Aviation Safety Investigation Report 198902539

Osprey 11

29 January 1989

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NOTE: All air safety occurrences reported to the ATSB are categorised and recorded. For a detailed explanation on Category definitions please refer to the ATSB website at <u>www.atsb.gov.au</u>.

Occurrence Number: Location: Date: Highest Injury Level: Injurios:		198902539 Palm Beach Water Authorised Lan 29 January 1989 Nil			Occurrence Type: Accident ding Area, NSW Time: 1130	
injui ies.		Crew Ground Passenger <b>Total</b>	Fatal 0 0 0 <b>0</b>	Serious 0 0 0 <b>0</b>	Minor 1 0 0 <b>0</b>	None 1 - 0 <b>1</b>
Aircraft Details: Registration: Serial Number: Operation Type: Damage Level: Departure Point: Departure Time: Destination:	Osprey VH-JDA N144 Private Substan Palm Ba 1130 Palm Ba	11 A tial each NSW each NSW				

## Approved for Release: 9th May 1990

## **Circumstances:**

The pilot had not previously flown the homebuilt floating hull type amphibian aircraft. The flight was to carry out an evaluation of its water handling characteristics, before continuing with the flight testing for the issue of a Certificate of Airworthiness. The pilot reported that the water conditions were calm with a light easterly breeze blowing. A witness had observed power boats in the area where the aircraft was operating, churning up the water surface. This type of aircraft has a known tendency to "porpoise" in choppy surface conditions. Several high speed taxi runs were performed, both into wind and crosswind. The pilot reported that the aircraft had a tendency to swing to the left, otherwise operations were normal. He returned to the beach where he had the water rudder alignment checked. After several more high speed taxy runs the pilot considered that the aircraft was ready for flight. During the take-off and before the aircraft had obtained flying speed, it passed through the wake of a power boat, causing its nose to pitch up and left wing to drop. The pilot released some up elevator pressure and used right aileron to correct the roll. This had little effect in correcting the aircraft attitude before it encountered a second wave, pitching the nose up higher and increasing the roll to the left. The left hand wing float impacted the water causing the aircraft to swing to the left and the nose to drop. This was followed by a severe water loop to the left, which submerged the cabin momentarily and caused the left hand wing float, nosegear door and rudder to separate. Previous flight testing of this type of aircraft had shown that the ideal take-off technique was to maintain the aircraft level, with the elevator control held in the neutral position. This accident was not the subject of an on-scene investigation.

## **Significant Factors:**

The following factors were considered relevant to the development of the accident

1. The pilot attempted to takeoff using a less then optimum control technique.

- 2. The aircraft was affected by adverse water conditions.
- 3. A loss of control occurred before the aircraft had reached flying speed.