OPITO HLO and HDA Standards
Training Facility & Equipment
Technical Specification
## Record of Changes to Document

<table>
<thead>
<tr>
<th>Revision &amp; Amendments</th>
<th>Agreed by</th>
<th>Checked</th>
<th>Approved</th>
<th>Section</th>
<th>Amended by</th>
<th>Checked by</th>
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<tbody>
<tr>
<td><strong>Revision 0</strong></td>
<td>March 2013</td>
<td>OPITO</td>
<td>G. Gall</td>
<td>P. Lammiman</td>
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<td><strong>No.</strong></td>
<td>Amendment &amp; Date</td>
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<tr>
<td><strong>1</strong></td>
<td>Revision 0, Amendment 1</td>
<td>Introduction, Helideck Structure, Helideck for HLO and HDA Initial Training, Firefighting</td>
<td>M.Foo</td>
<td>OPITO S&amp;A</td>
<td>P.Lammiman</td>
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<td></td>
<td>Amended wording in Introduction section for better clarity and guidance.</td>
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<td></td>
<td>Added note in ‘Helideck Structure’ section to explain items 5(d) and 6 are additional requirements if HERTL, HLO Further, HERTM and HDA Further are delivered.</td>
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<tr>
<td></td>
<td>Reworked Section 2 ‘Helideck for HLO and HDA Initial Training Programmes’ for better clarity and guidance.</td>
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<td></td>
<td>Added Note regarding Class B fires in Section 4 ‘Firefighting’.</td>
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<td><strong>2</strong></td>
<td>Change of titles for Further Training</td>
<td>All</td>
<td>SM</td>
<td>GTC</td>
<td>GTD</td>
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<td>Rev 0, Amendment 2</td>
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<td>27-Feb 2015</td>
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Introduction

Purpose
The purpose of this technical specification document is to provide a minimum facility and equipment specification for OPITO-approved training providers and training providers wishing to gain OPITO-approval to deliver training to the following OPITO standards:

1. HLO Initial Training
2. HLO Helideck Emergency Response Team Leader (HERTL) Training
3. HLO and HERTL Further Training
4. HDA Initial Training
5. HDA Helideck Emergency Response Team Member (HERTM) Training
6. HDA and HERTM Further Training

Training Centres can deliver the HLO and/or HDA Training Programmes using a helideck located inside or outside, the helideck and heli-simulator must comply with the specification contained within this document.

Specification covers the following technical areas:

1. Helideck Structure
2. Helideck for HLO and HDA Initial Training Programmes
3. Helicopter Fire and ER simulator
4. Firefighting Capability
5. Rescue Equipment and PPE.
1 Helideck Structure

1. Helideck elevation from ground level must be no less than 2.5m from ground level.

2. 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.

3. Helideck Area: Minimum 'D Value' of the helideck will be 12m.
   D value:
   *The D value is the largest overall dimension of the helicopter when rotors are turning. This dimension will normally be measured from the most forward position of the main rotor tip path plane to the most rearward position of the tail rotor tip path plane.*

4. The structure must contain at least two heli-wells

5. The Heli-wells must:
   a. 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.
   b. Have sufficient space to allow at least two people to move freely
   c. Have a safety rail around the heli-well
   d. **House a fully-operational *fixed fire monitor typical of the type used on offshore helidecks.**
   e. Be accessible by grated walkways and /or stairs
   f. Have stair (with handrails) access to the helideck.

6. **A facility on helideck to accommodate Class B hydrocarbon spill fires.**

7. Wind sock.

*Foam-making equipment should be of adequate performance and be suitably located to ensure an effective application of foam to any part of the helideck landing area irrespective of the wind strength/direction or accident location.

**5(d) and 6 are additional requirements for heli-standards containing firefighting practical exercises (HLO HERTL, HLO and HERTL Further, HDA HERTM and HAD and HERTM Further Training).
2 Helideck for HLO and HDA Initial Training Programmes

1. **Helideck Structure** – as per Section 1

2. **Helideck Markings:**

   Makings must be typical of marking used offshore helidecks – see example Graphic-1 below.

3. **Helideck Simulator:**

   Internal configuration:

   1. The cockpit (basic simulation of helicopter cockpit)
   2. A realistic baggage and freight compartment, including door or hatch and handle operational arrangements as found on offshore helicopters
   3. Passenger seating arrangement as found in offshore helicopters, to simulate seating arrangements for passengers
3 Helicopter Fire & ER Simulator

Helicopter Simulator Shape and Size

Although the fire and emergency response simulator doesn’t have to be an exact size and shape of a real helicopter for transporting passengers offshore, it must have a shape of a helicopter and reasonably realistic size.

The heli-simulator which must accommodate the following:

1. Search, rescue and retrieval of passenger casualty simulators by the emergency response team using breathing apparatus
2. Facility for a Class ‘A’ fire inside heli-simulator
3. Passenger seating
4. Capable of being smoke-logged (Cosmetic smoke can be used during casualty extraction)
5. Window arrangement typical of a type used on an offshore transport helicopter
6. Helicopter baggage hold
7. Capability/arrangement for emergency response team to enter the heli-simulator for helicopter crash on deck exercise i.e. fuselage top entry.
8. Facility to accommodate the extinguishing of a simulated engine fire by a CO2 extended applicator.
4 Firefighting

1. Fire Classes

<table>
<thead>
<tr>
<th>Fire Scenario</th>
<th>Fire Classification</th>
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<tbody>
<tr>
<td>1 *Fuel spill fire</td>
<td>Class B- flammable liquid</td>
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<tr>
<td>2 Leaking fuel fire</td>
<td>Class B- flammable liquid</td>
</tr>
<tr>
<td>3 Internal fires</td>
<td>Class A</td>
</tr>
<tr>
<td>4 Engine Fire</td>
<td>Class B-flammable liquid OR Class C-flammable gas</td>
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*Flammable liquid that has similar combustion characteristics of aviation fuel.

Note:*Class B fires: For environmental purposes, smoke suppression or clean-burn systems are acceptable for reducing smoke during Class B fire exercises.

2. Firefighting Equipment

a. Firewater Hydrants – for attaching fire hoses
b. Hand adjustable foam-producing fire monitors capable of cross-arcing over the helideck
c. Mobile foam and dry powder CO2 cart/trolley
d. Portable extinguishers:
   i. Water
   ii. Dry powder
   iii. Foam
   iv. CO2
e. Fire hoses
f. Variety of branches: aspirated and non-aspirated
g. Foam inductors
h. CO2 extended applicator for extinguishing engine fires
i. Water fire hose reel
j. Fire-lighting equipment for lighting fires.

3. Firewater Reservoir Tank/Vessel

Firewater reservoir of sufficient capacity to enable all firefighting exercises to be completed.

4. Firewater Pumping Capability

a. Firewater pumping capacity adequate to supply practical fire exercise areas at full training capacity.
b. Firewater pumping system back-up capability to supply adequate pressurised water to the exercise area in the event of the main pump/s failure.
c. Adequate controls and safety arrangements to shut off fuel to fires in event of fire water failure.
d. Low firewater pressure alarm.
5 Rescue Equipment and PPE

1. Helicopter Crash Rescue equipment

The provision of at least one set of helicopter crash rescue equipment is required in order to support helideck firefighting and rescue activities.

The equipment must be easily accessed by the helideck / ER team, kept in complete and serviceable condition, and be ready for use in the vicinity of the helideck.

The equipment stored in the Crash Box should cover the items recommended in applicable documentation, such as CAP437.

2. Breathing Apparatus

3. First Aid equipment

4. Casualty simulator

5. Personal Protective equipment (PPE)
Delegate PPE must be typical of types used by offshore helideck emergency response teams.

6. Resuscitation equipment