ACCIDENT

Aircraft Type and Registration: Rockwell Commander 114, G-DDIG

No & type of Engines: 1 Lycoming IO-540-T4B5D piston engine

Year of Manufacture: 1978

Date & Time (UTC): 19 July 2006 at 2040 hrs

Location: Fearn Airstrip near Tain, Ross-shire, Scotland

Type of Flight: Private

Persons on Board: Crew - 1 Passengers - 3

Injuries: Crew - None Passengers - None

Nature of Damage: Gear and propeller damaged; engine shockloaded

Commander's Licence: Private Pilot's Licence

Commander's Age: 52 years

Commander's Flying Experience: 516 hours (of which 11 were on type)

Last 90 days - 12 hours Last 28 days - 4 hours

Information Source: Aircraft Accident Report Form submitted by the pilot

Synopsis

After a bounce on landing, the pilot initiated a go-around by applying full power and retracting the flap. The flaps retracted fully rather than to the normal Flaps 20 for a go-around and the pilot was unable to prevent the aircraft sinking onto the runway with a subsequent nose landing gear collapse.

History of the flight

After a short local flight, the pilot returned to the airstrip for landing. The airstrip was an old military airfield with an asphalt surface and orientated approximately east/west. The weather was good with a calm surface wind and the pilot established his approach with Flap 35 for a landing on Runway 29. He considered that his approach was stable until, at an estimated 20 feet agl, he was aware

of an increased descent rate. He applied some power but the aircraft bounced on landing. The pilot decided to go-around, applied full power and selected the flap control to the 'UP' position. He was then aware of a loss of lift and the aircraft tracking to the left of the runway but yawing to the right. The nose landing gear collapsed and G-DDIG came to rest at the edge of the runway. After switching off the battery, the pilot followed his passengers out of the aircraft.

The pilot later commented that the aircraft needs a lot of nose-up trim on approach and when he applied full power for his go-around, he then needed to apply forward trim.

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Assessment of the cause

The pilot commented that the flaps are electrically actuated and controlled by a three-position switch; these positions are UP, NEUTRAL and DOWN. The switch is spring-loaded in the down sense such that it must be held in the DOWN position to extend the flaps and when released, it returns to the neutral position. However, when the switch is moved to the UP position

to raise the flaps, it will stay there until returned to the neutral position by the pilot.

For a normal go-around, the flaps should only be retracted to Flaps 20. The pilot considered that the accident resulted from the flaps retracting fully while he was attempting to trim the aircraft during the go-around.

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