa is arranged in the usual rugal folds and the lumen contains 50 ml of thick tan fluid with partially-digested food particles. No pills, pill fragments, or capsules are present. The small bowel and colon are unremarkable. The pancreas has a normal pink-tan lobulated appearance. The appendix is grossly unremarkable.

<u>GENITOURINARY SYSTEM</u>: The right kidney weighs 80 grams; the left 80 grams. The renal capsules are smooth and thin, semi-transparent and strip with ease from the underlying smooth, red-brown cortical surfaces. The cortices are sharply delineated from the medullary pyramids, which are red-purple to tan and unremarkable. The calyces, pelves and ureters are unremarkable. White bladder mucosa overlies an intact bladder wall. The bladder contains no urine. The prostate gland and seminal vesicles are without note. The testes are not identified due to injury and thermal effect.

<u>ENDOCRINE SYSTEM</u>: The pituitary gland is grossly unremarkable. The thyroid gland is symmetric and red-brown, without cystic or nodular change. The right and left adrenal glands are intact with bright yellow cortices and red-brown medullae; no masses or areas of hemorrhage are identified.

<u>NECK</u>: The anterior strap muscles of the neck are homogenous and red-brown, without hemorrhage. The thyroid cartilage and hyoid bone are intact. The larynx is lined by intact white mucosa.

<u>MUSCULOSKELETAL SYSTEM</u>: No non-traumatic abnormalities of bone are identified. No non-traumatic abnormalities of muscle are identified.

HEAD AND CENTRAL NERVOUS SYSTEM: There is no epidural, subdural or subarachnoid hemorrhage present. The leptomeninges are thin and delicate. Where uninjured, the cerebral hemispheres have an unremarkable pattern of gyri and sulci. The brain is fragmented and weighs 780 grams in aggregate. Coronal sections through the cerebral hemispheres reveal no non-traumatic lesions. Transverse sections through the brainstem, cerebellum, and upper spinal cord reveal no non-traumatic lesions.

SPECIMENS RETAINED

<u>TOXICOLOGY</u>: The following specimens are submitted for toxicology: liver, spleen, and gastric contents.

<u>HISTOLOGY</u>: Portions of tissues and major organs are retained in formalin. Sections of the heart and coronary artery are submitted for microscopic examination.

<u>PHOTOGRAPHS</u>: Digital identification photographs and photographs of selected findings are taken.

RADIOGRAPHS: Full body radiographs are taken.

MICROSCOPIC EXAMINATION

<u>HEART (slide #2; 2 sections)</u>: Two sections of cardiac tissue showing a normal syncytial pattern without disorganization. There is mild myocyte hypertrophy and mild interstitial fibrosis. No acute inflammation or necrosis is seen. There are putrefactive changes (foci of bacteria without associated acute inflammation).

<u>CORONARY ARTERY (slide #1: 4 sections)</u>: Two sections of artery showing eccentric thickening of the tunica media with approximately 50% luminal narrowing. There are no atherosclerotic changes including chronic inflammation or calcification.

RS:lcb

D: 6/29/18 T: 6/29/18

Rev. 7/25/18 clb



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TOXICOLOGY REPORT

Name: PLANE DOE #3,
Medical Examiner Number: 2018-01189
Date of Death: 5/10/2018
Time of Death: 2037

Pathologist: Robert Stabley, M.D.
Specimens Received: Gastric, Spleen, Liver

Date Specimens Received: 5/16/2018

Test Name (Method of Analysis)	Specimen Tested	Result
Alcohol Analysis (GC/FID-Headspace)	Spleen	
Alcohol (Ethanol)		Not Detected
Acetone, Isopropanol, Methanol		Not Detected
Drugs of Abuse Screen (ELISA)	Liver	
Amphetamines		Presumptive Positive
Benzodiazepines		Not Detected
Buprenorphine		Not Detected
Cannabinoids		Not Detected
Carisoprodol		Not Detected
Cocaine metabolites		Not Detected
Fentanyl		Not Detected
Methadone		Not Detected
Opiates		Not Detected
Oxycodone		Not Detected
Phencyclidine (PCP)		Not Detected
Zolpidem		Not Detected

Unless otherwise requested, all specimens will be destroyed six (6) months after the closure of the case by the Medical Examiner End Results

Comments:

- 1. Specimens received showed signs of decomposition.
- 2. Decomposition may produce a false positive result on the Amphetamines (ELISA) screening procedure.
- 3. A confirmation test for the presumptive positive Amphetamines result (ELISA) was not performed.
- 4. There was no suitable specimen available for the analysis of carboxyhemoglobin.

Approved and Signed:	
05/24/2018	Iain M. McIntyre, Ph.D.
	Egyptical Carried Laboratory Manager

Forensic Toxicology Laboratory Manager