## Piper PA-25-235 Pawnee D, G-BEII

## AAIB Bulletin No: 6/2000 Ref:EW/G2000/03/02 Category:1.3

## INCIDENT

Aircraft Type and Registration:	Piper PA-25-235 Pawnee D, G-BEII
No & Type of Engines:	1 Lycoming O-540-B2C5 piston engine
Year of Manufacture:	1976
Date & Time (UTC):	5 March 2000 at 1430 hrs
Location:	Eggborough, South of Selby, N Yorks
Type of Flight:	Private
Persons on Board:	Crew 1 - Passengers - None
Injuries:	Crew None - Passengers - N/A
Nature of Damage:	Loss of tailwheel assembly
Commander's Licence:	Private Pilot's Licence
Commander's Age:	N/A
Commander's Flying Experience:	780 hours (of which 380 are in gliders)
	Last 90 days - N/A
	Last 28 days - N/A
Information Source:	Aircraft Accident Report Form submitted by gliding club

G-BEIIhad returned from its Annual Inspection on Friday 3 March and on thefollowing day completed some 15 to 20 aerotows. After about 10 tows on Sunday 5 March the pilot of theglider being towed saw the tailwheel assembly drop away from the tug aircraftand fall towards the earth. Thisoccurred at 3,500 feet and the tug pilot was unaware of the loss until helanded on the runway, when he heard a scraping sound after landing. As G-BEII slowed, it appeared that the noisewas coming from the rear of the aircraft. The pilot thought that the tailwheel tyre was flat so he taxied carefullyand was surprised to find that the tyre, wheel and fork assembly were allmissing. The missing parts have notbeen found.

In the PA25 Pawnee aircraft, the tailwheel design is very similar to that in aPA18 Super Cub. The tailwheel itself isheld in a fork assembly that allows the wheel to castor under taxiingconditions. This castoring fork issecured to its stationary fitting by a vertical spindle with, at its lower end, a castellated nut and split pin. Withan inflated tyre in place, the nut and split pin would not normally be visible.

TheAnnual Inspection had not shown that any work was necessary in the area of thetailwheel other than servicing of the wheel itself, which would be performed without removing the fork. There is noready explanation for this occurrence but the possibilities exist that, at some previous maintenance input, the split pin had been inadvertently left outduring re-assembly or that, at a later time, the split pin had beendeliberately removed.