

Chalk's Ocean Airways
Miami, Florida
December 19, 2005
DCA06MA010

National Transportation Safety Board
Washington, DC

Attachment 3

Occupant Injury Descriptions

8 Pages

**Chalk's Ocean Airways Flight 101
DCA06MA010
Occupant Injury Descriptions**

Seat Position¹	Sex	Age	Weight² (In pounds)	Height (In inches)	Description of Injury	Fatal
Captain	F	37	125	66	Open compound comminuted fracture of the skull, multiple fractures of the base of the skull, facial fractures, and mandibular fractures. Evisceration of the brain and lacerations and abrasions of the face. Fractures of the thyroid cartilage and tracheal rings, of the fourth cervical vertebra, and of the left side of the hyoid bone. Multiple rib fractures. Hemothoraces. Lacerations of the pericardium and heart. Bilateral lung lacerations, and transection and laceration of the aorta. Lacerations of the liver and the spleen. Traumatic amputation of the right arm. Fracture of the left distal humerus. Multiple fractures of the left radius and ulna.	X
1 st Officer	M	34	210	70	Partial decapitation. Avulsion of the brain. Atlantooccipital joint dislocation. Severance of the distal tongue. Thyroid cartilage fracture. Lacerations of the scalp and neck. Shattered rib cage and sternum. Severed vertebral column and spinal cord, and transected heart. Right ventricle laceration and multiple aortic transections. Multiple lung lacerations and pulmonary congestion and hemorrhage. Ruptured diaphragm. Transection of the distal esophagus. Shredding of the left liver lobe. Laceration of the spleen and mesenteric tears. Shattered pelvis and perforation of the bladder. Traumatic amputation of the right arm above the elbow, and dislocation of the left fourth and fifth digits. Bilateral hip dislocations. Traumatic amputation of the left leg above the knee and fracture of the right femur.	X

¹ Chalk's Ocean Airways did not assign seats to the passengers on board flight 101.

² The weight information in this column were recorded at autopsy by the Miami-Dade County Medical Examiner.

Seat Position ¹	Sex	Age	Weight ² (In pounds)	Height (In inches)	Description of Injury	Fatal
I	F	65	100	61	Face, skull, brain, orbits, upper extremities, heart, left lung, pericardial sac, aorta, diaphragm, adrenal gland, spleen, stomach, small intestine, ascending and transverse colon, kidneys, pancreas, liver and portions of the thoracic and cervical vertebrae are absent. Avulsed laceration of the head, chest, abdomen and right lower extremities. Abrasions and lacerations of the lower extremities. Fractures of the bilateral femoral bones, the right tibial plate, and the left tibia. Amputation of the left lower leg and foot. Pattered contusions of the abdomen and back.	X
II	M	32	144	Unknown	Facial skin lacerations. Facial fractures and scalp hemorrhage. Skull and cerebral fragmentation. Neck muscle hemorrhage. Thyroid cartilage and hyoid bone fractures and thyroid gland lacerations. Bilateral clavicle fractures. Multiple bilateral rib fractures. Thoracic and abdominal visceral fragmentation and displacement. Spinal transection at the fourth thoracic vertebra. Aortic transection. Right iliac bone fracture and pubic symphysis diastalsis. Absent left adrenal gland, urinary bladder, and portions of the small intestines. Lacerations and abrasions of the upper extremities and amputation of the left arm and both legs.	X
III	F	31	197	65	Facial abrasions and orbital ecchymoses. Fractured mandible. Multiple rib fractures and fracture of the thoracic spine. Pulmonary lacerations and contusions and a pericardial tear. Atrial and ventricular septal lacerations. Bilateral hemothoraces. Liver pulpification and splenic lacerations. Hemoperitoneum and retroperitoneal hemorrhage. Urinary bladder rupture. Right sacroiliac fracture and separation. Multiple abrasions, contusions, and lacerations of the extremities. Open fracture of the right humerus and right femur.	X
IV	F	5 months	13.5	Unknown	Facial abrasion and laceration. Multiple comminuted skull fractures. Pulpification of the brain. Abrasions on the abdomen and lower back. Right clavicle fracture. Multiple bilateral rib fractures. Pulmonary contusions and lacerations. Pericardial and myocardial tears. Bilateral hemothoraces. Diaphragmatic tears. Aortic transection. Liver pulpification. Lacerations of the spleen and colon. Retroperitoneal hemorrhage and hemoperitoneum. Left arm abrasions. Bilateral humeral fractures and right femur fracture.	X

Seat Position¹	Sex	Age	Weight² (In pounds)	Height (In inches)	Description of Injury	Fatal
V	F	64	220	64	Abrasions and lacerations of the head and neck. Subgaleal hemorrhages. Fractures of the nasal, maxilla and mandible bones. Transected atlanto-occipital ligaments. Fractured first cervical vertebra. Pontomedullary transection. Severed heart. Lacerated pericardial sac, bilateral lungs and mesentery. Transected aorta and inferior vena cava. Fractures of the thoracic vertebrae and multiple bilateral ribs. Crushed liver and adrenal gland. Bilateral fractures of the pubic rami. Abrasions and lacerations of the extremities. Fractures of the bilateral humeral and right radius. Bilateral tibia and fibular fractures.	X
VI	F	28	94	63	Large scalp and facial laceration with avulsion. Shattered skull and avulsion of the brain. Fractured maxillae and mandible. Abrasions and lacerations of the torso and the left groin. Multiple bilateral rib fractures. Thoracic spinal fracture. Pulmonary lacerations and contusions. Lacerations of the atria and ventricular septum of the heart. Bilateral hemothoraces. Left sacroiliac fracture/separation. Liver pulpification and lacerations of the spleen. Multiple lacerations, abrasions and contusions of the extremities. Left distal humerus fracture. Right wrist, left femur, and left tibia and fibula fractures.	X

Seat Position¹	Sex	Age	Weight² (In pounds)	Height (In inches)	Description of Injury	Fatal
VII	M	38	201	69	Calvarium and basilar skull fractures with brain avulsion. Face, scalp and left cheek and right chin lacerations and abrasions. Avulsion of the eyes. Fractured maxilla and mandible. Hyoid bone fracture. Soft tissue hemorrhage. Sternum and ribcage fractures. Vertebral column and spinal cord transection. Lacerations of the pericardium and heart. Bilateral lower lung lobe lacerations. Tracheal perforation and ruptured diaphragm. Esophageal transection. Left liver lobe shredded and numerous lacerations of right liver lobe. Fragmented spleen and right adrenal gland pulverized. Right inferior pole of kidney avulsed and multiple pelvic fractures.	X
VIII	M	71	245	72	Lacerations of the face and scalp with contusions and abrasions. Multiple skull fractures and lacerations of the dura mater. Avulsion of the cerebral hemispheres. Patterned abrasion across the abdomen consistent with an airline seatbelt. Multiple fractures of the sternum, clavicles, ribs, and pelvis. Transected vertebral column in the fifth and ninth discs. Left hemi-diaphragmatic lacerations with herniation of the spleen. Shredded pericardial sac and partially avulsed atria. Atrial and atrioventricular valve lacerations. Partially pulverized heart and aortic transection at the fourth thoracic vertebrae. Transected right and left bronchus. Liver and splenic capsular lacerations and partial pulverization. Pulverized adrenal glands. Partial avulsion of the right upper extremity and lacerations and contusions of the upper and lower extremities. Compound fracture of the right and left humerus. Right femur fracture and dislocation of the right ankle. Near complete amputation of the left leg. Compound fracture of the left femur and complete fractures of the distal left tibia and fibula.	X

Seat Position ¹	Sex	Age	Weight ² (In pounds)	Height (In inches)	Description of Injury	Fatal
IX	M	60	197	75	Fractured skull and scalp contusions and galeal hemorrhage. Subarachnoid hemorrhage and a fractured mandible and right maxilla. Facial lacerations, abrasions and contusions. Transected aorta at the fourth thoracic vertebra. Parietal pleural lacerations and soft tissue hemorrhage. Pericardial sac lacerations and partial avulsion of the atria. Partial pulpification of the apex of the left ventricle and a lacerated right ventricle. Pulmonary contusions. Partial pulpification of the lungs. Fractures of the ribs, sternal, pubic rami, ilea and sacroiliac joint. Fractures of the left humerus and both femurs. Compound fractures of the distal right tibia and fibula.	X
X	F	57	212	60	Basilar skull fracture and subarachnoid hemorrhage of the brain. Nasal bone fractures and shattered maxilla. Dislocated mandible and gaping laceration of the cheeks and chin. Multiple fractures of the ribs, pelvis and sternum. Shattered vertebral column. Displaced downward of the major thoracic and abdominal organs. Numerous splenic lacerations and shredded liver. Avulsion of the heart. Traumatic amputations of the legs. Bilateral mid-shaft humerus fractures and left mid-radius and mid-ulna fractures.	X
XI	M	62	238	72	Calvarium and basilar skull fractures. Brain avulsion. Left and right eyeball severed. Fractured mandible. Atlantooccipital joint dislocated. Multiple rib fractures. Shattered sternum. Vertebral column transected and fractured and severed spinal cord. Heart ventricles lacerated and thoracic and abdominal aorta transected. Bilateral lacerations of the lower lung lobes. Ruptured diaphragm. Lacerations and partial pulverization of the liver and transection of the spleen. Pulverization of the right adrenal gland. Shattered pelvis and avulsed bladder. Bilateral dislocated elbows and distal humerus fractures. Right proximal radius and ulna fractures. Left third and fourth digit avulsions.	X

Seat Position ¹	Sex	Age	Weight ² (In pounds)	Height (In inches)	Description of Injury	Fatal
XII	F	38	146	63	Scalp hemorrhage and skull fractures. Subarachnoid hemorrhage. Brainstem and cranial nerve lacerations. Hyoid bone and thyroid cartilage fractures. Transection of the spine at the third cervical vertebra. Multiple, bilateral rib fractures. Right clavicle fracture. Heart lacerations and aortic transections. Transection of the spine at the fifth thoracic vertebra. Liver lacerations and splenic fragmentation. Mesenteric hemorrhage. Left hemi-pelvis avulsion and urinary bladder laceration. Bilateral radius and ulna fractures. Left humerus fracture. Bilateral femur and lower leg fractures.	X
XIII	F	16 months	39	30	Multiple fractures of the calvarium and base of the skull. Lacerated dura mater and subarachnoid hemorrhage. Pulpification of the anterior and inferior frontal cerebral lobes, and the cerebellum. Multiple rib fractures and bilateral hemothoraces. Pulmonary contusions and hemorrhage. Pulpification of the right lobe of the liver. Retroperitoneal hemorrhage. Fractures of the left humerus, left tibia and fibula and both femurs. Pubic rami and sacroiliac joint fractures.	X
XIV	M	65	156	70	Lacerations of the scalp and face. Multiple fractures of facial bones and skull. Lacerations of the brain and transection of the mid portion of the brain. Fracture of the hyoid bone. Contusions of muscles and soft tissue of the neck. Multiple rib fractures. Lacerations of the lungs and laceration and near avulsion of the heart. Laceration and transections of the aorta. Fracture/dislocation of the second and third thoracic vertebrae. Bilateral diaphragmatic lacerations. Laceration of the liver, spleen, and sigmoid colon. Transection of the small and large intestines. Sever pelvic fractures. Fracture of the right distal humerus and left proximal humerus. Fracture of the left distal femur. Fracture of the right radius, ulna, tibia and fibula. Fracture/dislocation and near amputation of the left ankle.	X

Seat Position ¹	Sex	Age	Weight ² (In pounds)	Height (In inches)	Description of Injury	Fatal
XV	F	39	190	62	Fractures of the maxillary, mandible, nasal and orbits. Absent right maxilla. Partially avulsion of the tongue. Temporalis and occipital muscle contusions. Calvarium and base skull fractures. Lacerated dura mater. Cerebral and cerebellar edema. Transected optic chiasm. Transected pons and cerebellum. Subarachnoid hemorrhage. Chest and abdominal abrasions. Fractures of the clavicle and sternum. Soft tissue lacerations and contusions. Bilateral parietal pleural lacerations. Multiple compound rib fractures. Diaphragmatic lacerations and herniation of the liver and spleen. Shredded pericardial sac. Avulsion of the heart through the atria. Left ventricular laceration. Transected aorta at the fourth thoracic vertebrae. Pulmonary contusions and lacerations. Liver lacerations and partial pulverization. Pulverized adrenal glands. Intra- and retroperitoneal hemorrhages. Transected vertebral column and spinal cord at the eleventh vertebrae. Fractured pubic rami, ileum, and sacroiliac joints. Fracture of the right humerus, proximal femur and proximal tibia and fibula. Fracture of the left metatarsal bones.	X
XVI	M	15 months	30	30	Scalp abrasions, contusions, and Subgaleal hemorrhage. Fractured skull. Right subdural hemorrhage and thin subarachnoid hemorrhage. Multiple rib fractures. Contusions of the lungs. Epicardial contusions. Multiple liver lacerations and spleen lacerations. Laceration of the stomach. Hemoperitoneum. Fractured right proximal humerus ad dislocation of the right elbow. Bilateral fractures of the femur, tibia and fibula. Laceration of the left popliteal fossa.	X
XVII	M	Unknown	163	65	Scalp lacerations and extensive fractures of the skull and facial bones. Multiple rib fractures. Laceration of the upper and middle lobes of the right lung. Laceration of the ascending aorta. Laceration of the liver. Fractures of the left pubic rami and right sacroiliac joint.	X

Seat Position¹	Sex	Age	Weight² (In pounds)	Height (In inches)	Description of Injury	Fatal
XVIII	F	Unknown	124	67	Laceration and avulsion of the scalp. Extensive skull fractures. Laceration of the frontal lobe. Transection of the pontomedullary junction. Multiple facial fractures. Fracture/dislocation of the fourth and fifth cervical vertebrae. Hemorrhage in the left sternocleidomastoid muscle and around the left lobe of the thyroid gland. Abrasions of the chest and back. Multiple rib fractures. Lacerations of the lower lobe of the right lung. Right hemothorax. Laceration of the right hemidiaphragm. Lacerations of the liver and spleen. Abrasions, contusions, and lacerations of the legs and arms. Fractured bilateral humeri. Open fracture of the right tibia and fibula.	X