COMMONWEALTH OF AUSTRALIA
DEPARTMENT OF CIVIL AVIATION

AIRCRAFT ACCIDENT INVESTIGATION SUMMARY REPORT

Reference: AS/752/1059.

1. LOCATION OF ACCIDENT

	Height a.m.s.l. (ft)	Date	Time (Local)	Zone
Currandooley, 16 n.m. North-East Canberra.	2230	22.11.75	1122	ESuT

2. THE AIRCRAFT

Make and Model	Registration	Certificate of Airworthiness	Valid from	Valid to
E. Schneider ES52/111.	VH-GFT		30. 8.75	30. 8.78

Registered Owner (name and address)	Operator (name and address)	Degree of damage to aircraft
George Petru, 36 Banjalong Crescent, Aranda. A.C.T. 2614.	Federal Soaring Club, c/- 4 Hallett Place, Kanbah. A.C.T.	Substantial.
		Other property damaged: Nil.

Defects discovered

(i) Aileron control cable tensions found to be excessively slack.

(ii) Evidence of insufficient lubrication on aileron control torque tube rear bearing.

3. THE FLIGHT

Last or intended departure point	Time of departure	Next point of intended landing	Purpose of flight	Class of operation
Currandooley	1122	Currandooley	Test	Private

4. THE CREW

Name	Status	Age	Class of licence	Hours on type	Total hours	Degree of injury
Peter MOORES	Pilot	37	Assistant Gliding Instructor.	14.58	925	Serious
George PETRU	Pilot-Observer	53	Senior Gliding Instructor.	50.12	427	Fatal

5. OTHER PERSONS *(all passengers and persons injured on ground)*

Name	Status	Degree of injury	Name	Status	Degree of injury
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6. CONTRAVENTIONS OF REGULATIONS AND ORDERS

Regulation or Order No.	Nature of contravention

7. RELEVANT EVENTS

In the week before the accident, the glider had undergone some repairs to the landing gear. At the same time maintenance operations were carried out on the aileron control system. During the rigging of the glider on the day of the accident, further adjustments were made to the aileron control system including a reduction of the control cable tensions. The glider was being test flown after these repairs and adjustments and was being launched by aero tow.

The first test flight was abandoned during take-off when the glider experienced severe aileron flutter. The pilot landed straight ahead on the available airstrip.

After further adjustment to the aileron control cables, in which the control cable tension was increased, a second test flight was attempted. Aileron flutter was again observed but the pilot did not immediately abort the take-off. At a height of about 150 feet, having passed the boundary of the airfield, the glider released and commenced a turn to the right. While in the turn, the glider entered a spin, completing one and a half turns before the rotation was stopped. While still in an almost vertical attitude, the glider struck the ground.

8. OPINION AS TO CAUSE

The cause of the accident was that the pilot lost control of the glider during a turn and recovery could not be effected in the height available. The probable cause of the loss of control was that buffet, induced by aileron flutter, masked the pre-stall buffet which normally provides stall warning.

SUMMARY REPORT NOT RELEASED.

GOVERNMENT OF AUSTRALIA DEPARTMENT OF TRANSPORT

AIRCRAFT ACCIDENT INVESTIGATION SUMMARY REPORT

Publication of this report is authorised by the Secretary under the provisions of Air Navigation Regulations 283 (1)

Reference No. AS/752/1059

1. LOCATION OF OCCURRENCE

	Height a.m.s.l.	Date	Time (Local)	Zone
Currandooley N.S.W., 30 kilometres east-north-east of Canberra	2230 feet	22.11.1975	1122	E,Su.T.

2. THE AIRCRAFT

Make and Model	Registration	Certificate of Airworthiness
Edmund Schneider ES 52/MK1111	VH-GFT	Valid from 30.8.75 to 30.8.78

Certificate of Registration issued to	Operator	Degree of damage to aircraft
George Petru 36 Banjalong Crescent, ARANDA. A.C.T.	Federal Soaring Club, C/- 4 Hallet Place, KANBAH, A.C.T.	Substantial
		Other property damaged: NIL

Defects discovered

Aileron control cable tensioning too slack

3. THE FLIGHT

Last or intended departure point	Time of departure	Next point of intended landing	Purpose of flight	Class of operation
Currandooley	1122	Currandooley	Aircraft Airtest	Private

THE CREW

Name	Status	Age	Class of licence	Hours on type	Total hours	Degree of injury
Peter MOORES	Pilot in command	37		14	925	Serious
George PETRU	Pilot	53		50	427	Fatal

5. OTHER PERSONS (All passengers and persons injured on ground)

Name	Status	Degree of injury	Name	Status	Degree of injury

6. RELEVANT EVENTS

During the week preceeding the accident, workshop repairs and rectification maintenance, including aileron control system lubrication and adjustment were carried out on the aircraft. The aileron control system adjustment was precipitated by the fact that aileron control was heavy to operate in flight.

At Currandooley, when the aircraft was being assembled and rigged prior to flight, further adjustments were made to the aileron control system, resulting in a reduction in aileron control cable tensions.

After inspection of the assembled glider had been completed Mr. Moores as pilot in command occupied the right rear seat and Mr. Petru the front seat, the intention being to carry out a test flight.

The first launch, by aero tow, was abandoned shortly after the glider had lifted off to about eight feet above ground level because the pilot experienced externally induced control deflections. Despite this abnormality he was able to retain control and land straight ahead utilising the remaining strip length.

Discussions between the pilots, the tow pilot and persons on the ground established that aileron flutter had occurred and been observed, and the aileron cable tensioning was increased to provide a remedy. A second test flight was then commenced under aero tow with Mr. Moores and Mr.Petru occupying the same position as on the first flight

During the second launch, aileron flutter, although less violent than before, was again seen from the tow aircraft and by observers on the ground, however this flight was continued until the glider was approximately over the strip boundary and at about 150 feet above ground level when it released from tow. A right turn was begun, suggesting that the pilot intended to return and land on the strip, although the terrain ahead was cleared and flat and quite suitable for a forced landing. In the turn the angle of bank increased, the nose dropped and the aircraft entered either a spin or a spiral dive. It did not recover and impacted the ground in a steep nose down attitude.

7. OPINION AS TO CAUSE

The pilot in command has no recollection of events subsequent to the first flight.

The cause of the accident was that when control of the aircraft was lost during the turn, there was insufficient clearance above the terrain for effective recovery action.

It is possible that the buffet which normally preceeds the onset of a stall was masked by buffet induced by aileron flutter.

Approved for publication	Delegate of the Secretary	Date

GOVERNMENT OF AUSTRALIA DEPARTMENT OF TRANSPORT

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1. LOCATION OF OCCURRENCE

	Height a.m.s.l.	Date	Time (Local)	Zone
30 kilometres east-north-east of Canberra	2230 feet	22.11.75	1122	ESuT

2. THE AIRCRAFT

Make and Model	Registration	Certificate of Airworthiness
Edmund Schneider ES 52 III	VH-GFT	Valid from 30.8.75 to 30.8.78

Certificate of Registration issued to	Operator	Degree of damage to aircraft
George Petru, 36 Banjalong Crescent, ARANDA, A.C.T.	Federal Soaring Club, C/- 4 Hallett Place, KANBAH A.C.T.	Substantial
		Other property damaged: Nil

Defects discovered: Excessive cable slackness in aileron control system. ~~Aileron control cables excessively slack.~~

3. THE FLIGHT

Last or intended departure point	Time of departure	Next point of intended landing	Purpose of flight	Class of operation
Currandooley	-	Currandooley	Test	Private

4. THE CREW

Name	Status	Age	Class of licence	Hours on type	Total hours	Degree of injury
Peter MOORES	Pilot	37		14	925	Serious
George PETRU	~~Observer~~	53		50	427	Fatal

5. OTHER PERSONS (All passengers and persons injured on ground)

Name	Status	Degree of injury	Name	Status	Degree of injury

6. RELEVANT EVENTS

In the preceding week work had been carried out on the glider, including the aileron control system. The aileron controls had been "heavy" to operate in flight and on the morning of 22.11.75 adjustments were made to lower aileron cable tension, with the aim of trying to reduce this "heaviness". It was then decided to test fly the glider with Mr. Moores as pilot in command in the rear seat and Mr. Petru in the front seat. During take-off under aero-tow aileron flutter occurred and after releasing the tow line at a height of 8-10 feet Mr. Moores landed the glider straight ahead, utilising remaining strip length. Aileron flutter was present throughout the brief airborne section of the flight but the pilot was still able to retain control of the glider.

Following discussion on the ground the aileron cables were adjusted to increase tension for the purpose of trying to prevent aileron flutter. A second test-flight was then commenced under aero-tow with Mr. Moores and Mr. Petru occupying the same ~~control~~ positions as on the first flight. At about the time of lift off the ailerons were again seen to commence to flutter but the glider continued under tow beyond the airfield boundary. At a height of about 150 feet the glider released and commenced a turn to the right, with the pilot's intention evidently being to land back on the airstrip. During the turn the nose dropped and the glider started spinning to the right, before impacting the ground in a steep nose down attitude.

7. OPINION AS TO CAUSE

The cause of the accident was that following the onset of aileron flutter and initiation of a turn back towards the runway from a low height, control of the glider was lost. The reason for the loss of control was not determined. The cause of the aileron flutter was the adoption of unsound maintenance procedures which resulted in the aileron control cables being inadequately tensioned.

Approved for publication	Delegate of the Secretary	Date