#### ACCIDENT

| Aircraft Type and Registration: | GAF Nomad, N5190Y                                                                            |                   |
|---------------------------------|----------------------------------------------------------------------------------------------|-------------------|
| No & Type of Engines:           | 2 Allison 250B17 turboprop engines                                                           |                   |
| Year of Manufacture:            | 1976                                                                                         |                   |
| Date & Time (UTC):              | 9 May 2009 at 1345 hrs                                                                       |                   |
| Location:                       | Chatteris Airfield, Cambridgeshire                                                           |                   |
| Type of Flight:                 | Aerial Work                                                                                  |                   |
| Persons on Board:               | Crew - 1                                                                                     | Passengers - 13   |
| Injuries:                       | Crew - None                                                                                  | Passengers - None |
| Nature of Damage:               | Left main landing gear and left wing tip damaged                                             |                   |
| Commander's Licence:            | Private Pilot's Licence                                                                      |                   |
| Commander's Age:                | 46 years                                                                                     |                   |
| Commander's Flying Experience:  | 1,161 hours (of which 328 were on type)<br>Last 90 days - 13 hours<br>Last 28 days - 4 hours |                   |
| Information Source:             | AAIB Field investigation                                                                     |                   |

#### **Synopsis**

The aircraft landed heavily in gusty conditions with 13 parachutists on board, causing damage to the landing gear and wing tip. The pilot had not received any formal training on this aircraft type and the British Parachuting Association have subsequently formed a working group to review the training and qualification of pilots flying foreign-registered aircraft for parachute dropping.

## History of the flight

The aircraft departed with the pilot and 13 parachutists aboard. During climb to the drop altitude, the ground crew called the pilot by radio to say that the wind was too strong for the planned drop, and the aircraft should return.

The pilot reported that he flew an approach to Runway 19, at 87 kt, with flaps set at  $20^{\circ 1}$ . The wind was reported as 220/15 kt gusting to 30 kt, visibility was 10 km or more, and cloud was scattered at 5,000 ft above the airfield. The approach appeared normal until, as he was about to initiate the roundout, the aircraft "suddenly dropped" and landed heavily. The pilot recalled that on his last instrument scan before the flare, the indicated speed was 75 kt. The aircraft came to a halt and the left main landing gear then collapsed. There was no fire and all occupants exited the aircraft without difficulty. Another experienced Nomad pilot, who observed the approach

Footnote

The flaps extend to a maximum of 38°, but their use was restricted to 20° by airworthiness requirements.

and accident, commented that the Nomad had followed a microlight aircraft close ahead of it on the approach. He added that he was surprised that the Nomad pilot had not gone around.

#### Aircraft performance

The flight manual for the aircraft showed that at a landing weight of 8,500 lbs, the uncorrected approach speed with flaps set at 20° should be 87 kt. The flight manual gave no advice about landing with less than full flap or adjusting the approach speed to take account of wind.

#### **Pilot qualification**

The pilot held both CAA and FAA Private Pilot's Licences; the FAA licence had been issued on the basis of the CAA licence. Under CAA rules, the pilot would have been required to undertake a course of training and tests to obtain a type rating on the Nomad aircraft, whereas FAA rules make no such provision. The pilot's training on the type had consisted of one 50 minute flight, which he described in is log book as a 'checkout', although the flying time was recorded in his P1 flying hours column. The name of the pilot who conducted the 'checkout' with him was not recorded.

The AAIB sought an opinion from the CAA as to whether the pilot's licence was valid for this flight with this aircraft. As this N-registered aircraft was being flown under the privileges of an FAA licence, the CAA asked the FAA for clarification but the FAA did not provide a definitive answer.

The pilot had carried out only one landing with parachutists still on board the aircraft since a previous accident in 2007.

#### **Previous accident**

The AAIB investigation<sup>2</sup> into a previous accident involving the same pilot and aircraft type in 2007 stated that:

'The aircraft, with 13 parachutists on board, inadvertently entered cloud as it climbed through about 8,500 ft. The pilot descended the aircraft and regained VMC at about 4,000 ft; however one of the engines ran down due to icing before the engine anti ice system was selected on. The pilot was unable to restart the engine and returned to his departure airfield, where he flew a faster than normal approach in accordance with training he had received for single-engine landings. The aircraft landed long and the pilot was unable to stop it before the end of the runway. During the subsequent overrun, the nosewheel entered a ditch causing the noseleg to collapse.

'The pilot did not hold a type rating for the aircraft, as required under CAA and JAR's, however he was operating under his FAA licence, (based on his CAA licence) and he incorrectly believed he did not require a specific type rating.'

The aircraft is prohibited from operating in icing conditions. Following the accident, the pilot continued to fly the aircraft regularly under the same licensing arrangement.

Footnote

<sup>&</sup>lt;sup>2</sup> EW/C2007/08/11.

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# Foreign-registered aircraft approved for parachute dropping in the UK

The Department for Transport provided a list of non-UK registered aircraft that have been granted permission for parachute operations in the current calendar year in the UK. It included 20 aircraft on eight foreign registers, almost all of them single or twin turboprop aircraft.

## Analysis

This accident occurred in good weather, though with a gusty wind. The fact that the parachutists had not disembarked meant that the landing weight was markedly higher than normal. The pilot had only occasionally landed the aircraft at similarly high weights.

The pilot had not received any formal training to fly the aircraft; his FAA licence permitted him to fly the aircraft

without a type rating. If the aircraft had been operated on the UK register, he would have been required to undertake training and a test to obtain a type rating. This may have better prepared him to complete a safe heavyweight approach and landing.

### Safety action

The accident was discussed with the British Parachuting Association (BPA). BPA officials have formed a working group to review the training and qualification of pilots flying foreign-registered aircraft for parachute dropping.

The aircraft operator now requires pilots converting onto the Nomad aircraft to undertake at least ten hours training in the right seat of the aircraft with a BPA Pilot Examiner, followed by approximately ten hours in the left seat, before being cleared to fly solo.

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