## Fokker F27 Mark 500, G-BVOB

AAIB Bulletin No: 2/2000	Ref: EW/G99/12/03	Category: 1.1
Aircraft Type and Registration:	Fokker F27 Mark 500, G-BV0	DB
No & Type of Engines:	2 Rolls-Royce Dart 532-7 turboprop engines	
Year of Manufacture:	1968	
Date & Time (UTC):	8 December 1999 at 2357 hrs	
Location:	Liverpool Airport	
Type of Flight:	Public Transport (Cargo)	
Persons on Board:	Crew - 2 - Passengers - None	
Injuries:	Crew - None - Passengers - N/A	
Nature of Damage:	Substantial damage to tail skid and skin on rear underside of fuselage	
Commander's Licence:	Airline Transport Pilot's Licence	
Commander's Age:	56 years	
Commander's Flying Experience:	7,225 hours (of which 213 we	re on type)
	Last 90 days - 82 hours	
	Last 28 days - 20 hours	
Information Source:	Aircraft Accident Report Form	n submitted by the pilot

## History of flight

The aircraft was approaching Runway 27 at Liverpool Airport. The surface wind was 240°/27 kt with gusts to 33 kt; there was no other significant weather. Although there had been no windshear reported, it was turbulent and the commander decided to add 5 kt to the approach speed. The wind was gusty and he assessed the mean crosswind component as 15 kt; VAT had been calculated as 95 kt.

At about the time the aircraft crossed the threshold, the commander noticed a 10 kt IAS decrease; he reported that, although the mean speed was 95 kt it was fluctuating  $\pm 10$  kt during the latter stages of the approach. He used a combination of crab and wingdown techniques to counter the crosswind. The power was reduced and the sink rate checked with elevator just before the

touchdown which he described as firm. It was not until an engineer drew it to his attention after shutdown that the commander was aware of the tailscrape.

## Damage to aircraft

The tailskid was damaged and there was substantial damage to the surrounding area to the rear of the pressure bulkhead. There was a hole in the fuselage skin, which measured 12 inches by 2.5 inches. The under fuselage skin suffered minor scraping damage over an area extending about 4.5 feet forward of the bulkhead.

## Flight operations manager's comment

Under normal conditions, it is an accepted technique on the F27 to close the throttles completely shortly before touchdown. In gusty, crosswind conditions this technique can lead to what appears to have happened in this accident. The immediate loss of lift on power reduction caused an increase in descent rate which the commander was unable to arrest by increasing the pitch attitude; more control would have been available had some power been maintained throughout the flare.