



Civil Aviation Authority
SAFETY NOTICE
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Helicopter Operations Flight Planning and Safe Flight Execution

This Safety Notice contains recommendations regarding operational safety.

Recipients must ensure that this Notice is copied to all members of their staff who need to take appropriate action or who may have an interest in the information (including any 'in-house' or contracted maintenance organisations and relevant outside contractors).

Applicability:	
Aerodromes:	Not primarily affected
Air Traffic:	Not primarily affected
Airspace:	Not primarily affected
Airworthiness:	Not primarily affected
Flight Operations:	All Helicopter AOC and PAOC Operators
Licensed/Unlicensed Personnel:	All Helicopter Commanders and Operations Staff

1 Introduction

- 1.1 Several recent accidents, especially the accident to Agusta A109E, G-CRST¹, have highlighted the potential for pre-flight planning to have a major impact on the safe outcome of a flight. Similar situations in the USA resulted in specific planning and pre-flight risk assessment requirements being introduced for Emergency Medical Service (EMS) flights. These requirements were captured in changes to Federal Aviation Regulation (FAR) Part-135 including new sections 614 and 617.²
- 1.2 The purpose of this Safety Notice is to reinforce to pilots and operators the essential need for detailed and appropriate pre-flight planning and risk assessment before conducting any flight. The plan then needs to be executed accordingly.

2 Background Information

- 2.1 The pilot in-command/commander and flight crew have responsibilities and obligations to ensure that a flight is conducted safely. An AOC holder's Operations Manual (OM) informs crews on the company's policy regarding safety and all procedures to be followed. A clear understanding of a company's safety policy and procedures is essential.

3 Discussion

- 3.1 Operators are required to document their flight preparation and planning procedures in their OMs. For EASA-OPS operators, this is covered by ORO.MLR.100 and 101 together with the associated Alternative Means of Compliance (AMC) and Guidance Material (GM). The means of compliance is comprehensive and details the kinds of subjects and information that must be provided so that flight operations can be planned and conducted safely. However, it is considered relevant to review the changes made in this area by the Federal Aviation Authority (FAA) for US Helicopter Emergency Medical Services (H)EMS operators as they may contain safety improvements with respect to UK commercial helicopter operations.
- 3.2 As noted by the Air Accident Investigation Branch (AAIB) on the report of the accident to the G-CRST helicopter, the proposals relating to pre-flight risk assessment and Visual Flight Rules (VFR) flight planning are worthy of particular consideration in relation to:
- the decision to accept a flight;
 - continued operation in adverse weather conditions;
 - low level flight in the vicinity of terrain or obstacles; and
 - short notice or en-route changes to flight objectives and planning.
- 3.3 The pre-flight risk assessment is an effective tool to ensure a crew is properly prepared for a flight. Both air and ground stakeholders need to contribute to the risk assessment to ensure flight crew are furnished with all the necessary information to conduct their flight safely. Special attention needs to be applied to obstacles en-route and high ground.
- 3.4 A process such as the European Helicopter Safety Team (EHST) Pre-departure Risk Assessment tool might have a positive safety impact because its use might prompt pilots to seek management approval before accepting a flight. This is an opportunity for discussion and joint assessment, which can highlight elevated risk factors and require risk-mitigating procedures to be put in place before departure. This tool and description for use may be found at the EHST website together with many other useful publications to improve safety - [EHST Pre-flight Risk Assessment Tool](#).

4 Review of Revised FARs

- 4.1 The following information is drawn from the latest FAR text and should be reviewed by operators to ascertain if any details would enhance their own OM procedures. The FAR text below was adapted slightly to reflect the UK context and adaptations are shown in *italics*.
- 4.2 Part-135.614 – VFR Flight Planning.
- (a) **Pre-flight.** Prior to conducting VFR operations, the pilot in command must:
- (1) Determine the minimum safe cruise altitude by evaluating the terrain and obstacles along the planned route of flight;
 - (2) Identify and document the highest obstacle along the planned route of the flight *making best use of available electronic devices and 'Apps' that portray NOTAMs and obstacles on the planned route*; and
 - (3) Using the minimum safe cruise altitudes in paragraph (b) of this section, determine the minimum required ceiling and visibility to conduct the planned flight by applying the weather minimums appropriate to the class of airspace for the planned flight.
- (b) **En-route.** Whilst conducting VFR operations, the pilot in command must ensure that all terrain and obstacles along the route of flight are cleared vertically *in accordance with the Rules of the Air*.