

A stylized paper airplane icon in shades of blue is positioned above a dashed grey line that forms a curved path, suggesting a flight trajectory. The background features large, light grey abstract shapes.

CIVIL AVIATION GUIDANCE MATERIAL – 1411

# GUIDELINES FOR THE ESTABLISHMENT AND OPERATION OF OFFSHORE HELICOPTER LANDING SITES

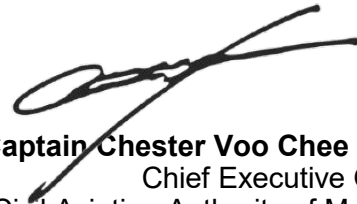
CIVIL AVIATION AUTHORITY OF MALAYSIA

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## Introduction

This Civil Aviation Guidance Material 1411 (CAGM – 1411) is issued by the Civil Aviation Authority of Malaysia (CAAM) to provide guidance for the establishment and operation of onshore Helicopter Landing Sites, pursuant to Civil Aviation Directives 2001 – Protection of Persons and Property (CAD 2001 – Protection of Persons and Property).

Organisations may use these guidelines to ensure compliance with the respective provisions of the relevant CAD's issued. Notwithstanding the Regulation 65 of the Civil Aviation (Aerodrome Operations) Regulations 2016 (CA (AO) R 2016), when the CAGMs issued by the CAAM are complied with, the related requirements of the CAD's may be deemed as being satisfied and further demonstration of compliance may not be required.



**(Datuk Captain Chester Voo Chee Soon)**  
Chief Executive Officer  
Civil Aviation Authority of Malaysia

## Civil Aviation Guidance Material Components and Editorial practices

This Civil Aviation Guidance Material is made up of the following components and are defined as follows:

**Standards:** Usually preceded by words such as “*shall*” or “*must*”, are any specification for physical characteristics, configuration, performance, personnel or procedure, where uniform application is necessary for the safety or regularity of air navigation and to which Operators must conform. In the event of impossibility of compliance, notification to the CAAM is compulsory.

**Recommended Practices:** Usually preceded by the words such as “*should*” or “*may*”, are any specification for physical characteristics, configuration, performance, personnel or procedure, where the uniform application is desirable in the interest of safety, regularity or efficiency of air navigation, and to which Operators will endeavour to conform.

**Appendices:** Material grouped separately for convenience but forms part of the Standards and Recommended Practices stipulated by the CAAM.

**Definitions:** Terms used in the Standards and Recommended Practices which are not self-explanatory in that they do not have accepted dictionary meanings. A definition does not have an independent status but is an essential part of each Standard and Recommended Practice in which the term is used, since a change in the meaning of the term would affect the specification.

**Tables and Figures:** These add to or illustrate a Standard or Recommended Practice and which are referred to therein, form part of the associated Standard or Recommended Practice and have the same status.

**Notes:** Included in the text, where appropriate, Notes give factual information or references bearing on the Standards or Recommended Practices in question but not constituting part of the Standards or Recommended Practices;

**Attachments:** Material supplementary to the Standards and Recommended Practices or included as a guide to their application.

It is to be noted that some Standards in this Civil Aviation Guidance Material incorporates, by reference, other specifications having the status of Recommended Practices. In such cases, the text of the Recommended Practice becomes part of the Standard.

The units of measurement used in this document are in accordance with the International System of Units (SI) as specified in CAD 5. Where CAD 5 permits the use of non-SI alternative units, these are shown in parentheses following the basic units. Where two sets of units are quoted it must not be assumed that the pairs of values are equal and interchangeable. It may, however, be inferred that an equivalent level of safety is achieved when either set of units is used exclusively.

Any reference to a portion of this document, which is identified by a number and/or title, includes all subdivisions of that portion.

Throughout this Civil Aviation Guidance Material, the use of the male gender should be understood to include male and female persons.





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## **1 Objective**

These guidelines set out factors that may be used to determine the suitability of a place for the landing and taking-off of helicopters when the place does not meet the heliport standards and requirements, as set out in Civil Aviation Directive 14 Vol II.

Application of these guidelines will enable a take-off or landing to be completed safely, provided that the pilot in command:

- a) has sound piloting skills; and
- b) displays sound airmanship.

## **2 Applicability**

This guidance applies to:

- a) Helicopters that do not operate International and/or commercial air transport operations; and
- b) specifications stated in this guidance are only for flights conducted by day light hours and under Visual Flight Rules (VFR).

## **3 Factors to Consider Prior to Using A Helicopter Landing Site (HLS)**

3.1 The pilot of a helicopter operating to, from or at an HLS should ensure that:

- a) the HLS is clear of all:
  - 1) persons, other than persons essential to the helicopter operation; and
  - 2) objects and animals likely to be a hazard to manoeuvring the helicopter, other than objects essential to the helicopter operation; and
- b) no person is within 30 m of the closest point of a hovering or taxiing helicopter, other than persons who are essential to the safe conduct of the operation or the specific nature of the task and who are trained and competent in helicopter operational safety procedures; and
- c) appropriate permission from the owners and authorities has been given; and
- d) where the performance information in an Aircraft Flight Manual (AFM) details greater or additional limitations for defined areas or the approach and departure paths (compared to those set out in these guidelines), then the greater and/or additional requirements should be met.

3.2 A helicopter must not land at, or take-off from a HLS that is located within controlled airspace unless:

- a) helicopter VMC exists;

- b) two way VHF radio communications with the appropriate Air Traffic Service (ATS) unit are established; and
  - c) the appropriate ATC clearances have been received.
- 3.3 If a proposed HLS is to be located near a city, town or populous area or any other area where noise or other environmental considerations make helicopter operations undesirable, such an HLS may be affected by the provisions of the environment protection law and other legislation.
- 3.4 There may be other local legislation that also applies to operations at HLSs. It is helicopter pilots and operators' responsibility to check and adhere to any local rules and regulations.

## **4 Recommended Criteria for HLS**

### **4.1 Basic HLS**

- 4.1.1 Because such HLSs are often developmental and 'basic' in nature, it's recommends that helicopter operators carry out thorough risk and hazard assessments for the proposed operation and apply appropriate controls to any hazards identified during this process.
- 4.1.2 Any passengers, crew and operational personnel carried into such locations should be briefed on the hazards of the site and any safety procedures needed to ensure safe loading and unloading at the HLS.
- 4.1.3 A Basic HLS should:
- a) be determined, by way of the helicopter operator's risk assessment, to be large enough to accommodate the helicopter and have additional operator-defined safety areas (or buffers) to allow the crew to conduct the proposed operation safely at the location;
  - b) have a TLOF with suitable surface characteristic for safe operations and strong enough to withstand the dynamic loads imposed by the helicopter;
  - c) have sufficient obstacle free approach and departure gradients to provide for safe helicopter operations into and out of the site under all expected operational conditions;
  - d) have approach and departure paths that minimise the exposure of the helicopter to meteorological phenomena which may endanger the aircraft and provide escape flight paths, if a non-normal situation arises, which maximise the potential for using suitable forced landing areas; and
  - e) only be used for day operations under helicopter VMC or better weather conditions.



*Note. — Dynamic load bearing capability assumes all static load limits imposed by the helicopter and any other structure or vehicle will also be met. Operators should ensure this is the case prior to using the site.*

## **5 Standard for Onshore Heliport**

Standards that prescribe the physical characteristics and obstacle limitation surfaces to be provided for at onshore heliports, and certain facilities and technical services normally provided at a heliport is contained in CAD 14 Vol II. The CAD can be obtained on the CAAM website.



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