

**Aviation Safety Investigation Report
198802391**

Socata MSTB20

7 September 1988

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NOTE: All air safety occurrences reported to the ATSB are categorised and recorded. For a detailed explanation on Category definitions please refer to the ATSB website at www.atsb.gov.au.

Occurrence Number: 198802391 **Occurrence Type:** Accident

Location: Dubbo Aerodrome NSW

Date: 7 September 1988

Time: 1722

Highest Injury Level: Nil

Injuries:

	Fatal	Serious	Minor	None
Crew	0	0	1	1
Ground	0	0	0	-
Passenger	0	0	0	1
Total	0	0	0	2

Aircraft Details: Socata MSTB20

Registration: VH-JTI

Serial Number: 379

Operation Type: Aerial Work

Damage Level: Substantial

Departure Point: Bankstown NSW

Departure Time: 1426

Destination: Dubbo NSW

Approved for Release: 9th May 1990

Circumstances:

During the pre-landing checks the right main and nose gear gave normal green light "gear-down" indications. The left main gear green light remained extinguished and the red gear warning light illuminated. The instructor took over control of the aircraft and proceeded to carry out the emergency procedures, including recycling of the landing gear selector. Selection of "gear-up" resulted in no change to the position indicators, and no audible indication of the landing gear moving up. When power was reduced, the audible warning for "gear not locked" was heard. The emergency extension procedure was then carried out but was also unsuccessful. A number of low passes were carried out under the observation of ground engineers who reported that the left gear appeared to be not fully down. Yawing and "g" manoeuvres failed to lock the gear down. During the subsequent landing roll the left main gear collapsed, the aircraft swung to the left and departed the runway. At this point the right main gear also collapsed. The failure of the normal landing gear extension system was attributed to lack of hydraulic pressure but the reason for this was not determined. The failure of the emergency landing gear system was the result of a binding downlock assembly which did not allow the lock to fully engage. The landing gear balance spring was too weak to pull the left leg overcentre. Subsequent receipt from the manufacturer of new springs of different tension is considered to have solved the problem. This accident was not the subject of an on-scene investigation.

Significant Factors:

The following factors were considered relevant to the development of the accident

1. The main landing gear failed to extend due to lack of hydraulic pressure for reasons which were not established.
2. The Emergency landing gear lowering system failed due to weak balance spring tension.