



NO. 93-018

**FREE FLIGHT KIWI FLYER 170
FISHERMANS POINT NR RAGLAN**

24 OCTOBER 1993

ABSTRACT

This report relates to the collision with a cliff face near Raglan of a Free Flight Kiwi Flyer hang glider on 24 October 1993. The safety issues identified were the risks of hang gliding alone in remote areas and flying over difficult areas without a preplanned escape route.

TRANSPORT ACCIDENT INVESTIGATION COMMISSION

AIRCRAFT ACCIDENT REPORT NO. 93-018

Aircraft Type and Serial Number:	Free Flight Kiwi Flyer hang glider
Year of Manufacture:	1991
Date and Time:	24 October 1993, 1145 hours*
Location:	Fishermans Point, 11 km south-south-west of Raglan Aerodrome Latitude: 37°53.4'S Longitude: 174°45.5'E
Type of Flight:	Private
Persons on Board:	Crew: 1
Injuries:	Crew: 1 Fatal
Nature of Damage:	Substantial
Pilot in Command's Licence:	New Zealand Hang Gliding Association's "Beginner" Rating
Pilot in Command's Age:	46
Pilot in Command's Total Flying Experience:	10 hours, approximately 5 on type
Information Source:	Transport Accident Investigation Commission field investigation
Investigator in Charge:	Mr R Chippindale

*All times in this report are NZDT (UTC+13 hours)

1. NARRATIVE

1.1 At about 1100 hours on 24 October 1993 the pilot had arrived at the Waikato Hang Gliding Club launch site near Ruapuke some 2 km south of the accident site.

1.2 He was assisted with the erection of the glider and subsequent launch by his son and a friend of his and a student who boarded with the family.

1.3 The pilot stated that the launch was good and that he flew generally northward for some 45 minutes enjoying good flying conditions, ridge soaring above the coastal hills/cliffs in the onshore wind.

1.4 Towards the end of the flight he had drifted north of the rocky Papanui Point immediately south of which was Fishermans Point.

1.5 Papanui Point and Fishermans Point were adjacent and jutted out from the coast line with 150 to 200 foot high cliffs above a rocky shore on which a heavy surf was breaking. Fishermans Point was two kilometres north of the Ruapuke launch site.

1.6 As the pilot attempted to move south toward an iron sand beach he lost height to a point where he was flying level with the high cliff top.

1.7 He endeavoured to fly west into the 18 to 20 knot south-westerly wind but as he moved seawards away from the cliff edge he encountered severe turbulence and could not avoid flying directly into the cliff face some 50 feet above the rocks.

1.8 Unable to help himself he let go of the A frame and fell with the glider on to the rocks below.

1.9 He sustained a broken femur and fractured cervical vertebrae in the accident.

1.10 As he was flying alone he was not missed until the children and their friend raised the alarm at the local motor camp some five hours later. A ground search failed to locate him so a fixed-wing aircraft was engaged to continue the search.

1.11 The aeroplane located him at about 2000 hours and a helicopter was sent to his aid. As he was beyond the reach of the helicopter's winch cable the paramedic and

an assistant had to scramble down the cliff to prepare him for the evacuation. He was taken to the Waikato Hospital some nine hours after the accident occurred.

1.12 Although the pilot had only a "Beginner" rating his instructor was confident that he had the ability to obtain the "Novice" rating which is the next step in the New Zealand Hang Gliding Association's Rating Scale.

1.13 A Safety Officer of the Waikato Hang Gliding Club to which the pilot belonged, stated that he had the ability to fly in the area in the conditions prevailing on the day of the accident so long as he was supervised. He was adamant that the pilot should not have been gliding alone and that he had been warned not to do so on previous occasions. The Safety Officer also commented that he should not have approached Papanui Point when such a strong wind was blowing from the south-west as it was not practicable to obtain sufficient height to ensure that a safe landing area was always within reach.

1.14 His decision to fly alone was also responsible for aggravating the consequences of the pilot's injuries in that he became hypothermic while waiting to be rescued which lessened his chances of recovery. Although he was not expected to succumb he died in hospital three weeks after the accident.

1.15 The glider was a Free Flight Kiwi Flyer 170. This was a double surface glider with preformed battens dictating the shape attained in flight by the upper surface and straight battens constraining the lower surface. The "170" relates to the wing surface area, the smaller model being a "140".

1.16 The glider's Warrant of Fitness was current until December 1993.

1.17 Prior to the accident the hang glider was in good repair and was fitted with the tip blow down tubes and luff lines fitted to effect recovery from inadvertent stalls.

1.18 The damage sustained was consistent with a nose-first impact with the rock face and subsequent slide/fall to the rocks below the cliff. There was no evidence of pre-existing damage.

2. FINDINGS

2.1 The glider was suitable for the pilot's weight and experience.

2.2 The glider was in good condition and properly maintained.

2.3 The search for the missing pilot and his subsequent rescue were conducted promptly and competently once the alarm was raised.

2.4 It was unwise for the pilot to be flying alone in a remote area in any event.

2.5 The NZHGA's doctrine was that pilots should not fly alone.

2.6 The Waikato Hang Gliding Club did not consider the Ruapuke site suitable for beginners in the prevailing wind conditions.

2.7 The pilot had the ability to fly in the prevailing conditions but needed supervision to plan his flight properly.

2.8 As a beginner the pilot should not have been flying alone from the Ruapuke site in the conditions prevailing on the day of the accident.

2.9 The accident was caused by the pilot's inaccurate assessment of the prevailing conditions which led him to fly into an area from which he did not have a clear escape route.

3. SAFETY RECOMMENDATION

3.1 As a result of this accident it was recommended that the New Zealand Hang Glider Association re-emphasise the consequences of flying alone and of ignoring the grading system applied to launch sites and pilot's ability (007/94).