Civil Aviation Directive (CAD)

Civil Aviation Directive – 1406 Vol. IV

Helideck Approved Training Organisation

HATO
Civil Aviation Authority of Malaysia

Issue 01
Revision 00 – 18th March 2026

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Introduction

In exercise of the power conferred by Section 24O of the Civil Aviation Act 1969 [*Act 3*], the Chief Executive Officer makes this Civil Aviation Directive 1406 Volume IV – Helideck Approved Training Organisation ("CAD 1406 Vol. IV – HATO"), pursuant to Regulation 65 of the Civil Aviation (Aerodrome Operations) Regulations (CAR(AO)) 2016 and Regulation 81 (2) of the Civil Aviation Regulations (CAR) 2016.

This CAD contains the standards, requirements and procedures pertaining to the provisions of the helideck approved training organisation issued by CAAM.

This Civil Aviation Directive 1406 Volume IV – Helideck Approved Training Organisation ("CAD 1406 Vol. IV – HATO") is published by the Chief Executive Officer under Section 24O of the Civil Aviation Act 1969 [*Act 3*] and comes into operation on 18 March 2026.

Non-compliance with this CAD

Any person who contravenes any provision in this CAD commits an offence and shall on conviction be liable to the punishment under Section 24O (2) of the Civil Aviation Act 1969 [*Act 3*] and/or under Malaysia Civil Aviation Regulation 2016.

(Dato' Captain Norazman Bin Mahmud)
Chief Executive Officer
Civil Aviation Authority of Malaysia

Civil Aviation Directive Components and Editorial Practices

This Civil Aviation Directive 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 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.

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 Directive 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 Directive, the use of the male gender should be understood to include male and female persons**.**

Record of Revisions

Revisions to this CAD shall be made by authorised personnel only. After inserting the revision, enter the required data in the revision sheet below.

ISS/REV No.	Revision Date	Revision Details

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Summary of Changes

ISS/REV no.	Item no.	Revision Details

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1 General

1.1 Citation

1.1.1 This Directive is the Civil Aviation Directives 1406 Volume IV – Helideck Approved Training Organisation (CAD 1406 Vol. IV – HATO), Issue 01/Revision 00, and comes into operation on 18th March 2026.

1.1.2 This CAD 1406 Vol. IV – HATO, Issue 01/Revision 00 will remain current until withdrawn or superseded.

1.2 Applicability

1.2.1 The standards and requirements in this CAD are applicable to Helideck Training Organisations. In this publication, the term 'Helideck' refers to all helicopter landing areas on fixed or floating offshore facilities used for mineral exploitation (for the exploration of oil and gas), research or construction.

1.3 Revocation

1.3.1 This CAD revokes the Civil Aviation Directive 1406 – Helidecks Standards and Requirements (CAD 1406), Issue 01/Revision 00, dated 15th May 2022.

1.4 Definitions and Abbreviation

1.4.1 For the definitions of this directive, refer to CAD 14 Vol. I – Aerodrome Design and Operations and CAD 14 Vol. II – Heliports.

2 Helideck Approved Training Organisation

2.1 General

2.1.1 This part outlines the training syllabus that are required by Aerodrome Manager (Helideck), Helicopter Landing Officer (HLO), Helideck Assistant (HDA), Helideck Radio Operator (HRO), Helideck Emergency Response Team (HERT) and helideck inspector.

2.1.2 This part is intended for all training centres applying to conduct or conducting training as in 2.3.

2.1.3 All such training syllabus shall be approved by CAAM. The syllabus must be taught locally by local training providers. All syllabi are assessed using the same analysis and standards. Approval of training syllabus will be issued once the training centres satisfy the requirements as indicated in this CAD.

2.1.4 In order for an initial approval of training syllabus, the training centres must first make an application by using the application form on the CAAM website. After reviewing the application and syllabus, CAAM may grant the organisation an approval.

2.1.5 The organisation is required to demonstrate to CAAM its ability to deliver the course before approval is granted. CAAM Inspector shall attend the course as observer, to observe the capability of the organisation to deliver the course.

2.1.6 The approved syllabus shall be outlined and updated by CAAM from time to time.

2.1.7 All courses are not allowed to be conducted offshore.

2.1.8 All Aerodrome Managers shall attend Helideck Standards Course (HSC) and Safety Management System (SMS) Course once throughout the position appointment.

2.1.9 HLO who is required to communicate with aircraft in flight e.g. landing clearance, shall undergo HRO course.

2.1.10 HLO and HDA courses shall be conducted separately.

2.1.11 The instructor to student ratio should be the maximum of 16 students to 1 instructor.

2.1.12 The certificate of training must bear the signatures of both the instructors and the principal to be considered valid.

2.2 Requirement of Helideck Approved Training Organisation

2.2.1 The requirements of helideck approved training organisation are as follows:

a) Ensure compliance with aviation regulations applicable to helideck operations. This may include regulations from civil aviation authorities.

b) Develop and provide a training syllabus that covers all relevant aspects of helideck operations. This should include topics such as safety procedures, emergency response, helideck equipment, and regulatory requirements.

c) Employ qualified and experienced instructors who have the necessary expertise in helideck operations. Instructors should be knowledgeable about the regulatory framework and industry best practices.

d) Maintain appropriate training facilities equipped with the necessary resources to deliver effective training. This may include simulation equipment, training helideck, classrooms, and other instructional materials.

e) Ensure that training equipment used is up-to-date, relevant, and complies with industry standards. This may include simulators, firefighting equipment, and other tools used in helideck operations.

f) Establish a clear and transparent certification process for individuals who complete the training program. This process should meet the requirements of relevant authorities and industry standards.

g) Implement a robust quality management system to monitor and continuously improve the training organisation's processes. This may involve regular audits, feedback mechanisms, and corrective actions.

h) Maintain accurate records of training programs, participant assessments, and certifications. Proper record-keeping is essential for demonstrating compliance and tracking the progress of individuals who undergo training.

i) Demonstrate a commitment to continuous improvement by staying informed about updates to regulations, industry best practices, and technological advancements. Update training programs accordingly to reflect changes in the industry.

2.3 Helideck Training Syllabus

2.3.1 Helicopter Landing Officer (HLO)

2.3.1.1 The minimum hour for this course is 20 hours (to be delivered in consecutive days) inclusive of theoretical and practical training / assessment.

2.3.1.2 The syllabus of the HLO course and requirements for facilities and equipment shall be provided for this course can be found in Appendix 1 of this CAD.

2.3.1.3 The validity of HLO course shall not be more than two (2) years.

2.3.1.4 All offshore personnel to be appointed as HLO shall have a minimum:

a) Working experience: 2 years as HDA

b) Language: English proficiency

2.3.2 Helideck Assistant (HDA)

2.3.2.1 The minimum hour for this course is 16 hours (to be delivered in consecutive days) inclusive of theoretical and practical training / assessment.

2.3.2.2 The syllabus of the HDA course and requirements for facilities and equipment shall be provided for this course can be found in Appendix 1 of this CAD.

2.3.2.3 The validity of HDA course shall not be more than two (2) years.

2.3.2.4 All offshore personnel to be appointed as HDA shall have a minimum:

a) Working experience: 1 year experience in offshore

b) Language: Reasonable proficiency in English

2.3.3 Helideck Radio Operator (HRO)

2.3.3.1 The minimum hour for this course is 24 hours (to be delivered in consecutive days) inclusive of theoretical and practical training / assessment.

2.3.3.2 The syllabus of the HRO course and requirements for facilities and equipment shall be provided for this course can be found in Appendix 1 of this CAD.

2.3.3.3 The validity of HRO course shall not be more than two (2) years.

2.3.3.4 All offshore personnel to be appointed as HRO shall have good oral and written English skills.

2.3.4 Helideck Emergency Response Team (HERT)

2.3.4.1 The minimum hour for this course is 21 to 24 hours (to be delivered in consecutive days) inclusive of theoretical and practical training / assessment.

2.3.4.2 The pre-requisite for any helideck crew to attend HERT course is attended HLO/HDA courses and certified.

2.3.4.3 The syllabus of the HERT course and requirements for facilities and equipment shall be provided for this course can be found in Appendix 1 of this CAD.

2.3.4.4 The validity of HERT course shall not be more than two (2) years.

2.3.5 Helideck Inspection Course (HIC)

2.3.5.1 The minimum hour for this course is 20 hours (to be delivered in consecutive days).

2.3.5.2 The syllabus of the HIC can be found in Appendix 1 of this CAD.

2.3.5.3 The validity of HIC shall not be more than two (2) years.

2.3.6 Helideck Standard Course (HSC)

2.3.6.1 The minimum hour for this course is 16 hours (to be delivered in consecutive days) inclusive of theoretical and practical training / assessment.

2.3.6.2 The syllabus of the HSC can be found in Appendix 1 of this CAD.

2.3.6.3 The validity of HSC shall not be more than two (2) years.

2.3.7 Instructor(s)

2.3.7.1 The instructor shall have relevant background qualification and industry working experience for a minimum of three (3) years.

2.3.7.2 As of January 2025, all instructors shall have a Train the Trainer (TTT) certificate and a Competence Assessor certificate, or an equivalent certification.

2.3.7.3 Training centre approved instructor shall attend Helideck Standards Course (HSC) course every two (2) years.

2.4 Application for Helideck Training Syllabus Approval

2.4.1 An application for the issuance of the approval should be made using CAAM/ANSA/HTSAF/01 application form.

2.4.2 The organisation who intends to apply for helideck training syllabus approval shall be subjected to the process as follows-

a) Pre-application phase

1) Pre-application phase is an introductory process where the organisation, who intended to acquire an approval from CAAM, shall be briefed on the procedures and processes involved prior to the approval.
2) The organisation shall provide a reasonable timeline that covers all related aspects of the processes until their expected date of getting the approval. The CAAM may advise on the duration of the process and may advise further on the timeline.
3) The organisation, at this phase, shall provide CAAM with a set of a company profile that contains the information but not limited to the status of the organisation, place of business, organisation structure, proposed helideck training to be conducted, trainers or instructors, facilities and requirements and any other information that could assist the organisation's evaluation.
4) The organisation will be advised to further submit the formal application if the CAAM is satisfied with the pre-application phase.

b) Formal application phase

1) This stage is a formal application process where the organisation will submit all required documents to CAAM.
2) The organisation shall submit the application form CAAM/ANSA/HTSAF/1.

3) The organisation shall submit a complete exposition that includes an organisation chart and a functional chart, documenting key personnel's responsibilities and accountabilities.
4) The organisation shall nominate the accountable manager who shall have administrative authority to ensure that all syllabus and requirements are in accordance with this Directive.
5) The organisation also shall nominate the trainer or instructor accompanied with curriculum vitae, supporting documents to show the experiences and qualifications and standards officer who shall have sound knowledge and experiences in helideck requirement and standards.
6) Application form together with all the required documents shall be submitted to:

CIVIL AVIATION AUTHORITY OF MALAYSIA
No. 27, Persiaran Perdana, Presint 4,
Aras 1-4, Blok Podium,
62618 Putrajaya,
Wilayah Persekutuan Putrajaya,
Malaysia.

c) Document evaluation phase

1) This is the phase where the CAAM Inspector will review the organisation submission documents and this includes the assessment on the accountable manager, trainer or instructor, facilities and requirements.
2) The process of reviewing the submitted documents will be carried out once the completed application form together with all the required documentations have been received by CAAM.

d) Inspection phase

1) The organisation shall ensure that at this phase they are ready for the inspection. This is where the evaluation of the organisation will be performed by the CAAM Inspector.

e) Approval phase

1) Once the demonstration and inspection phase are completed, the organisation will be issued with the Training Syllabus Certificate of Approval reflecting the privileges that the organisation is deemed to have based on its capabilities.

2.5 Approval of Helideck Training Syllabus

2.5.1 After successful completion of the processing of the application and the evaluation of the training syllabus, the CAAM when granting the approval, will endorse the

conditions for the approval of helideck training syllabus and other details as shown in the approval.

2.5.2 An application to renew a helideck training syllabus approval shall be made in writing to the CAAM and shall be made not less than sixty (60) days before the date of expiration and shall be in accordance with provision 2.4.

2.5.3 Application for renewal on the approval of syllabus for all these courses shall be made to the CAAM prior to a planned course which will be organised by the training centre. CAAM Inspector shall attend the course provided by the training centre as observer to ensure any changes in current requirement being taught in the course, instructors are competent and training facilities and classroom are adequate.

2.5.4 The approval shall not be transferable to any other organisations.

2.5.5 The CAAM may change or vary the approval when:

a) there is a change in the condition of the approval;

b) there is a change in the syllabus; or

c) upon request by the training centre.

2.6 Surveillance of Helideck Training Syllabus

2.6.1 CAAM may conduct surveillance audit for the purpose to ensure that the approved helideck training syllabus continues to comply with relevant Directives or Guidance from time to time.

2.6.2 The surveillance process shall comprise but not limited to:

a) Announced Scheduled audit/inspection;

b) Announced Non-scheduled audit/inspection;

c) Unannounced Scheduled audit/inspection; or

d) Unannounced Non-scheduled audit/inspection.

2.6.3 The training centre shall cooperate and facilitate with the CAAM Inspector in surveillance audit, and all documentation and records relevant to the helideck training syllabus shall be made available to facilitate the audit.

2.6.4 The training centre shall ensure that all records are to be retained and available for the audit.

2.6.5 CAAM may suspend or revoke the helideck training syllabus approval at any time where the training centre fails to comply with the provisions set forth in the approval or due to the negligence of training centre.

2.6.6 CAAM may issue reminder and warning prior to suspension or revocation of the helideck training syllabus approval.

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3 Appendices

3.1 Appendix 1 – Training Syllabus

3.1.1 The training syllabus for each personnel training identified in Chapter 2 - Helideck Approved Training Organisation can be found in the table below. The contents in the table are minimum syllabi to be covered and is not limited.

3.1.2 Additionally, organisations that conduct any training shall ensure the following facilities are provided for the students:

a) adequate classroom, training aids (e.g. helideck mock-up), office and rest accommodation to satisfactorily carry out and support all planned training programme;

b) relevant Instructor Manual and training hand-out;

c) appropriate helideck model and mock-up for the type of training it is intended for and shall replicate as close as possible, a real-time environment;

d) a library containing all relevant training materials. If training material is provided in electronic format, there shall be adequate facilities to allow for production of printed copies. The training organisation is responsible for copyright arrangements of such documents;

e) all trainers and participants shall wear appropriate PPE for the training, where applicable; and

f) Office accommodation of an acceptable standard for instructor to ensure that preparation for duties are without undue distraction and discomfort.

3.1.3 Training syllabus

Training	Training Details
Helicopter Landing Officer (HLO)	a) Helideck Regulations and Standard (Duration: 4.5 hours) 1) International / Local Requirements 2) HLO Responsibilities 3) Helideck Operation Manual (HOM) 4) Helideck Limitation List (HLL) 5) Helideck Team Member (HTM) 6) Helideck Types 7) Helideck Standards (Marking, Visual Aids, Lighting, Access Point and All Facilities) b) Helicopter Operational Hazard, Danger Zone, Access Area & Engine Controls (Duration: 1.5 hours) 1) Human Factors

	2) Helicopter Hazard 3) Helicopter Engine Emergency Systems and Control 4) Danger Zone c) Helicopter Landing & Departure Preparation (Duration: 2 hours) 1) Daily Check 2) Monthly Check 3) Prior to E.T.A. Procedures 4) Checklist For HLO i) 30, 10 and 5 minutes ii) Immediately before Landing iii) After Landing 5) Helicopter Take Off and Start up 6) Departure Procedures 7) Communication d) Standards Operating Procedures & Radio Telephony (Duration: 2 hours) 1) General Loading Instruction and Caution 2) Passenger & Baggage Loading 3) Freight Loading 4) Aircraft Type Loading 5) Common Problem 6) Communication i) Hand Signals ii) Voice iii) Lights and Signs iv) Radio Phraseology e) Emergency Exercises and Drill (Duration: 1 hour) 1) Rescue Equipment 2) Firefighting Equipment 3) Offshore and Helideck Emergency Procedures 4) Helicopter Emergency Procedures 5) Emergency Response Plan 6) Assess the Potential Emergencies i) Crash on helideck ii) Helicopter engine fire iii) Fire in cabin iv) Fire on helideck v) Fire during refuelling vi) Emergency precautionary landing vii) Helicopter wheels-up landing

	viii) Ditching near rig ix) Obstructed helideck x) Major jet A-1 spillage on helideck xi) Fire during refuelling xii) Planned evacuation and emergency movement xiii) Wrong deck landing xiv) Installation status changes with helicopter on deck f) Offshore Helicopter Refuelling (Duration: 1 hour) 1) Fuel quality control (Theory only) i) Fuel system inspection ii) Daily check iii) Before refuelling check iv) After refuelling check v) Emergency procedures during refuelling g) Helicopter Practical Session & Assessment (Duration: 3 hours) 1) Helicopter familiarisation h) Helideck Practical Session & Assessment (Duration: 4 hours) 1) Helideck – General (Marking, Visual Aids, Lighting, Access Point and All Facilities) 2) Daily Check 3) 30 minutes before ETA 4) 10 minutes before ETA 5) 5 minutes before ETA 6) Immediately before landing i) Theoretical Assessment (Duration: 1 hour) 1) Examination
Helideck Assistant (HDA)	a) Helideck Regulations and Standard (Duration: 3 hour) 1) International / Local Requirements 2) HDA Responsibilities 3) Helideck Operation Manual (HOM) 4) Helideck Limitation List (HLL) 5) Helideck Team Member (HTM) 6) Helideck Types 7) Helideck Standards (Marking, Visual Aids, Lighting, Access Point and All Facilities) b) Helicopter Operational Hazard, Danger Zone, Access Area & Engine Controls (Duration: 1 hour)

	1) Human Factors 2) Helicopter Hazard 3) Helicopter Engine Emergency Systems and Control 4) Danger Zone c) Helicopter Landing & Departure Preparation (Duration: 1 hour) 1) Daily Check 2) Monthly Check 3) Prior to E.T.A. Procedures 4) Checklist For HLO 5) 30, 10 and 5 minutes 6) Immediately before Landing 7) After Landing 8) Helicopter Take Off and Start up 9) Departure Procedures 10) Communication 11) RFF Equipment 12) Fire Fighting d) Standards Operating Procedures (Duration: 2 hours) 1) HDA Responsibilities 2) General Loading Instruction and Caution 3) Passenger & Baggage Loading 4) Freight Loading 5) Aircraft Type Loading 6) Common Problem e) Emergency Exercises and Drill (Duration: 1 hours) (Theory only) 1) Rescue Equipment 2) Firefighting Equipment 3) Offshore and Helideck Emergency Procedures 4) Helicopter Emergency Procedures 5) Emergency Response Plan 6) Assess the Potential Emergencies 7) Crash on helideck i) Ditching near rig ii) Obstructed helideck iii) Major jet A-1 spillage on helideck iv) Fire during refuelling v) Planned evacuation and emergency movement f) Basic introduction to Offshore Helicopter Refuelling (Duration: 1 hour) (Theory only)

	1) Fuel quality control 2) Fuel system inspection 3) Daily check 4) Before refuelling check 5) After refuelling check 6) Emergency procedures during refuelling g) Helicopter Practical Session & Assessment (Duration: 3 hours) 1) Helicopter familiarisation h) Helideck Practical Session & Assessment (Duration: 3 hours) 1) Helideck – General (Marking, Visual Aids, Lighting, Access Point and All Facilities) 2) Daily Check 3) 30 minutes before ETA 4) 10 minutes before ETA 5) 5 minutes before ETA 6) Immediately before landing i) Theoretical Assessment (Duration: 1 hour) 1) Examination
Helideck Radio Operator (HRO)	a) Helideck Regulations and Standard (Duration: 3 hours) 1) International / Local Requirements 2) HRO Responsibilities 3) Helideck Operation Manual (HOM) 4) Helideck Limitation List (HLL) 5) Helideck Team Member (HTM) 6) Helideck Types 7) Helideck Standards (Marking, Visual Aids, Lighting, Access Point and All Facilities) b) Meteorology (Duration: 2 hours) 1) Overview & Definition 2) Earth Atmosphere 3) Sun's Heat Energy 4) 5 Major Weather Elements 5) Wind 6) Clouds 7) Condensation 8) Convection 9) Malaysia Climate 10) ICAO and World Meteorological Organisation (WMO)

	11) Aviation Hazards 12) Standard Weather / Message c) Weather Observation (Duration: 3 hours) 1) Requirements and Standard 2) Weather Measuring Instrument 3) Code for Weather Report 4) Surface Wind 5) Meteorological Optical Range 6) Visibility 7) Weather Phenomenon 8) Clouds Observation 9) Sky and Sea 10) Offshore Weather Report 11) Temperature – dry/wet/humidity 12) Pressure – QFE/QNH d) Air Traffic Regulations (Duration: 2 hours) 1) Airspace 2) Final Approach and Take-Off Area (FATO) 3) Touchdown and Lift-Off Area (TLOF) 4) Safety Area 5) Taxiway and Taxi-routes e) Radio Telephony (Duration: 4 hours) 1) Aeronautical Radio and Communication Equipment 2) Methods of Communication 3) HLO Responsible 4) Hand Signal 5) Phraseology 6) Speech Technic 7) Operating Procedures 8) Alphabets, Numerals and Time 9) Call Sign 10) Standard Speech Abbreviation f) Offshore Standard Operating Procedures (Duration: 2 hours) 1) Document References 2) Normal Radio Operation Procedures 3) Handover Procedures 4) Equipment – Communication and Meteorological 5) Normal Operation Checklist g) Emergency Procedures (Duration: 2 hours) 1) Distress Radio Operations Procedures 2) Phases of Emergencies

	3) Plan of Action 4) Emergency and Distress Communication 5) Emergency Precautionary Landing h) Radio Telephony Practical Session & Assessment (Duration: 5 hours) 1) Platform Status Report 2) Radio Phraseology 3) Normal Radio Communication 4) Distress Radio Communication 5) Urgency Message 6) Practical Simulation 7) Test Assessment Scenario i) Theoretical Assessment (Duration: 1 hour) 1) Examination
Helideck Emergency Response Team (HERT)	a) Helideck Emergency Response Preparedness (Duration: 2 hours) 1) HLO & HDA Roles and Responsibility 2) Helideck and Helicopter Emergency Response Pre-Planning 3) Emergency Response Plan 4) Main Elements Emergency Response 5) Preparation for Emergencies 6) Helicopter Emergency Response Plan 7) Assess the Potential Emergencies 8) Equipment to Meet the Plan 9) Classification of Fire 10) Immediate Actions b) Helideck and Helicopter Emergency Systems and Control (Duration: 1.5 hours) 1) Rescue and Firefighting 2) Monitor and Foam Application 3) Deck Integrated Firefighting Systems (DIFFS) 4) Operational Hazards 5) Regulatory Requirement 6) PPE Issue, Crash Box, Communication 7) Helideck & Helicopter Familiarisations 8) Fire Extinguisher, Trolley Unit & CO2 Applicator c) Normally Unattended Installation (NUI) (Duration: 2 hours) 1) Emergency Planning with limited capability 2) Emergency Response Requirements

	d) Helideck Emergency Response (Duration: 3 hours) 1) Human Factor During Emergency 2) Potential Aircraft Hazards 3) PPE Requirements in conducting rescue and firefighting 4) Helicopter Types 5) Emergency Arrangements 6) Operation using MMMF Mask Filter 7) Equipment and control 8) Firefighting Equipment - Media 9) Monitoring of environmental condition 10) Awareness & Understanding of Back-up Crew e) Theoretical Assessment (Duration: 1 hour) 1) Examination f) Practical and Assessment (Duration: 12 hours) 1) PPE Issue, Crash Box, Communication 2) Helideck and Helicopter Familiarisations 3) Fire Extinguisher, Trolley Unit & CO2 Applicator 4) Hose Management, Brach Handling, Foam Application & Operating Fixed Monitors 5) Deck Integrated Firefighting Systems (DIFFS) (written assessment only) 6) The Application of Aspirated & Non-Aspirated Foam 7) MMMF Filter Mask 8) Helicopter on its side, fuel spill, no fire and pilot secure 9) Fire in Engine No 2 10) Fuel spill on deck due to hard landing 11) Engine fire, heavy impact on deck with fuel spill no fire 12) Fire in cargo compartment 13) Aircraft heavy landing on deck unignited fuel spill casualty unable to rescue 14) Operate the CO2 applicator, understand the start-up procedures, understand the fire access point, communication technique for NUI 15) Engine fire, heavy impact on deck with fuel spill fire 16) Burst tank which has ignited-crash off deck 17) Cockpit fire on deck with pilot still inside 18) Fire during refuelling 19) Total crash in all compartments and spill off deck 20) Breathing apparatus 21) Casualty assessment, handling and use of rescue stretchers

	22) BA pre-entry check, gain access into helicopter, rescue casualties, means of escape, communication 23) Fuel spill under helideck due to leaking refuelling nozzle
Helideck Inspection Course (HIC)	a) Helideck Regulations and Standard (Duration: 6 hours) 1) International / Local Requirements 2) Helideck Inspector Responsibilities 3) Helideck Operation Manual (HOM) 4) Helideck Limitation List (HLL) 5) Helideck Team Member (HTM) 6) Helideck Types 7) Helideck Standards (Marking, Visual Aids, Lighting, Friction, Access Point and All Facilities) b) Helideck Environment & Equipment (Duration: 3 hours) 1) Danger Zone 2) Helideck & Aviation Hazard 3) Airspace 4) FATO & TLOF 5) Safety Area 6) Weather Observation 7) Rescue Equipment 8) Firefighting Equipment 9) Communication Equipment 10) Meteorological Equipment c) The Inspector (Duration: 2 hours) 1) Requirement 2) Inspector Responsibilities 3) Certificates 4) Equipment 5) Training d) Components of Helideck Inspection (Duration: 4 hours) 1) All components contained in the HIR e) Helicopter Performances & Operation (Duration: 2 hours) 1) Engine Performances with Performance Classes and Departure Path Clearance 2) Helicopter Take-Off 3) Helicopter Start-Up 4) Helicopter Landing & Departure Preparation 5) Emergency System & Control

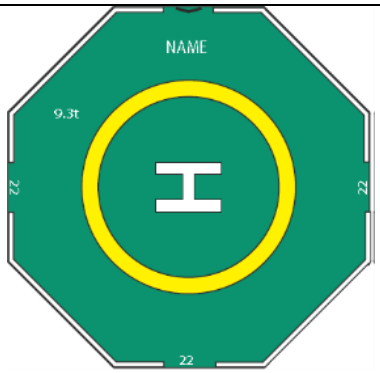
	f) Helideck Inspector, Certification process and requirements (Duration: 3 hours) 1) Introduction 2) Development of Risk Assessment and HLL 3) HIR 4) Application and certification process 5) Post certification and surveillance obligations / Requirement
Helideck Standard Course (HSC)	a) Helideck Regulations and Standard (Duration: 5 hours) 1) International / Local Requirements 2) Aerodrome Manager Responsibilities 3) Helideck Operation Manual (HOM) 4) Helideck Limitation List (HLL) 5) Helideck Team Member (HTM) 6) Helideck Types 7) Helideck Standards (Marking, Visual Aids, Lighting, Access Point and All Facilities) 8) Helideck technical drawings and documentation b) Helideck Environment & Equipment (Duration: 4 hours) 1) Danger Zone 2) Helideck & Aviation Hazard 3) Airspace 4) FATO & TLOF 5) Safety Area 6) Weather Observation 7) Rescue Equipment 8) Firefighting Equipment 9) Communication Equipment 10) Meteorological Equipment 11) Engine Performance with Performance Classes and Departure Path Clearance c) Standards Operating Procedures and maintenance (Duration: 4 hours) 1) Helideck Crew roles and responsibilities, manning level and training 2) Helideck preventive/routine maintenance 3) Emergency drill/exercise 4) Passenger & Baggage Loading 5) Freight Loading 6) Aircraft Type Loading 7) Common Problem

	d) Helideck Inspection, Certification process and requirements (Duration: 3 hours) 1) Introduction 2) Risk Assessment and HLL 3) HIR 4) Application and certification process 5) Post certification and surveillance obligations/requirements

3.1.4 Additional training requirements

3.1.4.1 The following facilities and equipment shall be provided by the training organisation for the following training:

Training	Training Details
Helideck Landing Officer (HLO), Helideck Assistant (HDA)	a) Helideck elevation must be no less than 2.0 m from ground level. b) The helideck must be typical of a type used offshore i.e. have stair-access wide enough for heli-teams to manoeuvre fire and rescue equipment to and from the helideck. c) Helideck Area: Minimum 'D Value' of the helideck shall be 12m. d) The structure must contain at least one heli-wells (ideally two) and must: 1) Be of sufficient depth below the helideck so that helideck team personnel can take cover from flying debris in the event of a helicopter crash on deck simulation; 2) Have sufficient space to allow at least two people to move freely; 3) Have a safety rail around the heli-well; 4) Be accessible by grated walkways and /or stairs; and 5) Have stair (with handrails) access to the helideck. e) Complete with wind sock. f) Markings must be typical of marking used offshore helideck as in Figure 3-1.

	 **Figure 3-1. Typical helideck markings**
Helideck Radio Operator (HRO)	a) Minimum two (2) units of radio with adjustable frequency knob (walkie-talkie not allowed); b) Two (2) separate rooms with radio console; c) To have at least one radio unit back-up in the event of unserviceability; d) For off-site location course: 1) Minimum three (3) units of radio-set (walkie-talkie not allowed); and 2) Two (2) separate rooms (preferably with console)
Helideck Emergency Response Team (HERT)	The above requirements as per HLO, and the following: a) Firefighting equipment 1) Firewater/Water Hydrants – for attaching fire hoses 2) Hand adjustable foam-producing fire monitors capable of cross-arcing over the helideck 3) Mobile foam and dry powder CO2 cart/trolley 4) Portable extinguishers: i) Water ii) Dry powder iii) Foam iv) CO2 5) Fire hoses 6) Variety of branches: aspirated and non-aspirated 7) Foam inductors 8) CO2 extended applicator for extinguishing engine fires 9) Water fire hose reel 10) Fire-lighting equipment for lighting fires 11) Crash box 12) Breathing apparatus 13) Man-made Mineral Fibres (MMMF)

	b) Firewater Reservoir Tank/Vessel 1) Firewater reservoir of sufficient capacity to enable all firefighting exercises to be completed. c) Firewater Pumping Capability 1) Firewater pumping capacity adequate to supply practical fire exercise areas at full training capacity. 2) Firewater pumping system back-up capability to supply adequate pressurised water to the exercise area in the event of the main pump/s failure. 3) Adequate controls and safety arrangements to shut off fuel to fires in event of fire water failure. 4) Low firewater pressure alarm. d) Helicopter Simulator 1) Shape and size 2) Cockpit 3) Window arrangement 4) Door/Hatch 5) Handle 6) Baggage and freight compartment 7) Pilot seating 8) Passenger seating 9) Fuselage top entry 10) Extinguishing of simulate engine fire

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