Reims Cessna F172N, G-BFMX, 5 March 1997

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Aircraft Type and Registration:	Reims Cessna F172N, G-BFMX
No & Type of Engines:	1 Lycoming O-320-H2AD piston engine
Year of Manufacture:	1978
Date & Time (UTC):	5 March 1997 at 1327 hrs
Location:	Near Farley Farm Airstrip, Hampshire
Type of Flight:	Private
Persons on Board:	Crew - 1 - Passengers - None
Injuries:	Crew - None - Passengers - N/A
Nature of Damage:	Propeller bent, damage to front lower cowling, exhaust pipe, wheel strut fairings, plastic cowls, tailplane and elevator
Commander's Licence:	Private Pilot's Licence
Commander's Age:	36 years
Commander's Flying Experience:	229 hours (of which 71 were on type)
	Last 90 days - 3 hours
	Last 28 days - 1 hour
Information Source:	Aircraft Accident Report Form submitted by the pilot and information from repair/overhaul facilities

The pilot arrived at Farley Farm Airstrip and removed the coverfrom the aircraft before checking the fuel contents. He thenchecked for water using a fuel strainer/cup at all three drain-points. On finding a small quantity of water (which he estimated as 2to 3 cc) from the engine drain point, he drained a considerableamount of fuel until he was satisfied that no water remained.

The pilot then ran the engine up to temperature, stopped it andcompleted a full set of external checks, including a further checkon the three fuel drain points, during which no water was found.

The pilot reported that internal checks, start-up, taxi and powerchecks were all normal and the engine ran very smoothly. In viewof the wetness of the strip, he opted to carry out a short-fieldtake off. At approximately 300 feet AGL the engine abruptly stoppeddelivering power. The pilot carried

out a quick panel scan, selecteda field, transmitted a mayday call and switched off the fuel andignition. He then realised that he would be unable to reach hischosen field and therefore touched-down in the field before it. The aircraft rolled for approximately 50 yards before passingthrough a hedge and stopping on a road.

Personnel involved in salvaging the aircraft later reported thatwater was found to be present in the carburettor bowl. Duringsubsequent repairs the fuel strainer bowl was found to have evidenceof internal corrosion and one of the seals on a fuel filler capwas also found to be broken. The carburettor was sent for specialistservicing during which a considerable amount of water was foundremaining inside. No specific defects were found, however, otherthan a number of slightly worn items which typically require replacementduring carburettor servicing. No pre-impact defects were foundin the remainder of the aircraft. After repair and re-assembly,the engine was successfully ground run and a Certificate of Airworthinessrenewal test flight conducted before the aircraft was returnedto service.

It is known that the aircraft was parked in the open, out of use,for an extensive period before the accident flight. During thisperiod a cover was used which did not extend over the fuel fillercaps and the aircraft was parked on slightly sloping ground. The Cessna 172 has no wing dihedral and hence the undersides ofthe tanks are almost flat and do not slope towards the drain valvelocations. It is thus possible for an accumulation of water tobe present in one of the tanks and for it to remain in a cornerremote from the drain when the aircraft is not parked on levelground. Water will thus not be readily detectable during fueldrain checks, unless the aircraft is re-orientated and the drain-pointsre-tested.