S4/2001 - AS332L, G-BKZE

AAIB Bulletin No: S4/2001	Ref: EW/C2001/11/1	Category: 2.1
Aircraft Type and Registration:	AS332L, G-BKZE	
No & Type of Engines:	2 Turbomeca Makila 1A turboshaft engines	
Year of Manufacture:	1983	
Date & Time (UTC):	1254 hrs on 10 November 2001	
Location:	80 miles West of Shetland Isles	
Type of Flight:	Public Transport	
Persons on Board:	Crew 1	Passengers - Nil
Injuries:	Crew 1 Severe	Passengers N/A
Commander's Licence:	Airline Transport Pilots Licence (H)	
Commander's Age:	37 years	
Commander's Flying Experience:	2 7791 hours (1800 on type)	
	Last 90 days 147 hours	
	Last 28 days 40 hours	
Information Source:	AAIB Inspectors Investigation	

History of the flight

The aircraft had been contracted to transport ship's crew from Aberdeen to a drilling ship located about 80 miles to the west of the Shetland Isles. The ship was positioned to the north of a cold front lying between the north coast of Scotland and the West Coast of Norway. A weather observation made on the ship at about 0830 hrs gave a surface wind of 260°/25 kts, cloud base at 800 ft in light mist and rain. Helideck movements were within operational limits and the vessel heading was given as 259°. About ten minutes prior to landing the helicopter crew were given a surface wind of 285°/34kts and helideck movements within operational limits.

The aircraft landed on the ship at 1242 hrs, with the captain as handling pilot, on a heading of 295°. The captain remained on board the aircraft with the rotors running whilst the passengers disembarked and the co-pilot assisted with refuelling. At about 1247 hrs the ship's dynamic positioning system lost heading control and, unknown to the helicopter captain, the ship's heading started to drift slowly to the right. As the ship's heading increased a list of approximately 1° to starboard developed and at 1254 hrs, with the aircraft heading now about 330°, the aircraft toppled

over to the right. As the main rotors impacted the deck they broke up and the co-pilot received a severe leg injury from flying debris.

Investigation

The Chief Inspector of Air Accidents has ordered an Inspector's Investigation into the circumstances of this accident under the provision of the Civil Aviation (Investigation of Air Accidents and Incidents) Regulations 1996. Initial analysis of the helicopter's flight data recorder indicates that all Automatic Pilot System channels were disconnected at touchdown, the collective lever was down and cyclic control remained neutral for the duration that the helicopter was on deck. Examination of the wreckage revealed that the nose wheel lock and parking brake were both engaged.