

BULLETIN ADDENDUM

AAIB File: EW/G95/11/12

Aircraft Type and Registration: Robinson R22 Beta, G-XIIX

Date & Time (UTC): 16 November 1995 at 1302 hrs

Location: Blackpool Airport, Lancashire

Information Source: Aircraft Accident Report Form submitted by the pilot and telephone enquiries by the AAIB

AAIB Bulletin No 1/96, page 63 refers

The Bulletin indicated that a feature of R22 engine management was that application of full carburettor heat combined with almost simultaneous reduction of collective pitch could result in engine rough running. The feature of engine management it was intended to highlight is described in the Pilot's Operating Handbook. [Section 4 Normal Procedures - Use of carburettor heat] and emphasised in Safety Notice No 25 which states:

R22 HELICOPTER
SAFETY NOTICE # 25

To: All R22 Pilots
Date: 11 December 1986

CARBURETTOR ICE SEASON IS HERE !!

It is that time of year again when we begin receiving reports of carburettor ice. It seems to occur most often when the temperature is between 25°F to 55°F and there is high humidity or visible moisture. It usually happens because the pilot forgets to always apply full carb heat whenever the throttle is rolled off during an approach or a practice autorotation.

Remember, applying partial carb heat to prevent ice by keeping the CAT gage out of the yellow is only effective during hover, climb and cruise when the ice tends to form in the carburettor venturi or on the upstream side of the throttle butterfly. That is where the temperature probe is located. It is not effective when the throttle is closed and a large pressure and temperature drop occurs across the throttle butterfly allowing ice to form on the downstream side of the butterfly. Ice can occur at that point even though the CAT gage is indicating a temperature well above the yellow arc.

WHEN CONDITIONS CONDUCTIVE TO CARB ICE EXIST AND
YOUR MANIFOLD PRESSURE IS BELOW 18 INCHES, IGNORE
THE CAT GAGE AND APPLY FULL CARB HEAT