

GRIM HOMECOMING TESTS NEW MORGUE

Victoria's newly opened Coronial Services Centre played a key role in one of Australia's worst air disaster investigations. **Carolyn Ford** reports



CLAIR RICHARDS

Within weeks of reopening on 29 August after a big-budget redevelopment, Victoria's State Coronial Services Centre became the focus of the MH17 airline disaster for Australians involved.

It was there that the bodies and remains went of some 30 Australian victims of the catastrophe after repatriation ceremonies at Melbourne Airport. White hearses travelled from the Qantas hangar to the morgue where they had their identities confirmed and within 48 hours were released to their families for burial locally and interstate. Families of victims benefited from a new counselling suite established for grieving relatives, some of whom in this case had accompanied their

loved ones home from the Netherlands on commercial and military aircraft.

The director of the Victorian Institute of Forensic Medicine (VIFM), a cornerstone of the centre, Professor Noel Woodford said the new purpose-built office sees coroners and pathologists meeting and deliberating, and families counselled and consoled. "This new facility allows us to meet with families to discuss our findings and their consequences in appropriately comforting surrounds at what is often the most emotionally difficult of times."

State Coroner Judge Ian Gray said the centre ensures a more efficient coronial system. "Most people will never have to approach a court but for those who do, we hope to give

peace of mind, answers and closure to families. With the opening of our new building, this commitment is even stronger."

The MH17 homecoming was part of a process begun weeks earlier when a team of Victorian coronial staff was despatched to Amsterdam to help process 298 dead and aid repatriation of 38 Australian victims of the 17 July Malaysian Airlines disaster, which killed all on board when it broke up mid-air and came down on the Ukraine-Russia border.

As all the world knows, it was a uniquely difficult task; bodies and remains were scattered over a large rural area in a conflict zone with negligible facilities and limited access to the crash site. Months later, access is still



WORKING IN TANDEM: From left: State Coroner Judge Ian Gray, Victorian Institute of Forensic Medicine (VIFM) deputy director Associate Professor David Ranson, VIFM director Professor Noel Woodford, the entrance to the redevelopment, the mortuary and the Coroners Court.

denied with remains and personal effects of Australians yet to be retrieved.

The first contact the Victorian coronial team had with victims was at a medical military base in Hilversum outside Amsterdam, where bodies and remains were taken by train in the days after the crash.

Legal medicine expert, David Ranson, who is VIFM deputy director and Monash University Department of Forensic Medicine adjunct clinical associate professor, led the medical team from VIFM that helped with the Australian Federal Police response to the disaster. Victoria's Deputy State Coroner Iain West also travelled to Amsterdam to review the operation on behalf of Australian coroners.

Associate Professor Ranson, a 25-year veteran of disaster investigations, said for the first time in a disaster response he had to wear a face mask and body suit to protect against the potentially hazardous toxic chemical preservative formaldehyde that had been applied to bodies. The remains of victims ranged, not unusually in a major air disaster, from intact bodies to small fragments. The forensic medical examinations involved DNA, fingerprint and dental procedures. More than 700 bodies and parts were examined and identity was established with many, allowing their return to families.

"There was certainly a very wide range of damage to the bodies, which presented a major forensic challenge. Police doctors and

scientists from around the world were all working together. It's about doing the job in a consistent and reliable way."

Associate Professor Ranson said his investigation led him to conclude passengers and crew died instantaneously.

"I believe they died in the air. They died from the effects of aircraft disruption at altitude. And I believe it was instantaneous. It is a problematic issue for families – whether they [victims] were aware and did they die quickly."

Associate Professor Ranson's findings were published in an eight page report to Judge Gray who approved its distribution to victims' families here and abroad. The highly detailed report, released to the *LIJ* by the Coroners



Court, explains the identification process in Hilversum, the medical and scientific examinations performed, the pattern of injuries and the mechanics and causes of death.

“Once we have identified people and returned them to their families, there are many, many unanswered questions. If we just take out the huge question of how the aircraft came down, there are a whole string of very personal questions families have. They ask would a person have suffered?, what would they have known?, and so it’s very, very important that we answer those questions, to get that information to families at an early stage.”

The State Coronial Services Centre at 65 Kavanagh Street, Southbank, which incorporates the VIFM, Coroners Court and the

Donor Tissue Bank of Victoria, is recognised as the best in the country and a leader in the region with expertise in death investigation, clinical forensic medicine and tissue banking.

“Our work on MH17 was part of our overall plan to be able to respond to this kind of event in the Asia-Pacific region. The centre is the largest single centre for pathology and coronial work in Australia and as such we have a very wide scope. We are deployed to mass tragedies around the world as they happen,” Associate Professor Ranson said.

Professor Woodford said staff had also been deployed to mass tragedies in Kosovo, Bali, Thailand, Timor and most recently Liberia and Holland. Lessons learned were applied in Australia.

“The years have seen this place evolve into a large, complex, multifaceted organisation. It’s learning and applying the knowledge and expertise we gain in the service of the courts and justice system . . . and most especially to families and the community.

“Our co-location with the Coroners Court means that we work collaboratively to find the truth and provide answers.

“Our expertise in human identification allowed us to successfully identify Ned Kelly’s remains and bring closure for families in the wake of the Black Saturday bushfires.”

The \$102.7 million redevelopment, begun in 2011, includes:

- new Coroner’s chambers;



LEADING THE WAY: The redevelopment includes clinical forensic medicine, anthropology, toxicology, disaster victim identification, histology, molecular biology, CT scanner, microbiology and odontology; Ned Kelly's skull.

- three new coronial court rooms, including one for directions hearings and summary inquests;
- a counselling suite for families to identify and spend time with their deceased loved ones;
- refurbished mortuary and laboratories;
- a CT scanner to speed up the coronial process;
- two new homicide rooms;
- increased freezer capacity to store up to 100 bodies; and
- a remote witness room.

Judge Gray said the centre gave Victorians a complete coronial investigation process and a new and modern opportunity for both forensics and law to work in tandem. ●

MH17 POSTMORTEM FINDINGS

Occupants became unconscious immediately after mid-air disruption.

Occupants died within seconds – long before they entered the lower atmosphere.

There was no evidence of haemorrhage or bruising associated with injuries from a high altitude fall suggesting death had already occurred.

The absence of clothing on most victims indicated body acceleration/deceleration after catastrophic disruption of the aircraft, exposure to high-speed airflow during a long distance fall from a high altitude, blast injury or explosive decompression.

Causes of death from explosive decompression – similar to the pressure wave from a bomb – included hypothermia, hypoxia, massive internal organ injury, embolism and heart attack. Exposure

to very low temperatures, airflow buffeting and low oxygen at 30,000 feet would also result in death in seconds. Fatalities could also have occurred by high-speed debris movement.

More than 200 coffins were examined at Hilversum.

More than 700 body parts were identified.

Formaldehyde applied to the surface of bodies presented a significant hazard to post-mortem examiners.

CT scans identified non-aircraft structure, devices or weapons in some victims.

Examinations were done in five stages – the Australian team collected biopsies for DNA analysis and recorded prosthetic devices.