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Report RL 2008:12e

# Accident to aircraft SE-FYK at Nyckelsjön, D län (Södermanland county), on 7 June 2008

Case L-10/08

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2008-12-10

L-10/08

The Swedish Civil Aviation Authority SE-601 73 NORRKÖPING, Sweden

### **Report RL 2008:12e**

The Swedish Accident Investigation Board has investigated an accident that occurred on 7 June 2008 at Nyckelsjön, near to Vängsö airport, D county, involving an aircraft with registration SE-FYK.

In accordance with section 14 of the Ordinance on the Investigation of Accidents (1990:717) the Board herewith submits a report on the investigation.

Göran Rosvall

Sakari Havbrandt

## **Report RL 2008:12e**

L-10/08

Report finalised 10.december 2008

Aircraft: registration and

Class, airworthiness Normal/valid Certificate of Airworthiness

**Owner** 

Time of occurrence

2008-06-07, 11:30 hours, in daylight. Comment: All times are given in Swedish daylight

Östra Sörmlands Flygklubb (Flying Club)

saving time (UTC + 2 hours)

SE-FYK, PA 18-150

Place Nyckelsjön close to Vängsö airport, D

(posn. 59°06' N 017°1.2' E; 17 m above sea

level)

Type of flight Training flight

Weather According to SMHI's analysis: Easterly

wind, 10 knots, good visibility, no cloud,

+23°/+10°C QNH 1020 hPa.

Persons on board:

crew

Members

None Injuries to persons

Damage to aircraft Substantially damaged

Other damage None, no environmental effects

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Instructor:

Sex, age, licence Male, 63 years, B licence

6052 hours, of which 788 hours on type Total flying time Flying hours previous 90 146 hours, of which 13 hours on type days

204, of which 63 on type

Number of landings

previous 90 days Pilot:

> Sex, age, licence Male, 42 years, PPL

Total flying time 795 hours, of which 70 hours on type Flying hours previous 90

days

Number of landings

previous 90 days

12 hours, of which none on type 8

The Swedish Accident Investigation Board (SHK) was notified on 7 June 2008 that an aircraft with registration SE-FYK was involved in an accident at 11:30 hours on that day at Nyckelsjön, D county. The accident was investigated by SHK represented by Göran Rosvall, Chairperson and Sakari Havbrandt, Investigator in Charge. SHK was assisted by Lars Jonsson as an operations expert. The investigation was followed by Gun Ström, Swedish Civil Aviation Authority.

## Sequence of events, etc.

The purpose of the flight was for the pilot to perform a training flight, accompanied by an instructor in order to renew his authorisation for seaplane flying.

The pilot taxied out on to the lake and turned into wind to prepare for take-off. After full engine power was applied the aircraft began to plough through the water with its nose high. The pilot then decided to move the control column forward so that the aircraft would rise "on to the steep" whereby the floats would begin to plan out at an almost horizontal attitude along the surface of the water. At this point the pilot discovered that the control column was locked in its full rear position and notified this problem to the instructor.

The instructor then ordered the pilot to abandon the take-off, but he was unable to do this before the aircraft rose from the lake surface and climbed in a nose-high attitude to several metres height. At this stage the instructor took control of the flight in order to correct the situation, but the aircraft descended and struck the water surface with the nose pointing down.

According to the pilot, after the collision the aircraft stood vertical on the bottom of the lake, balancing on the tips of its floats. The depth of water at impact was about 1.5 m. Both on board were uninjured and were able to leave the aircraft. Soon afterwards the aircraft tipped over and ended upside down supported by the wings, resting on the bottom. Both occupants inflated their life vests and by alternately swimming and wading reach the shore, about 500 m from the point of impact.



The instructor has said that at the very start of the flight he reacted to the fact that the pilot had not read out the checklist but instead recalled the check items from memory.

According to the instructor, this meant that the pilot forgot to check that the rudder and ailerons had full and free movement. When the pilot began the take-off the instructor locked the control column in its rearmost position to bring to the attention of the pilot that things were not as they should be.

According to the pilot the entire taxying procedure from the pier out on to the lake was carried out with the control column fully back, and this was the normal procedure. The pilot stated that the wind was gusting and there were waves on the lake. After applying full power the aircraft accelerated quickly.

The pilot described that he never took in the instructor's command to abandon the take-off and from the outset it had been difficult to communicate via the aircraft intercom.

#### **Conclusions**

The fact that there were strong gusts of wind with waves on the lake could explain why the aircraft was able to take off before it had gone onto the steep, which is normally a prerequisite for taking off.

The difficulty in receiving instructions from the instructor via the internal aircraft communication system also probably contributed to a lack of support for the pilot in coming to the correct decision to abandon the take-off.

Clearer communication between the instructor and the pilot at an earlier stage of the flight would have ensured that all the items in the aircraft checklist had been checked and performed before take-off.

The accident was caused by unsuitable measures to emphasise the risk of the lack of aileron control being used.