

LIGHT HELICOPTER FLIGHT TRAINING.

1 Background

1.1 AIC 70/2000 (Pink 5) - Helicopter Flight Safety - which replaced AIC 68/1995 (Pink 114), was published on 27 July 2000 reflecting the issue of the Federal Aviation Administration (FAA) Special Federal Aviation Regulation 73 (SFAR 73) which established specific type awareness training and experience requirements for pilots operating the Robinson Model R22 or R44 helicopters. However, the AIC was cancelled in September 2009 as being sufficiently promulgated and not then replaced.

1.2 For operations under Federal Aviation Regulations (FAR), SFAR 73 remains extant and in fact was updated on 29 June 2009 by the FAA to remain in force until further notice. In response to this update, the European Aviation Safety Agency (EASA) issued Safety Information Bulletin 2009-35 'Robinson R22/R44 Special Training and Experience Requirements' in which it recommended that National Aviation Authorities apply the amendment.

1.3 The CAA previously (and after reviewing the differences between the FAA and JAR-FCL helicopter pilot licence training and flying instructor experience requirements) concluded that the mandatory adoption of a similar programme in the UK, independent to and in addition to the FCL requirements, was not warranted. Additionally, the CAA is aware that the majority of training organisations conducting helicopter type rating training have in place their own awareness refresher programs for all their students, flying club members and visiting self-fly hirers.

1.4 Since AIC 70/2000 was cancelled, EASA Part-FCL (Aircrew Regulation) has been fully adopted. Helicopter pilots are now required to comply with Subpart H Class and Type Ratings, for the issue, revalidation and renewal of type ratings (or Subpart B for the Light Aircraft Pilot Licence (LAPL)).

2 Experience Requirements

2.1 Under SFAR 73, minimum experience levels are mandated for student pilots prior to going solo, for pilots acting as Pilot in Command and for the flight instructors conducting flight instruction on the R22 and R44 aircraft. The CAA strongly recommends that Approved Training Organisations and operators of Robinson aircraft take these elements into consideration whilst completing the risk analysis element of their Safety Management Systems.

3 Awareness Training

3.1 The recommendations originally contained in AIC 70/2000 (Pink 5) remain valid and the CAA strongly recommends that **all helicopter pilots**, regardless of the type ratings held, receive regular appropriate flight and theoretical knowledge and flight training awareness training.

3.2 Theoretical Knowledge Training

- Prohibited and Limited manoeuvres;
- Effects of Low and Negative G manoeuvres and correct recovery action (**Discussion Only**);
- Low rotor RPM - recognition and recovery;
- Engine/rotor RPM control without use of the governor;
- Autorotative landings;
- Helicopter stability;
- Smooth control handling and disc loading;
- Sloping ground landings/take-offs;
- Confined area operations;
- Dynamic roll over;
- Vortex ring and loss of tail rotor effectiveness;
- Centre of Gravity and loading;
- Recovery from inadvertent Instrument Meteorological Conditions (IMC) - flight by sole reference to instruments;
- Multi-engine engine malfunction procedures;
- Other Emergency drills appropriate to type;
- Aircraft limitations and Safety Notices;

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- Safety Sense Leaflets (particularly Number 17 - Helicopter Airmanship);
 - European Helicopter Safety Team (EHST) training materials (particularly Safety Leaflets);
 - Review of appropriate type incident and accident reports.

3.3 **Flight Training**

3.3.1 Sufficient according to ability to cover the above. However, it should be noted that SFAR 73 requires that for R22 and R44 annual dual instruction must include at least the following abnormal and emergency procedures flight training:

- a. Enhanced training in autorotation procedures;
- b. Engine rotor RPM control without the use of the governor;
- c. Low rotor RPM recognition and recovery;
- d. Effects of low G manoeuvres and recovery process.