

The Medico-legal Organization of a Mass Disaster — The Air India Crash 1985

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INTRODUCTION

On Sunday 23 June 1985, an Air India flight AI-182 travelling from Toronto to Bombay crashed into the sea off the South West coast of Ireland with the loss of all 329 passengers on board. One hundred and thirty-two bodies were recovered from the sea, 39.8% of the total number of victims. There is no evidence that whatever happened was anticipated. The cockpit voice recorder, the air traffic tapes, meteorology reports all appeared to indicate that everything was normal at the time of the crash. This led to intense speculation that a bomb caused an explosive break up of the aircraft in the air. Wreckage and bodies spread over a five-mile area supported the speculation (*Sunday Times*, June 1985).

The 600-bed Regional Hospital in Cork, Ireland, became the centre for investigation of the disaster. The Department of Histopathology has a medical staff of four consultants and four trainees. The mortuary has storage facilities for nine bodies and has two necropsy tables. Five local pathologists, the State Pathologist and a visiting specialist aviation pathologist completed the team of pathologists. Four forensic odontologists were also enlisted and the Radiology Department of the hospital was closed from 2 pm each day to allow for detailed X-raying of the victims. The Irish Army provided the necessary transport and assistance with moving the bodies.

The purpose of the medical investigation of an aircraft accident is.

1. Identification of the cause of death of each person
2. Identification of the remains.

3. Identification of the causes of the crash
4. Prevention of fatal accidents by identifying fatal injuries and thus indicating specific needs for improved safety features (Mason, 1984).

The Air India disaster provided many lessons in the organization of a major disaster. With one exception, all 132 bodies were identified and returned to their families within approximately six weeks. A full necropsy was carried out on each case and all the bodies were completely X-rayed and dental findings recorded. The major advantage in dealing with this accident was the space and facilities available in a large teaching hospital.

THE ORGANIZATION

Body recovery at sea was co-ordinated by an Irish Naval vessel, *L. E. Aisling*; 88 bodies were landed by helicopter, 38 by the vessel *L. E. Aisling* and five by a local lifeboat. The last body was recovered after four months, on 25 October, when part of the aircraft wreckage was recovered from the ocean floor.

The bodies were stored in body bags, some of which were from the Royal Air Force and some from the Southern Health Board. All the body bags were previously unused and those from the Royal Air Force were certified as being free from explosive residues, which is important when attempting to establish the cause of the accident.

On recovery a number was assigned to each body and this number only was used throughout all subsequent procedures to identification. This system proved very satisfactory as it avoided the possible confusion of different