### **ACCIDENT**

Aircraft Type and Registration: Ikarus C42 FB100 Bravo, G-OSPH

No & Type of Engines: 1 Rotax 912ULS piston engine

**Year of Manufacture:** 2012 (Serial no: 1205-7202)

Date & Time (UTC): 1 December 2020 at 1330 hrs

**Location:** Chilbolton Airfield, Stockbridge, Hampshire

Type of Flight: Private

Persons on Board: Crew - 1 Passengers - 1

**Injuries:** Crew - None Passengers - None

Nature of Damage: Landing gear collapsed

Commander's Licence: National Private Pilot's Licence

Commander's Age: 42 years

**Commander's Flying Experience:** 127 hours (of which 60 were on type)

Last 90 days - 23 hours Last 28 days - 7 hours

**Information Source:** Aircraft Accident Report Form submitted by the

pilot and further enquiries made by the AAIB

# **Synopsis**

The pilot normally flew this aircraft from the left seat; however, on this occasion he was flying a short cross-country flight from Blackbushe to Chilbolton whilst occupying the right seat. This meant that his hands were transposed on the control column and throttle lever from their usual position. During the landing, at approximately 5 ft to 10 ft agl, the pilot felt the aircraft descending more rapidly than he had intended. To correct the rate of descent, he instinctively pushed the control column forward rather than the throttle, which resulted in a hard landing during which the landing gear collapsed.

#### Aircraft description

The Ikarus C42 primary flight control consists of a control column mounted on a centre console between the pilot seats. There are two throttle levers pivoted on the cockpit floor directly in front of the seats between the pilot's legs.

# Pilot and passenger position in the cockpit

The pilot normally flew the aircraft from the left seat. However, as he was flying with an experienced passenger, who had also been his instructor, he reported that he "elected to fly" as the aircraft commander from the right seat.

The pilot's operating handbook does not specify which seat the aircraft commander should occupy. In conventional GA flying, the aircraft commander normally occupies the left seat unless they are a pilot under training with an instructor.

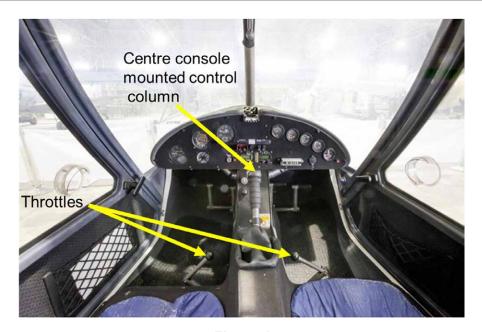


Figure 1

Example Ikarus C42 cockpit layout (Image © National Museums Scotland)

## **Pilot's comments**

The pilot was very clear as to the cause of this accident and identified the following causal factors:

- With a more experienced pilot, who had previously been his instructor, sitting next to him, his familiarity with the aircraft and destination caused him to feel that it was a routine flight. However, he had not identified the risks that the subtle differences in flying from the right seat might introduce.
- He normally flew from the left seat which meant that he operated the control
  column with his right hand and the throttle with his left hand. His hand
  positioning, when operating the aircraft from the right seat, was transposed.
  As he was landing, he instinctively corrected what he felt was a too rapid
  a descent; however, his automatic sub-conscious response moved his left
  hand forward on the control column rather than the throttle.
- The proximity of the aircraft to the ground left no time for the pilot to apply the correct control inputs and rectify the situation.

### **AAIB** comment

This accident illustrates what a seemingly minor change or difference can make to a routine flight. All types of flying require complex sets of processes and procedures. Training and practice introduce automatic corrective response reactions as dynamic conditions arise during flight. If a change is introduced which alters the validity of the automatic responses, care should be taken to assess the risk that change will bring, and how that risk might be mitigated.