



Civil Aviation Authority  
**SAFETY DIRECTIVE**  
Number: SD-2016/005



Issued: 12 December 2016

## Offshore Helicopter Helideck Operations

At Annex 1 to this Safety Directive is an Operational Directive mandating action that is required to restore an acceptable level of safety. The Operational Directive is issued in accordance with Article 248 of the Air Navigation Order 2016.

Recipients must ensure that this Directive 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 organisation and relevant outside contractors).

Applicability:	
<b>Aerodromes:</b>	Not primarily affected
<b>Air Traffic:</b>	Not primarily affected
<b>Airspace:</b>	Not primarily affected
<b>Airworthiness:</b>	Not primarily affected
<b>Flight Operations:</b>	All AOC Helicopter Operators Conducting Offshore Operations
<b>Licensed Personnel:</b>	Not primarily affected

### 1 Introduction

- 1.1 This Safety Directive (SD) promulgates the Operational Directive (OD) (see [Annex 1](#)) issued by the Civil Aviation Authority (CAA) on 12 December 2016 and which comes into force on 01 January 2017, and is applicable to operators conducting offshore Commercial Air Transport (CAT) helicopter operations in support of: offshore oil, gas and mineral exploration, production, storage and transport and the offshore renewable energy industry.
- 1.2 Following concerns raised by helicopter accidents in the seas around the UK, the CAA conducted a Safety Review of Offshore Public Transport Helicopter Operations in association with the Norwegian CAA and the European Aviation Safety Agency (EASA) in 2013. The report of the review was published in [CAP 1145](#) (Safety review of offshore public transport helicopter operations in support of the exploitation of oil and gas) and a 2016 progress report on actions and recommendations arising is at [CAP 1386](#).

### 2 Reason and Explanation

- 2.1 This SD is made in the interests of safety of operations to offshore locations (helidecks) for the reasons set out in Chapters 10 and 14 of CAP 1145. Additionally, it is made in further response to the Air Accidents Investigation Branch (AAIB) Safety Recommendation (SR) 2011-053 issued following the accident to Eurocopter EC225 LP Super Puma, G-REDU, when approaching the ETAP Central Production Facility platform on 18 February 2009.

- 2.2 The review identified a lack of adequate helideck fire fighting provisions at Normally Unattended Installations (NUIs) to address all likely and reasonably foreseeable fire situations that may be encountered during routine helicopter operations to offshore locations.
- 2.3 The review also identified inadequacies in the visual cueing environments at NUIs for operations at night. This position reinforces the previously mentioned SR published in [Aircraft Accident Report 1/2011](#). Here the AAIB recommended that the CAA should: “*amend CAP 437, Offshore Helicopter Landing Areas - Guidance on Standards, to encourage operators of vessels and offshore installations, equipped with helidecks, to adopt the new lighting standard, for which a draft specification has been published in Appendix E of CAP 437, once the specification has been finalised.*” This amendment has been carried out and the revised [CAP 437](#), now titled ‘Standards for Offshore Helicopter Landing Areas’, published.

### 3 Implementation

- 3.1 Following a benchmarking exercise with other North Sea States, which led to a comprehensive review of fire fighting arrangements at NUIs operating on the UK Continental Shelf, the CAA issued a letter to the oil and gas industry on the 01 July 2011 seeking improvements to the basic fire fighting arrangements on 117 NUI helidecks. This was promulgated with the full support of the offshore helicopter operators and the Helideck Certification Agency (HCA). The aim was that equipment regarded as inadequate should be replaced with fully automated systems capable of addressing a worst case post crash fire scenario, including when the platform was unattended (e.g. during the first landing of the day). The scheme, where fully implemented, will allow unrestricted movements to the helideck regardless of the attendance model in use
- 3.2 On 01 July 2016, the CAA agreed a new scheme with the industry aimed at addressing deficiencies in the fire fighting provisions at the same 117 NUIs, in a way that provides platform owners/operators with a higher degree of flexibility for meeting CAA minimum requirements. The new scheme introduces an alternative means of compliance (AltMoC) from the options disseminated in the industry letter (see paragraph 3.1). The alternative scheme (H1/H2 compliant) proposes manually operated fire fighting systems to adequately address the worst case post crash fire scenario following landings on NUIs but only during periods when they are attended (i.e. there are personnel present to operate the fire fighting equipment). However, the scheme is not intended to address the same risks for landings on NUIs when they are unattended. As a consequence, and to mitigate the risks, a cap is imposed on the number of unattended landings when the alternative scheme is utilised in lieu of a fully automated fire fighting system. Both schemes are described in detail in appendices to CAP 437 Standards for Offshore Landing Areas, 8<sup>th</sup> Edition, published in December 2016.
- 3.3 As a result of concerns within the industry that were further highlighted in an independent offshore helicopter pilot opinion survey reported in CAA Paper 97009 (summarised at Appendix E to [CAA Paper 2004/01](#)), the CAA has conducted a programme of research which culminated in the production of a specification for an improved lighting scheme for operations to offshore helidecks at night. The research and the initial specification are summarised and presented respectively, in [CAP 1077](#). The specification was incorporated into CAP 437 at 7<sup>th</sup> Edition published in May 2012. An updated and refined version based on early experience with installing the new lighting, was published in CAP 437 8<sup>th</sup> Edition. The industry has agreed to a five-year voluntary retrofit programme of the new lighting with a compliance date of 31 March 2018; however, progress has been slower than expected or desired. The formal mandate provided by this SD will ensure that the acknowledged safety benefits of the new lighting are realised as originally agreed with the industry.

### 4 Applicability

- 4.1 The helideck fire fighting scheme applies to the 117 established NUIs listed in Appendix 2 to the CAA industry letter dated 01 July 2011; this is now reproduced in Appendices D1 and D2 to CAP 437, 8<sup>th</sup> Edition.

- 4.2 The helideck lighting scheme specified in Appendix C of CAP 437 8<sup>th</sup> Edition applies to all offshore helidecks on the UK Continental Shelf to which offshore operations are conducted at night. "Night", as defined in the Air Navigation Order 2016, means the time from half an hour after sunset until half an hour before sunrise (both times inclusive), sunset and sunrise being determined at surface level.

## 5 Queries

- 5.1 Any queries or requests for further guidance from AOC holders as a result of this communication should be addressed to the assigned Flight Operations Inspector in the first instance.
- 5.2 Otherwise, queries should be addressed to the following e-mail address:  
[ISPTechnicalSupportTeam@caa.co.uk](mailto:ISPTechnicalSupportTeam@caa.co.uk).

## 6 Cancellation

- 6.1 This Directive will remain in force unless revoked by the CAA.

**Signed:** Philip Clarke  
*for the Civil Aviation Authority*

**Date:** 12 December 2016

**Annex 1:** Operational Directive

## Annex 1 Operational Directive

### To: Operators conducting commercial air transport offshore helicopter helideck operations.

1. The Civil Aviation Authority (CAA), in exercise of its powers under article 248 of the Air Navigation Order 2016 ('the Order'), directs the operator ('a specified operator') of any helicopter which is:
  - (a) registered in the United Kingdom; or
  - (b) flying in the United Kingdom or in the neighbourhood of an offshore installation;to comply with the requirements set out in paragraphs 3 and 4.
2. This Directive is made in the interests of safe operations for the reasons set out in Chapters 10 and 14 of CAP 1145, the CAA safety review into offshore helicopter operations. Additionally, it is made in further response to the Air Accidents Investigation Branch (AAIB) Safety Recommendation (SR) 2011-053 issued following the accident to Eurocopter EC225 LP Super Puma, G-REDU, when approaching the ETAP Central Production Facility platform on 18 February 2009.

### Requirements

3. From the 01 January 2017, a specified operator must not conduct offshore operations to an offshore location without fire-fighting provisions that are fully compliant with Chapter 5 of CAP 437 unless doing so in accordance with procedures detailed in CAP 437 (8<sup>th</sup> Edition), Appendix D1 or D2 or equivalent procedures approved by the CAA.
4. From the 01 April 2018, a specified operator must not conduct offshore operations at night to an offshore location unless that location has lighting comprising lit Touchdown/Positioning Marking and lit Heliport Identification Marking meeting the specification contained in CAP 437 (8<sup>th</sup> Edition), Appendix C.

### Definitions

5. In this Directive:
  - (a) 'Offshore operation' means a helicopter operation that has a substantial proportion of any flight conducted over open sea areas to or from an offshore location for the purpose of:
    - i) the support of offshore oil, gas and mineral exploration, production, storage and transport; or
    - ii) the support of offshore wind turbines and other renewable energy sources.
  - (b) 'Offshore location' means a facility intended to be used for helicopter operations on either:
    - i) an offshore installation or a renewable energy installation as defined in the [Civil Aviation Act 1982](#)<sup>1</sup>; or
    - ii) a fixed or floating offshore structure or vessel.
  - (c) 'Night' has the same meaning as in Schedule 1 of the Order.

### Revocation and Commencement

6. This Directive comes into force on 01 January 2017 and will remain in force until revoked by the CAA.

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<sup>1</sup> The Civil Aviation Act further refers to interpretations in:

[Mineral Workings \(Offshore Installations\) Act 1971](#)

[The Offshore Installations and Pipeline Works \(Management and Administration\) Regulations 1995](#)  
[Energy Act 2004](#)