

No. 91-019

Hawker Siddeley HS748

ZK-CWJ

Wellington Airport

13 September 1992

Wellington - New Zealand

TRANSPORT ACCIDENT INVESTIGATION COMMISSION

AIRCRAFT ACCIDENT REPORT No. 91-019

Aircraft Type, Serial Number and Registration:

Hawker Siddeley HS748, 1647 ZK-CWJ

Number and Type of Engines:

Two Rolls Royce Dart 534-2

Year of Manufacture:

1968

Date and Time:

13 September 1991 at 0832 hours NZST

Location:

Wellington Airport Latitude: 41°20'S Longitude: 174°49'E

Type of Flight:

Scheduled Air Transport

Persons on Board:

Crew: 3

Passengers: 15

Injuries:

Nature of Damage:

Crew: 3 Nil Passengers: 15 Nil

Substantial to right wing

Pilot in Command's Licence:

Air Transport Pilot Licence (Aeroplane)

Pilot in Command's Age:

52

Flying Experience: Pilot in Command's Total

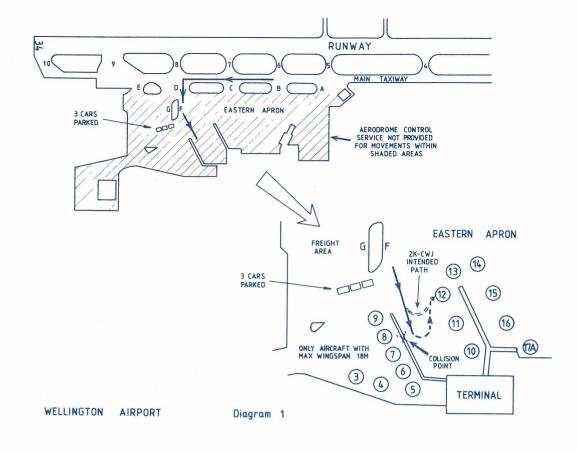
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Information Sources:

Transport Accident Investigation Commission field investigation

Investigator in Charge:

Mr R Chippindale



- 1.1 The aircraft which was operating as Mount Cook Flight 71 from Rotorua to Wellington landed ahead of schedule at 0829 hours.
- 1.2 Because of the early arrival the aircraft was not given a gate number before landing. The pilot was informed, after landing, that all gates at the passenger terminal were full but he would be allocated Gate 12 (see Diagram 1) when it became free.

 1.3 As the Captain taxied the aircraft towards the terminal area he endeavoured to plan ahead so that he could hold in a position which would not
- 1.3 As the Captain taxied the aircraft towards the terminal area he endeavoured to plan ahead so that he could hold in a position which would not obstruct the departing aircraft.
- 1.4 He turned left off the main taxiway onto Stub-way Delta (See Diagram 1) which was the normal access to the gate which he had been allocated. This taxiway lead onto an apron area which was bounded by a covered walkway on the aircraft's right and a series of airbridges and the associated building on the left. Prior to the covered walkway was a grass area and a sealed access for aircraft to taxi to the other side of the walkway. Normally this sealed area would have provided a holding bay for the aircraft but on this occasion there was a VIP car and two escort vehicles parked on the western side of this access.
- 1.5 The Captain judged that there was no alternative but to attempt to park alongside the walkway behind the aircraft occupying the air bridges and wait until his allocated gate became clear. If he had stopped after he entered the Eastern Apron his aircraft would have impeded the departure of the others.
- 1.6 He decided to taxi into the confined space after asking the First Officer to "Watch the wing tip". The First Officer who had been watching the wing tip up to that point looked toward the Captain and nodded to acknowledge the instruction. He did not look back at the wing tip immediately, instead he endeavoured to establish the Captain's intentions by studying the relative positions of the other aircraft. The Captain accept "the nod" as confirmation that his instruction would be complied with and continued taxiing. The Captain was adamant that he advised the First Officer of his intention to hold opposite Gate 12 just after the aircraft departed from the main taxiway but allowed that the number of transmissions on the RTF at the time may have conflicted with this advice.
- 1.7 After noting the positions of the aircraft to his left the First Officer returned his attention to the right wingtip just in time to see it hit the covered walkway. The Captain felt a short period of vibration and assumed the aircraft had run over something on the ground. However the First Officer informed him that the wing tip had collided with the roof of the walkway.
- 1.8 The damage to the aircraft involved the right wing tip and adjacent aileron for approximately one metre inboard of the navigation light.
- 1.9 The walkway roof sustained minor damage to some five metres of its corrugated metal roofing sheets.

- 1.10 Parking for the domestic airline aircraft using the area in which the accident occurred was allocated by operators' representatives using radio telephone on a discrete frequency. There was no positive ramp control nor was the assistance of marshallers available.
- 1.11 Guidance lines were painted on the tarmac in the area adjacent to the gates. When aircraft were taxied in conformance with these lines an adequate clearance from the fixed obstructions was guaranteed. A wing tip clearance line was painted on the tarmac adjacent to the walkway at the point where the accident happened.
- 1.12 The VIP vehicles on the tarmac were escorted by a member of the airport security service in a separate vehicle. There was no coordination between the escort vehicle and the company representatives who allocated the gates for the aircraft. The security service drivers were required to conform to set rules to ensure they did not cause any hazard or obstruction to the manoeuvring aircraft.
- 1.13 Although the vehicles were parked so that an aircraft could taxi past them on this occasion it was not evident to the Captain of ZK-CWJ that there was room for his aircraft to pass them and use the area to their rear as a holding bay.
- 1.14 The Air Traffic Services did not provide any form of control of surface movements in the apron area involved and advice to this effect was included on the Wellington International Airport Ground Movements Chart of the Aeronautical Information Publication.
- 1.15 No guidance was provided for pilots as to which areas to use for holding if no gates were available once they entered the Eastern Apron with the intention of off-loading passengers.
- 1.16 There was no coordination between Air Traffic Control and the company gate allocation staff in the event of all of the gates being occupied when an additional aircraft landed which required a gate in the area.

2. FINDINGS

- 2.1 The Captain of ZK-CWJ was complying with ATC instructions when he taxiied into the Eastern Apron area.
- 2.2 Once his aircraft entered the Eastern Apron area the Captain was responsible for locating a safe area in which to hold the aircraft while waiting for his allocated gate to become free.
- 2.3 The First Officer was not aware of the Captain's informed intentions when the aircraft entered the Eastern Apron.
- 2.4 Although ultimately responsible for the safety of his aircraft the Captain was entitled to rely on the First Officer to ensure the clearance of the aircraft's right wingtip from fixed obstructions.

- 2.5 As the First Officer had nodded following his instruction relating to wing clearance the Captain believed he had understood the instruction.
- 2.6 The First Officer diverted his attention from his assigned task after he had been instructed by the Captain to ensure the right wing was clear of obstructions.
- 2.7 The congested conditions on the Eastern Apron at the time of the accident dictated extreme care be used by those taxiing aircraft without the use of ground marshallers.
- 2.8 No ground marshalling assistance was available to the Captain of ZK-CWJ.
- 2.9 The area adjacent to the airbridges in which the accident occurred was adequately marked for an aircraft to proceed to its allocated gate when the gate was unoccupied.
- 2.10 The alternative of returning to the main taxiway and holding in another area or on the taxiway itself was available to the Captain of ZK-CWJ.
- 2.11 A mixture of uncontrolled, non-airport, vehicular traffic and aircraft on a apron area was an undesirable combination.

. RECOMMENDATIONS

3.1 As a result of the investigation of this accident it was recommended that the Wellington Airport Authority;

Investigate the allocation of a more remote area for parking VIP vehicles during peak traffic periods.

Enable at least one of the escort vehicles for VIP cars to remain in contact with the authority allocating gates on the Wellington Eastern Apron.

Arrange that during peak periods ATC be notified if no gates are available for arriving aircraft which normally use the Eastern Apron.

Investigate the establishment of sufficient liaison with Air Traffic Control to ensure that aircraft captains be directed not to enter the Eastern Apron to the north of Taxiway D unless the gate they have been allocated is free.

Investigate the feasibility of installing a ramp control facility in place of the existing gate allocation advisory service.

3.2 It was also recommended to the Operating Company that

They remind their pilots of the importance of verbal responses to instructions received on the aircraft's intercom.

They remind Captains of the desirability of keeping the other crew members informed of their intentions at all times.

12 November 1992

M F DUNPHY
Chief Commissioner

