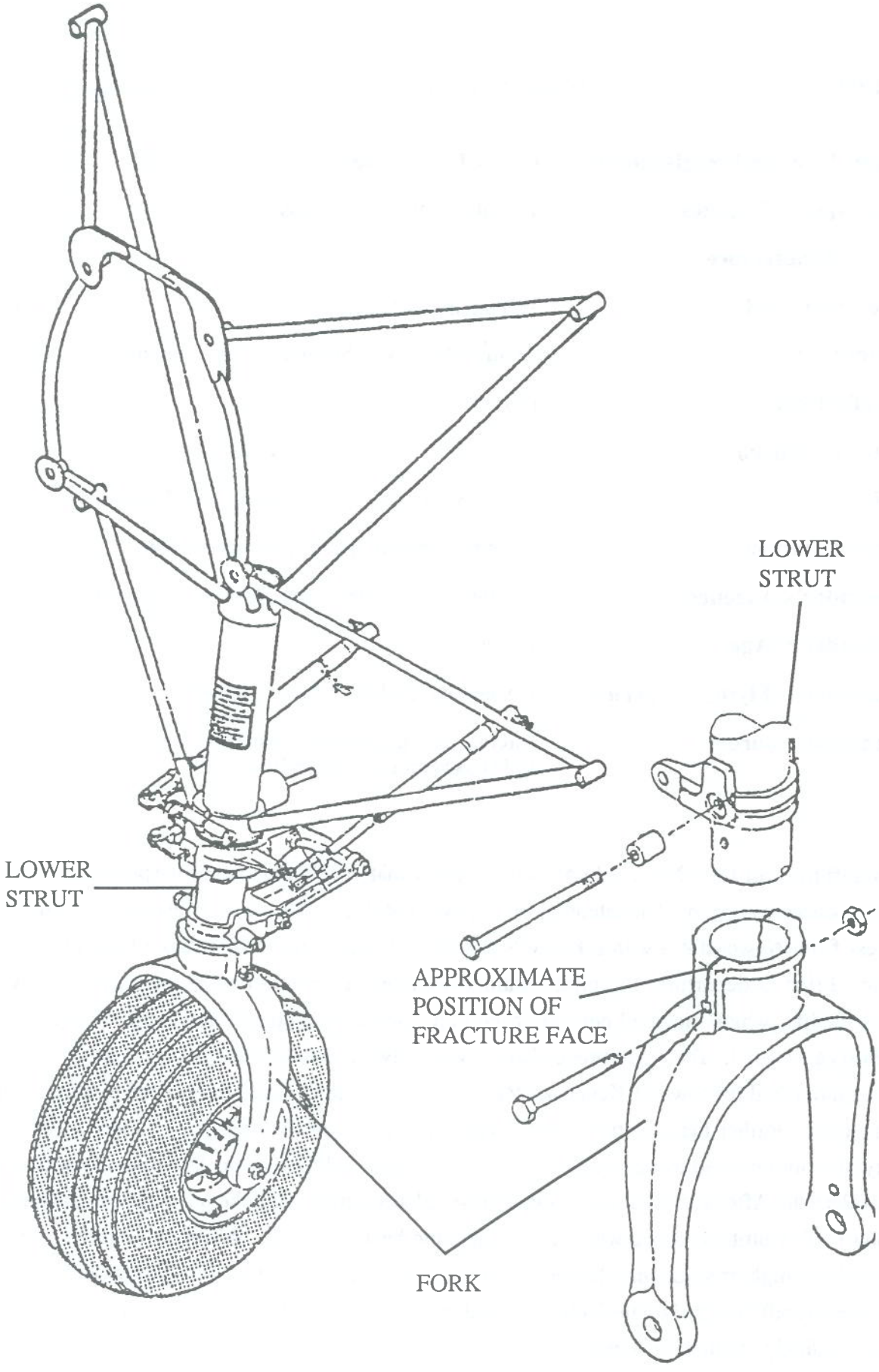
No: 4/92 **Ref: EW/G92/01/04** **Category: 1c**

Aircraft Type and Registration:	Cessna 152 Commuter, G-BMMM	
No & Type of Engines:	1 Lycoming O-235-L2C piston engine	
Year of Manufacture:	1981	
Date & Time (UTC):	13 January 1992 at 1608 hrs	
Location:	Luton Airport, Bedfordshire	
Type of Flight:	Private	
Persons on Board:	Crew - 2	Passengers - None
Injuries:	Crew - None	Passengers - N/A
Nature of Damage:	Nose-leg assembly, propeller, engine shock-loaded	
Commander's Licence:	Airline Transport Pilot's Licence with Instructor rating	
Commander's Age:	36 years	
Commander's Flying Experience:	7,500 hours (of which 3,500 were on type)	
Information Source:	Aircraft Accident Report Form submitted by the pilot and examination of failed components supplied to AAIB	

The aircraft was being flown by two qualified pilots for the purpose of flying instructor training. Following a normal landing, the wheel assembly detached from the nose landing gear leg and the aircraft came to rest on the runway.

Examination of the recovered nose landing gear components revealed that the aluminium-alloy nosewheel attachment fork had fractured at its upper end where it joined the lower strut (see diagram). This fracture appeared to have originated in the bore of one of the bolt holes in the fork which accommodates the bolt securing the fork to the lower strut. The fracture face was found to contain an area of stress-corrosion adjacent to the inboard end of the bolt-hole bore. The bore in this area showed visible deposits of ferrous corrosion presumably originating from the steel bolt. The bolt was not recovered but it was evident that electro-chemical action had been present at that point and contributed to the onset of the stress corrosion observed in the fracture face of the fork.



NOSE GEAR INSTALLATION