Safety Regulation Group
Safety Investigation and Data Department

Follow-up Action on Occurrence Report

ACCIDENT TO SIKORSKY S76C, G-JCBJ, AT CRANFIELD AIRFIELD ON 11 OCTOBER 2003
(HELICOPTER LANDED HEAVILY DURING PILOT TRAINING EXERCISE)

CAA FACTOR NUMBER	:	F27/2004
FACTOR PUBLICATION DATE	:	13 July 2004
OPERATOR	:	JCB
CAA OCCURRENCE NUMBER	:	2003/07120
AAIB REPORT	:	Bulletin 5/2004

SYNOPSIS

(From AAIB Report)

The helicopter landed heavily from a practice rejected takeoff, following a simulated engine failure, during a short field or semi-oblique take-off profile. The helicopter was not fitted with a Flight Data Recorder (FDR), but data retrieved from the Cockpit Voice Recorder (CVR) was compared with flight test data and this showed a shorter than normal time spent in descent. In addition, both pilots recalled a higher than normal rate of descent and the absence of translational lift. The investigation concluded that the most probable cause of the heavy landing was the high rate of descent, which was in turn due to the absence of translational lift, possibly as a result of the manoeuvre being flown in a slight tailwind.

FOLLOW UP ACTION

The three Safety Recommendations, made by the AAIB following their investigation, are reproduced below, together with the CAA's responses.

Recommendation 2004-04

The Civil Aviation Authority require operators of the S76 to carry out an analysis of the risks associated with flying vertical and short field rejected takeoff manoeuvres with a view to mitigating the risks as much as possible.

CAA Response

The CAA partially accepts this Recommendation.

In the view of the CAA this Recommendation should have been directed at operators of the S76 who fly vertical and short field rejected takeoff manoeuvres. It is the operators who have the responsibility for analysing the risks associated with their operation, and of mitigating these risks as much as possible.

However the CAA will, through a FODCOM to be published by 31 August 2004, recommend that operators of the S76 conducting vertical and short field rejected takeoff manoeuvres carry out an analysis of the risks associated with these manoeuvres with a view to mitigating the risks as much as possible. The FODCOM will be forwarded to relevant corporate operators of the type.

CAA Status - Open

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Recommendation 2004-05

The Civil Aviation Authority require Sikorsky to rewrite the S76C+ Rotorcraft Flight Manual to emphasise the potential hazards when flying vertical and short field rejected takeoff in light winds or winds close to the beam.

CAA Response

Since 28 September 2003, responsibility for the matters addressed in this Recommendation has passed to EASA under Regulation (EC) 1592/2002 and the recommendation should be addressed to that Agency.

Under the EASA transition arrangements and as the lead authority for the S76C+ type, the CAA accepts this recommendation on behalf of EASA.

The CAA has written to the manufacturer requiring them to amend Part 2 (Pilot Training Provisions) of the S76C+ Rotorcraft Flight Manual to emphasise the potential hazards when flying vertical and short field rejected takeoff in light or variable winds or winds close to the beam.

CAA Status - Closed

Recommendation 2004-06

The Civil Aviation Authority require Sikorsky to rewrite the S76C+ Rotorcraft Flight Manual to make the required handling techniques for the rejected takeoff from the short field or semi-oblique take-off profile clearer.

CAA Response

Since 28 September 2003, responsibility for the matters addressed in this Recommendation has passed to EASA under Regulation (EC) 1592/2002 and the recommendation should be addressed to that Agency.

Under the EASA transition arrangements and as the lead authority for the S76C+ type, the CAA accepts this recommendation on behalf of EASA.

The CAA has written to the manufacturer requiring them to rewrite the S-76C+ Rotorcraft Flight Manual to make the required handling techniques for the rejected takeoff from the short field or semi-oblique profile clearer.

CAA Status - Closed