

COMMONWEALTH OF AUSTRALIA
DEPARTMENT OF CIVIL AVIATION

ACCIDENT INVESTIGATION REPORT

DC8-62 AIRCRAFT JA-8031
SYDNEY (KINGSFORD SMITH) AIRPORT, AUSTRALIA
22ND FEBRUARY, 1970.

The investigation of this aircraft accident was authorised
by the Director-General of Civil Aviation pursuant to the
powers conferred by Air Navigation Regulation 278.

Prepared by:

Air Safety Investigation Branch,

August 1970

Melbourne

ACCIDENT INVESTIGATION REPORT

ACCIDENT INVOLVING JAPAN AIRLINES DC8-62 AIRCRAFT JA-8031 AT SYDNEY (KINGSFORD SMITH) AIRPORT, AUSTRALIA ON 22ND FEBRUARY, 1970.

1 - INVESTIGATION

1.1 HISTORY OF THE FLIGHT

JA-8031 was engaged on a regular public transport flight from Sydney, Australia, to Manila, Philippines, thence to Tokyo, Japan, and was designated Japan Airlines Flight 772. The aircraft had arrived at Sydney from Manila at 2200 hours Eastern Standard Time (EST) on 21st February and, after maintenance and routine servicing, engines were ground tested in an area set aside for this purpose. This work was completed at 0945 hours on 22nd February and the aircraft then remained unattended until 1120 hours on 22nd February when it was moved to the apron for pre-departure servicing and loading. After taxiing at 1240 hours, the aircraft commenced to take off on Runway 34 at 1251 hours and, about one minute later, when the aircraft was at about 200 feet altitude, a person was seen to fall from the left main landing gear bay.

1.2 INJURIES TO PERSONS

Injuries	Crew	Passengers	Others
Fatal			1
Non fatal			
None	11	66	

1.3 DAMAGE TO AIRCRAFT

None

1.4 OTHER DAMAGE

None

1.5 CREW INFORMATION

Captain [REDACTED] aged 47 years, held a valid Air Transport Rating and DC8 type rating. He was check Captain on this flight and had a total flight time of 12,322 hours, and 3,587 hours on DC8.

Captain [REDACTED] aged 44 years, held a valid Air Transport Rating and DC8 type rating. He was undergoing a route check on this flight and had a total flight time of 15,575 hours.

Co-pilot [REDACTED] aged 30 years, held a valid commercial pilot certificate with DC8 type rating. He had a total flight time of 2,586 hours.

Flight Engineer [REDACTED] aged 28 years, held a valid Flight Engineer Certificate with a DC8 type rating. He had a total flight time of 1,794 hours.

There were seven cabin crew.

1.6 AIRCRAFT INFORMATION

JA-8031 (Aircraft Serial Number 45953) was issued with an Airworthiness Certificate on 19th April, 1968. It completed an overhaul on 27th December, 1969 and the most recent service, a B-Service, was carried out on 12th February, 1970. There was no evidence to suggest that the aircraft was other than airworthy or that the loaded weight and centre of gravity position were not within the prescribed limits.

1.7 METEOROLOGICAL INFORMATION

Not applicable.

1.8 AIDS TO NAVIGATION

Not applicable.

1.9 COMMUNICATIONS

Not applicable.

1.10 AERODROME AND GROUND FACILITIES

Not applicable.

1.11 FLIGHT RECORDERS

Not applicable.

1.12 WRECKAGE

The aircraft was undamaged but it diverted and landed at Darwin where an examination was made. There was nothing visible in either the nose landing gear compartment or the starboard main landing gear compartment to indicate that any person had occupied those compartments. There were, however, marks which were either hand or foot prints and shoe prints on frames and the door of the port main landing gear compartment. These marks indicated that someone had rested on the door and had touched the inside of the compartment fairly recently. In addition, there was a set of three finger marks clearly evident on a vertical section of the main rear frame of this compartment.

1.13 FIRE

None

1.14 SURVIVAL ASPECTS

Not applicable.

1.15 TESTS AND RESEARCH

It was demonstrated that the main landing gear compartment could be entered without undue difficulty by standing on a wheel, then on the retract strut and there was ample space for a person to squat on the door near the location of shoe prints which were found.

The body, which was recovered from a position adjacent to the runway used for taking off at Sydney, was that of a 14 year old boy who was of smaller stature than the person who demonstrated the ease of entry of the compartment.

1.16 OTHER INFORMATION

During the pre-departure checks, all four flight crew members conducted a walk around inspection before they boarded the aircraft and the Japan Airlines station engineer also carried out a pre-flight check. None of these inspections or checks included a detailed examination of the interior of the main landing gear bays nor is a detailed internal examination required by the operator.

2 - ANALYSIS

From 0945 hours to 1120 hours the aircraft was unattended and was located on a part of the airport which was shielded by a blast fence from areas where other people were working and, in these circumstances, it would not be difficult for an unauthorised person to approach the aircraft without arousing any suspicion. In addition, it was demonstrated that access to the main landing gear compartment would not present any undue difficulty to an agile youth who could be very quickly out of sight and well hidden.

The main landing gear compartment is located some distance inboard of the main landing gear strut and it is probable that the youth did not associate the compartment with its function of housing the landing gear following retraction. The door was retained securely in the closed position by the door up locks, probably assisted by some residual hydraulic pressure as the engines had recently been run, and the boy would have had no reason to expect that it would open after the aircraft took off.

An inspection, even with the aid of a light, of the fairly dark interior of the landing gear compartment would not necessarily reveal the presence of a person hiding there. The rear of the compartment extends for more than three feet past the corner of the fuselage structure and presents an area into which inspection would not normally be directed during pre-flight procedures.

Although it could not be established precisely when the stowaway gained access to the landing gear compartment, it is clear that such an opportunity was present and that it was possible for him to quickly hide in this compartment. There was evidence that the left main landing gear compartment had been occupied and that such occupancy could remain undetected unless special inspectional procedures were adopted.

3 - CONCLUSIONS

1. The aircraft was properly certificated and was airworthy.
2. The flight crew members were properly certificated and were qualified for the duties they performed.
3. Pre-flight inspections carried out by the operator's station engineer and members of the flight crew were in accordance with Company procedures.
4. When the aircraft was at about 200 feet altitude after taking-off and as the undercarriage retraction cycle commenced, a person fell from the aircraft.
5. There was evidence that a person had secreted himself in the left main landing gear bay.
6. The cause of the accident was that the stowaway secreted himself in a compartment of the aircraft which was intended solely for the stowage of the landing gear in flight.