

**AAIU Report No: 1998/003**  
**AAIU File No: 19970025**  
**Published: 28/05/1998**

**Name of Operator:** Private

**Manufacturer:** S.N.C.A.N. France

**Model:** Stampe SV4C

**Nationality:** Irish

**Registration:** EI-BLB

**Serial Number:** 323

**Location:** Clonteen, Carrick-on-Shannon, Co.  
Roscommon

**Date & Time:** 1 June 1997; 1830 hrs UTC

### **Notification**

The Air Accident Investigation Unit (AAIU) was notified of this accident at 2130 hrs UTC, on 1st. June 1997, by Air Traffic Control (ATC), Dublin Airport.

### **Synopsis**

EI-BLB departed Sligo Airport on the afternoon of Sunday 1st. June 1997, having taken part in a fly-in at Sligo Airport on the previous day. On board were the pilot and a passenger. In the company of some other aircraft it landed at a private field which was owned by the passenger and which was intended for use as a future private airfield. As far as can be established four other aircraft landed at this field at Meera, Carrick-on-Shannon, with EI-BLB.

All the aircraft took off to over fly the town of Carrick-on-Shannon as part of a festival organised by the Chamber of Commerce.

EI-BLB again had the pilot and passenger on board and carried out some aerobatics near Carrick-on-Shannon, returned and landed at the private field at Meera. After a late lunch in an hotel in Carrick-on-Shannon, EI-BLB departed this time with the pilot solo to return from Meera to Abbeyshrule Airfield.

EI-BLB followed the line of the Shannon River from Carrick-on-Shannon Southwards. EI-BLB was seen by several eye-witnesses flying at very low level following the line feature of the Jamestown Canal.

As the aircraft approached the Albert Lock on the Jamestown Canal it struck power lines which stretched across the Canal. EI-BLB was seen to bank to the left and dive steeply into a small field where it came to rest with the engine and fuselage separated. The pilot was fatally injured.

The accident occurred at approximately 1830 hrs UTC in daylight.

## 1. **Factual Information**

### 1.1 **History of the Flight**

EI-BLB departed Sligo Airport on the afternoon of Sunday 1 June 1997. On board were the pilot and a passenger. The pilot had taken part in a fly-in at Sligo Airport on the previous day.

The passenger, also a qualified pilot, who had travelled to Sligo by road that morning, had prepared over some months a twenty acre field at Meera, Carrick-on-Shannon, which he intended to develop as an airfield.

EI-BLB was accompanied by other aircraft from Sligo which also landed at Meera. After some light refreshments all the aircraft overflew the town of Carrick-on-Shannon as part of a festival which had been organised by the local Chamber of Commerce.

The accompanying aircraft returned to Meera and EI-BLB carried out a short series of aerobatics near the town. EI-BLB then returned to Meera and landed. After late lunch in a local hotel the pilot uplifted some fuel "Mogas" and departed for Abbeyshrule, his home base.

Routing along the Shannon, EI-BLB was observed by several witnesses to be following the line of the Jamestown Canal. At the Albert Lock, EI-BLB struck power lines in a level attitude which stretched across the Canal.

The left lower wing was seen to fall downwards and the aircraft turned left and dived steeply into a small field, where it came to rest facing the opposite direction, with the engine and fuselage separated. The pilot was fatally injured. There was no fire.

The accident occurred at approximately 1830 hrs UTC in daylight at Clonteen, Drumsna, Carrick-on-Shannon, Co. Roscommon, at position 53.54N 08.00W.

### 1.2 **Injuries to Persons**

Injuries	Crew	Passengers	Others
Fatal	1	None	None
Serious	None	None	None
Minor/None	None	None	

### **1.3 Damage to Aircraft**

The aircraft was substantially damaged.

### **1.4 Other damage**

Examination of the recovered cables revealed evidence of propeller slashes, however, the cables were not cut through. Both cables failed in ductile overload.

### **1.5 Personnel Information**

The pilot was male aged 53 years and 10 months. He held an Irish Pilots Licence (PPL), valid for the following classes:-

*Single Engine Landplane with piston engines;*

*Single Engine Seaplane with piston engines;*

*Multi Engine Landplane with piston engines.*

*Last Medical Class 2:-* 11 June 1996

*Last Licence Renewal PPL:-* 11 June 1996; Expiry 30 June 1997

*Total Flying Experience:-* 4,000 hrs.

*Type operated:-* Since 1983

### **1.6 Aircraft Information**

The aircraft held a valid Certificate of Airworthiness, No. 610. First issued in Ireland on 27th. July 1991 and renewed every two years thereafter, the last renewal being from the 23 June 1995 to 22 June 1997.

There were no known or discovered deficiencies which could have any bearing on the accident.

The type of fuel recovered from the aircraft was MOGAS. This had been uplifted from a motor fuel retail outlet at Carrick-on-Shannon shortly before the flight.

The Stampe SV4C is a two seat training bi-plane of wood with fabric covering. The wings are single bay, staggered and swept back with steel tube interplane struts. It has non-retractable split axle type landing gear with castoring tailwheel.

It is powered by a 140hp Renault four cylinder, in-line inverted air cooled engine, with a fixed pitch wooden propeller.

## 1.7 Meteorological Information

General weather situation SW Leitrim area between 1500 and 1900 UTC, an anticyclone of 1036 hPa centred approximately 58°N 04°W maintained an E/SE flow over the area.

*Mean Wind Direction and Strength:-* Generally 09012 - 15kt at surface. At 2000 feet the wind was 120/20-25kt.

*Maximum Wind Gusts Between 1500 and 1900 UTC:-* 25kt.

*Visibility:-* 10+km

*Weather:-* Nil

*Cloud:-* Generally FEW/SCT 2000 to 3000 feet.

*Surface Temperature:-* 18°C

*Freezing Level:-* 8500 feet

*msl Pressure:-* 1026/1027 hPa

## 1.8 Aids to Navigation

Not applicable.

## 1.9 Communication

Not applicable.

## 1.10 Aerodrome Information

Not applicable.

## 1.11 Flight Recorders

Not fitted nor required to be so.

## 1.12 Wreckage and Impact Information

Small pieces of wreckage were discovered at the Lock directly beneath the wires. These included a large portion of a propeller blade part and the pitot tube.

The main wreckage of the aircraft was contained in a small area consistent with a high velocity vertical impact. The engine and fuselage had separated on impact. The engine aligned roughly to the direction of impact with the wings and fuselage facing the opposite direction.

The fuselage had telescoped and disintegrated between the engine firewall and the cockpit. The fuselage to the rear of the aft cockpit was intact and the tail plane rudder and elevator control surfaces remained attached.

Examination of the wreckage at the site revealed all control runs free, apart from some compression restrictions. All control surfaces were attached and moveable in the correct sense, including the lower and upper ailerons and the connecting push rods.

The upper and lower wings suffered extensive damage. The left upper wing was fractured in three places. Both upper wing leading edges were pushed rearwards to the leading edge spar. The Interplane struts on the right hand side were straight and intact with light indications of a wire strike. These on the left were severely damaged with evidence of wire strike 4" from the top to the pitot fitting 9" lower. The leading left strut was severely distorted into a Z shape. The pitot probe had sheared and was found separate from the main wreckage at the lock. The rear left strut was also distorted into a V shape and had evidence of wire strike.

The engine was separated from the fuselage with some compression on the underside with one propeller blade still attached. The other blade had separated 12" from the centre of the boss.

The propeller was reassembled in the AAIU hangar, to where the wreckage had been removed, and almost the entire propeller blade was recovered. The propeller had wire strike indications along the leading edge approximately 15" from the tip.

The undercarriage assembly was intact and had been pushed rearwards underneath the aircraft possibly damaging the lower left wing. The undercarriage had no indications of wire strike.

There is no evidence of wire strike which would have caused spar failure, and this is considered to have occurred at impact.

The cockpit column had failed in its fitting in the cockpit floor. The fittings at the control column base to the aileron and elevator controls were intact.

### **1.13 Medical and Pathological Information**

A Post Mortem carried out at the Longford/Westmeath General Hospital at Mullingar, Co. Westmeath revealed that death was due to shock and haemorrhage due to massive trauma.

No trace of alcohol or prohibited substance was discovered.

#### **1.14 Fire**

There was no fire.

#### **1.15 Survival Aspects**

Ground impact forces were considerable, making survival unlikely. The lap straps of the 5 point harness failed on impact at points midway between the attachment and the locking mechanism. The pilot may have suffered injuries from the initial wire strike, as an eye witness observed waving motions from the pilot using both his hands.

The lock keeper who had witnessed the crash was at the crash site almost immediately, but the pilot was beyond first-aid assistance.

Within minutes an ambulance driver and nurse and two doctors were at the scene as well as a Garda presence. All were from Carrick-on-Shannon.

It is considered that impact from the vertical forces was unsurvivable.

#### **1.16 Tests and Research**

Two separate samples of fuel from EI-BLB were sent for laboratory analysis. Both samples contained no water and no contaminants. The fuel met the Irish and British standards in density and distillation tests. There was nothing to indicate that the fuel would not function satisfactorily in an engine.

#### **1.17 Additional Information**

N/A

#### **1.18 Useful and Effective Investigation Techniques**

N/A

### **2 Analysis**

The pilot of EI-BLB was an experienced and qualified operator of light aeroplanes. He was also an aircraft mechanic and dedicated aircraft restorer. His aviation company was used far and wide in the General Aviation Community in all aspects of club and sport flying.

The weather conditions were ideal for this simple transition flight from Carrick-on-Shannon to Abbeyshrule, which should have been straight forward and trouble free.

The fact that the pilot owned a float plane and was kept at the Albert Lock may have induced him to give a fly by or low run towards the lock. Having operated for years in the area and having operated his float plane from the lock he must have been aware of the existence of the overhead cables.

Unfortunately it is not unusual for pilots to carry out low runs, or fly pasts. In this case the pilot had on previous occasions carried out low passes over the lock in both land planes and float planes. The run towards the lock was carried out, out of sun making it unlikely that he was blinded. Having struck the wires the aircraft continued along the line of the canal before turning left and descending steeply.

An eye witness just slightly past the lock noticed what she thought was the pilot waving, with a hand out each side of the cockpit which could suggest that either the cable or part of the aircraft struck the pilot in the face which may have incapacitated him somewhat. Blood stains along the port side of the fuselage and some blood staining on the tail suggest that these occurred before impact.

It is not unknown for aircraft to strike power lines or overhead cables and to return to land safely. The known cases involved all metal type aircraft and propellers, with enclosed cockpits.

The nature of the materials used in the Stampe's fuselage and propeller i.e. fabric and wood, would make recovery from a wire strike, excluding pre-impact injuries to the pilot very difficult.

### **3. Conclusions**

- (i)** The aircraft held a current Certificate of Airworthiness
- (ii)** The aircraft had a current Certificate of Registration.
- (iii)** The aircraft was properly maintained in accordance with the appropriate Light Aircraft Maintenance Schedule (LAMS).
- (iv)** The pilot was properly licensed and qualified for the flight.
- (v)** The pilot was medically fit for the flight.
- (vi)** No mechanical defect was found in the airframe or engine which could have caused the accident.
- (vii)** The fuel used in the aircraft was suitable for the engine type and post crash analysis found no contaminants which would have caused engine failure or stoppage.
- (viii)** A Post Mortem examination of the pilot found no presence of alcohol or prohibited substances.
- (ix)** The weather conditions did not affect the conduct of the flight.

4. **Probable Cause**

The probable cause of this accident was failure to ensure adequate clearance between the aircraft and known obstacles in the flight path.

5. **Recommendations**

This Report does not sustain any Recommendations.