

SERIOUS INCIDENT

Aircraft Type and Registration:	Ultramagic N-250 balloon, G-CDST
No & Type of Engines:	None
Year of Manufacture:	2005 (Serial no: 250/37)
Date & Time (UTC):	13 July 2019 at 0805 hrs
Location:	North-east of Crowle, north Lincolnshire
Type of Flight:	Commercial Air Transport (Passenger)
Persons on Board:	Crew - 1 Passengers - 8
Injuries:	Crew - None Passengers - None
Nature of Damage:	Minor tears to the envelope
Commander's Licence:	Commercial Pilot's Licence (Balloon)
Commander's Age:	28 years
Commander's Flying Experience:	375 hours (of which 189 were on type) Last 90 days - 28 hours Last 28 days - 2 hours
Information Source:	Aircraft Accident Report Form submitted by the pilot

Synopsis

The balloon landed in a field and the envelope came to rest against some trees causing several tears. The pilot and passengers were unable to pull it away from the trees and it had to be deflated over them. The pilot did not realise that the field was too short for the distance the balloon needed to stop in the conditions.

History of the flight

The pilot arrived at the launch site south of York at 0515 prior to the arrival of the eight passengers at 0530. With only eight passengers the balloon was lightly loaded with 1,100 lb of spare lift. He noted the wind speed and direction was consistent with the forecast, being northerly at 5 kt, gusting less than 10 kt. This was confirmed using a helium meteorological balloon.

After a passenger briefing and uneventful inflation and takeoff, the balloon climbed to 2,000 ft and travelled in a southerly direction for 30 minutes. The pilot found the wind speeds and directions were as expected according to the forecast. The balloon tracked towards the Drax power station and, in order to fly around it at a safe distance, the pilot descended to 500 ft to enter slower wind with a more south-easterly direction of travel. He hoped to land prior to the town of Goole but could not find a suitable field so ascended to a safe height above the town, the M62 and the first of a series of wind turbine farms.

The pilot descended again to 400 ft for most of the remainder of the flight and searched for a landing site. He had flown for approximately 1 hour and 40 minutes when he saw a field with grass and good access that he considered suitable for landing. The pilot saw power lines at the edges of the field parallel to the balloon's direction of travel and asked the passengers to help confirm there were no others. He made a steep approach to the field due to trees. The wind near the surface was gusting up to 15 kt. On landing, the basket bounced once and dragged along the field before coming to rest with the envelope against some trees. The pilot asked the passengers to assist with pulling the envelope away from the trees and back into the field, but the wind was too strong. The balloon had to be deflated with the bottom half over the trees and the top in the neighbouring field.

Meteorology

Time	Surface wind	Gradient wind
0500 UTC (0600 Local)	320 05/10	350/10
0600 UTC (0700 Local)	340 05	350/11
0700 UTC (0800 Local)	360 06/15	350/12

Table 1

Met Office ballooning forecast according to the pilot

Pilot's comments

The pilot commented that he felt under pressure to land because of a combination of factors including the length of flight, his fuel status, his knowledge of more unfavourable landing areas ahead and the rising ambient temperature.

The pilot had a Group B rating and 189 hours flying balloons in this group. He had recently started flying G-CDST which was within Group B but larger than balloons he had previously flown. He stated that his relative inexperience with the larger balloon may have contributed to him misjudging the amount of space needed for it to stop. He also felt that searching for powerlines during the approach may have distracted him from realising the field was too small.

Chief pilot's comments

The operator's chief pilot commented that flying at low level reduces the amount of time available for decision making after sighting a field. He remarked that balloon pilots can give themselves more planning time by using periodic climbs and binoculars to provide an earlier and better view of potential landing areas ahead.

Conclusion

After a long search for a landing site, the pilot landed in a field that was too small. The balloon took longer than he expected to stop due to its speed and spare lift. The pilot felt under pressure to land as soon as possible and was distracted during the approach by power lines in the field.