

OPITO Audit Criteria

HUET Diver Training Programme





The content of this document was developed (2001) and reviewed (2009) by a work group of OPITO approved training providers coordinated by OPITO.

Guidance on this standard is available by contacting OPITO

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Amendments					
Amendment and Date	Pages	Changes made by	Checked by	Approved by	
1	Revision 1 issued 11/05/10				
2	Changed A.2: Delegate Prior Achievement criteria. 18 Nov 2010	Page 5	M. Carr	Peter Lammiman and Iain Emslie	Jim Cameron
3	Changed C.2: Only UK Training Centres are required to notify OPITO. 22 Mar 2011	Page 14	M. Carr	Peter Lammiman	Jim Cameron
4	Amended B1 standby/safety diver qualifications to align with A2. 24 Aug 2011	Page 13	M. Carr	Melissa Foo	Peter Lammiman
5	Amended B1(b) to state 'A qualified diver, experienced in HUET operations'. Amended C2 to include statement 'Training centres working toward achieving OPITO approval can complete the HUET Diver programme. Following OPITO approval a HUET Diver certificate can be issued to the delegate.'	Page 13, Page 14	Melissa Foo	Standards and Approvals	Peter Lammiman
6	Revision 2 – February 2016 Amended Introduction and certification and registration requirements and inclusion of Confidence in Water Training	Pages 4, 16 and 17	QAM	SM	RAMs
7	Revision 3 – June 2017 Change in minimum SCUBA requirements	16	SM	SA	RAMs
8	06/03/2018 - Revision 3, Amendment 1 – Amended A.2 HUET Diver Delegate Prior Achievement to include reference to The Diving at Work Regulations 1997	7	Standards Coordinator	Director (Standards and QA)	
	21/03/2018 – Updated content table and amendment table to reflect that change was on page 6 opposed to page 7		Standards Coordinator		

Any amendments made to this document by OPITO will be recorded above.



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INTRODUCTION

The use of divers during Helicopter Underwater Escape Training (HUET) is common practice and the HUET diver plays an important role both in the training and safety of course participants. HUET operations present specific hazards associated with the HUET apparatus itself and the equipment worn by participants, as well as the hazards posed by passenger behaviour. The HUET diver is a key component in the control of the risks associated with these hazards.

The technical competences and skills required for SCUBA operation will be gained by the HUET diver via commercial or amateur training schemes and in the UK and other countries there are legislative requirements defining the accepted levels of training.

The purpose of this document (Sections A-D) is to provide a programme of training and development to equip the qualified diver with the specific knowledge and skills required to undertake the role of HUET Diver.

As this is an OPITO training programme delivered by the Training Provider, the medical emergency response requirements set out in the [OPITO Medical Emergency Response Audit Criteria](#) document must also be adhered to.

There are various other roles involved during BOSIET/HUET/FOET related delivery at the Training Provider's site which include HUET Divers, pool safety personnel, and HUET crane/hoist operators. For specific staff certification, training and competence requirements for each role please refer to the relevant BOSIET/HUET/FOET Standard(s).

This document also contains a 'Confidence in Water' module (Section E) which is aimed to provide delegates with water confidence prior to commencement of relevant training. Whilst this is not an OPITO requirement, it is highly recommended for Training Providers to offer this training to encourage (in consultation with the Employers) weak or non-swimmers to familiarise themselves prior to the actual pool exercises.

Note: All highlighted areas indicate OPITO audit requirements, these requirements will be used by OPITO auditors during audit of training providers.

GLOSSARY

EBS	Rebreather Emergency Breathing System
CMAS	Confédération Mondiale des Activités Subaquatiques
CPR	Cardio pulmonary resuscitation
Delegates	Persons participating in a HUET diver initial training
FRC	Fast rescue craft
HUET	Helicopter underwater escape training (or trainer)
HUET Instructor	The instructor positioned inside the HUET cabin for briefing and immediate supervision of passengers
JAR	Joint aviation regulations
Passengers	Occupants of the HUET
Scuba	Self contained underwater breathing apparatus
Supervisor	A person appointed to supervise HUET diving operations
Surface Assistant	Surface based member of the dive team present during HUET operations
TBT	Tool box talk

SECTION A HUET DIVER TRAINING PROGRAMME

A.1 HUET Diver Target Group

This programme is designed to meet the initial training needs of HUET divers who are already qualified SCUBA divers.

A.2 HUET Diver Delegate Prior Achievement

To ensure that delegates have the necessary core competencies to attend this training course they must be in possession of an appropriate Open Water SCUBA qualification, awarded by an independent recognised diving accreditation body.

In addition, training providers must comply with any National law related to HUET Diver qualifications and dive operations at work (e.g. in the UK the relevant legislation is The Diving at Work Regulations 1997).

Audit Requirement – A.2 Divers hold appropriate open water diving qualification from a recognised accreditation body, and if applicable as required by National Law

A.3 HUET Diver Medical and Health Requirements

Delegates are required to possess an appropriate certificate of medical fitness to dive. Practical training exercises are of a very physical nature and all participants are required to be in good health.

Audit Requirement – A.3 All divers hold relevant current certificate of fitness to dive (a dive medical certificate).

A.4 HUET Diver Aims and Objectives

The aim of the training is to ensure that HUET divers understand their role in ensuring the safety of course participants during HUET training.

The objectives of this training are that HUET divers will be able to:

- 1) Identify and gain an understanding of the specific hazards associated with HUET operations and equipment worn by participants
- 2) Demonstrate specific knowledge and skills to undertake the role of the HUET diver safely during HUET operations.

A.5 HUET Diver Learning Outcomes

Theory

Delegates will explain:

- (1) The hazards associated with HUET operations
- (2) The hazards associated with HUET diving
- (3) The roles and responsibilities of HUET team members
- (4) The legislative requirements that apply to HUET
- (5) HUET operational and emergency procedures, commands, communications and signals
- (6) Function and operation of equipment used during HUET operations
- (7) The physiological response to stress and suitable intervention techniques.

Practical

Delegates will demonstrate:

- (8) Awareness of hazards during HUET operations
- (9) Correct equipment preparation
- (10) Effective response to instructions
- (11) Appropriate and effective diver rescue techniques
- (12) Appropriate and effective passenger assistance including *directing delegates to the pool surface during underwater HUET escape Appropriate and effective passenger rescue techniques
- (13) Effective communications
- (14) Appropriate stress intervention techniques
- (15) Appropriate first aid and casualty handling techniques
- (16) Safe behaviors during HUET operations.

Audit Requirement – A.5 The relevant Learning Outcomes are contained within the Training Provider HUET Diver training course, delegates are assessed against the outcomes using an assessment checklist.

A.5.1 HUET Diver Delegate Performance Evaluation

Evaluation of Learning

Delegates will be given a written, open-book test (with invigilator present) to test their understanding of the knowledge elements of the Modules (theory Learning Outcomes specified in Section [A.5](#)):

- a) A 100% pass mark is required
- b) Remedial training and evaluation documented for all non-achieved learning
- c) Papers to be kept for audit purposes.

Delegates shall be continuously coached and evaluated during practical exercises (practical Learning Outcomes specified in [A.5](#)) via observation of performance in pool scenarios:

- d) Risk assessment and TBT prior to scenarios
- e) Delegates not briefed on scenarios
- f) Scenarios to become progressively more complex
- g) Identification of further coaching requirements
- h) Recording of events and outcomes for audit purposes.

Further and Final Evaluation

Following successful completion of the [Training Programme A.8](#) (including the theory written test), HUET divers will proceed to undertake HUET diver operations under the supervision of a competent HUET diver. The supervised HUET activities and final evaluation must meet the following requirements:

- a) Constant evaluation and coaching to be conducted
- b) Debrief to be conducted with coach, buddy and supervisor
- c) Supervised HUET dive details, evaluations and coaching details must be logged for audit purposes
- d) The HUET diver must complete a minimum of five supervised HUET sessions, prior to final evaluation and appointment as competent HUET diver*
- e) Final evaluation of HUET diver to be undertaken by Supervisor
- f) Final evaluation and appointment to be recorded for audit purposes.

*The HUET Diver certificate will only be issued to the delegate after the completion of the initial training, five supervised HUET dive sessions and final evaluation.

Audit Requirement – A.5.1 following completion of the training programme, Training Centres retain delegate assessment records against the learning outcomes, and records of supervised dive completion

Further and Ongoing Development

Qualified HUET Divers must be engaged in a programme which ensures that they are assessed as competent to carry out the skills required to carry out their job function on a regular basis:

- a) Competence to be maintained through participation in emergency drills and exercise conducted in accordance with company programmes
- b) Records of emergency drills and exercises to be maintained for audit purposes
- c) Supplementary familiarization training including e.g. new equipment/procedure

Audit Requirement – A.5.2 Ongoing competence is being assured, the HUET divers participate in activities contained within sections a) – c)

A.6 HUET Diver Duration and Timing of Training Programme

The optimum “contact time” for this training is seen as **15 hours**

A.7 HUET Diver Training Programme

In order to make efficient use of the time and ensure effective learning there should whenever practicable be an integration of the three phases of explanation, demonstration and practice. The training programme outlined below will assist delegates to meet the stated learning outcomes.

MODULE 1 Introduction to HUET and Hazards

ELEMENT 1.1 HUET Operations and Hazards

Training staff to **explain**:

- 1.1.1 The development of HUET operations including:
 - a) Military/civil/offshore requirements
 - b) Requirements e.g. JAR, OPITO Standards etc
 - c) OPITO HUET Specification
 - d) Types of trainer and their principles of operation
 - e) Types of research conducted and impact on requirements
 - f) Examples of HUET application in helicopter ditching.

- 1.1.2 The range of HUET activities and the equipment used including:
 - a) Exercise formats e.g. surface, partial submersion, capsize etc.
 - b) Passenger worn equipment
 - c) Seating and restraint arrangements
 - d) Commonly used aviation type rafts
 - e) Emergency exits
 - f) Other related operations e.g. FRC capsize safety diving.

- 1.1.3 The hazards associated with HUET diving operations including:
 - a) Diving hazards e.g. equipment failure, medical etc.
 - b) Proximity to lifting operations
 - c) Proximity to moving machinery and pressure systems
 - d) Entrapment/entanglement
 - e) Passenger behaviour
 - f) Simultaneous operations e.g. Heliraft briefings, helicopter winching etc.

- 1.1.4 Legislative requirements relevant to HUET operations:
- a) Diving at Work Regulations, ACOPs and guidance
 - b) Lifting Operations and Lifting Equipment Regulations
 - c) Management of Health and Safety Regulations.

MODULE 2 Roles and Responsibilities and HUET safety

ELEMENT 2.1 Roles and Responsibilities and SSOW in HUET Operations

Training staff to **explain** and **demonstrate**:

- 2.1.1 The role and responsibilities of those participating in HUET including:
- a) Dive supervisor
 - b) HUET operator
 - c) HUET divers
 - d) HUET instructor
 - e) Surface assistant
 - f) Other nominated staff e.g. first aider.

This may be assisted by use of video or by observation of HUET in operation.

Training staff to **explain**:

- 2.1.2 HUET safe systems of work including review of:
- a) Diving project plan (as per legislative requirements)
 - b) Relevant risk assessments
 - c) Company operating procedures
 - d) Emergency procedures
 - e) Contingency plans
 - f) Emergency equipment and facilities
 - g) Communication arrangements.

Following explanations and demonstrations by training staff: delegates to **practice** and **demonstrate**:

- 2.1.3 The donning and use of passenger worn equipment
- 2.1.4 Passenger evacuation and escape techniques for the range of HUET exercises

MODULE 3 HUET Diver Operations and Emergencies

ELEMENT 3.1 HUET Operations and Emergencies

Following explanations and demonstrations by training staff: delegates to **practise** and **demonstrate**:

- 3.1.1 HUET diver rescues appropriate to HUET operations including:
 - a) Diver entanglement and entrapment
 - b) Recovery from bottom of pool
 - c) Conscious/unconscious diver.

- 3.1.2 Use of available equipment and appropriate techniques
 - a) Casualty handling
 - b) Casualty recovery
 - c) CPR/ first aid
 - d) Oxygen administration.

- 3.1.3 HUET diver role during HUET operations including:
 - a) Equipment etc. preparation and checking
 - b) Identifying/assisting non or weak swimmers
 - c) Checking passenger worn equipment
 - d) Fitting and retrieval of exits other items
 - e) Maneuvering of rafts
 - f) Communications and teamwork
 - g) Actions during passengers boarding and exiting.

- 3.1.4 HUET diver role during HUET emergencies including:
 - a) Panicking passenger
 - b) Other passenger behaviors e.g grabbing mask, removing EBS etc
 - c) Harness release problems
 - d) Premature activation of lifejacket
 - e) Premature egress by passenger
 - f) Passenger exiting HUET and not swimming to the surface
 - g) Passenger injury/medical problem
 - h) Injury/incapacitation of HUET instructor
 - i) Mechanical/electrical/hydraulic/equipment failures
 - j) Combination of the above.

MODULE 4 Managing Acute Stress, Phobia and Trauma

The material in this module should be delivered with focus on the role of HUET diver and the practical application of stress intervention techniques.

ELEMENT 4.1 Stress Management and Intervention Techniques

Training Staff to **explain**:

- 4.1.1 Nature of stress, including:
 - a) Definition
 - b) Types – acute and chronic
 - c) Function
 - d) The cognitive model of stress.

- 4.1.2 Signs and symptoms of stress
 - a) Physical
 - b) Cognitive
 - c) Emotional
 - d) Behavioural.

- 4.1.3 Phobic reaction
- 4.1.4 Post-Traumatic Stress Disorder
- 4.1.5 When to obtain professional support.

Training Staff to **explain** and **demonstrate**:

- 4.1.6 Recognition of stress in HUET passengers and suitable intervention techniques:
 - a) Reassurance
 - b) Breathing regulation
 - c) Progressive muscle relaxation.

Training Staff to **discuss** with delegates:

- 4.1.7 Physical stress reduction techniques:
 - a) Seat positioning
 - b) Remedial training/confidence building
 - c) One to one attention
 - d) Returning to complete training.



SECTION B HUET DIVER REFRESHER TRAINING

Refer to Section [D.2 Periodicity](#).

SECTION C HUET DIVER RESOURCES

C.1 Staff

Training staff delivering modules 1, 2 and 3 will be:

- (a) Trained and experienced in instructional and evaluation techniques
- (b) A qualified diver, experienced in HUET operations.

Training staff delivering module 4 will be:

- (c) Trained and experienced in instructional techniques
- (d) Familiar with HUET operations and the roles of the HUET team members
- (e) Experienced in the recognition of stress and in making appropriate interventions.

Dive Supervisor(s) used during practical exercises and scenarios:

- (f) Must be qualified and experienced in HUET Dive operations and trained in emergency response.

Standby/safety divers used during practical exercises and scenarios:

- (g) Must hold an Open Water SCUBA diver qualification, awarded by an independent recognised body. In addition, training providers must comply with any national law e.g. Diving at Work Regulations, related to HUET diver qualifications.
- (h) Must be trained and experienced in HUET diver operations.

Audit Requirement – C.1 Training records and certificates are documented and valid

C.2 Trainer/Delegate Ratio

The maximum number of delegates attending this programme will not exceed **six**.

The following ratios indicate the maximum number of delegates to be supervised by one instructor at any one time during each activity.

Theory	1 : 6
Practical	1 : 1

Audit Requirement – C.2 The trainer/delegate ratios have been implemented

C.3 Facilities

Different facilities may be required and it is important to make sure that these are available:

Theory training area(s) so designed to enable each delegate to participate fully

Practical training areas suitable for the delivery of OPITO HUET events.

All facilities must be maintained, and where appropriate, inspected and tested in accordance with current standards/legislation.

C.4 Equipment

The following equipment must be available for use and maintained to ensure effective operation/use during training sessions.

- (a) **HUET and ancillary equipment** relevant to the delivery of OPITO HUET

Audit Requirement – C.4 The HUET is in compliance with HUET requirements as contained within the BOSIET related standards

- (b) **SCUBA and ancillary diving equipment:** Sufficient and appropriate diving equipment as determined through task risk assessment suitable for use by HUET divers supporting OPITO HUET i.e. A minimum requirement of 3 complete sets of the following equipment per HUET in operation must be evident; breathing cylinders (and back plates if used), SPG (Contents Gauge), cutting implement with concealed blade capable of cutting through a HUET seat belt in the case of an emergency, masks, fins and weight belts where required; diver head protection.

Audit Requirement – C.4.1 The SCUBA and ancillary equipment is in compliance with C.4 Equipment (b)

- (c) **First aid and emergency equipment** suitable for the support of OPITO HUET events with sufficient consumables available for the purposes of training delivery.

Audit Requirement – C.4.2 The First aid and emergency equipment is in compliance with C.4 Equipment (c)

All equipment must be maintained, and where appropriate, inspected and tested in accordance with current standards/legislation.

SECTION D HUET DIVER ADMINISTRATION AND CERTIFICATION

D.1 Joining Instructions

Not applicable as HUET Diver delegates are company staff.

D.2 Periodicity

There is no expiry date for the OPITO HUET Diver Certificate. However, HUET Divers must participate in an ongoing development programme to ensure their competence is maintained, as specified in relevant subsection of Section A.5.1

D.3 Registration and Certification

Training establishments are responsible for registering **ALL** successful HUET Diver delegates with OPITO. This must be done via notifying the relevant OPITO Regional Office each time a delegate successfully completes the final evaluation (i.e. after the five supervised HUET sessions have been successfully completed).

Training Providers may also wish to issue a certificate to each delegate on successful final evaluation (i.e. after the five supervised HUET sessions).

Note 1: Training Centres working toward achieving OPITO approval can complete the HUET Diver programme. Following OPITO approval successful delegates must be registered with OPITO and a HUET Diver certificate will be issued to the delegate.

Note 2: Only approved OPITO training centres may issue HUET Diver certification.

SECTION E CONFIDENCE IN WATER

This section deals with weak or self-declared non swimmers. It is recognised that delegates wishing to complete their BOSIET related training and to work in the industry may be weak or non-swimmers, and in many locations there is no requirement for offshore workers to be able to swim.

However, it is noted that certain parts of the BOSIET related training can be physically demanding and mentally stressful, in this regard, OPITO has defined the following supplementary course content to gain confidence in water in preparation for BOSIET and HUET training participation. The module is not aimed to deliver swimming proficiency (to achieve this specific swimming training course is recommended) but to reduce anxiety about water and exercises within the HUET, and support participants to gain comfort and confidence in getting their head under water and to hold breath while under water, and carry out simple underwater exercises.

Note: This module is not a mandatory part of BOSIET and/or HUET related training and will not be audited by OPITO (as an OPITO Training Standard) the intent is to provide guidance and equip the training provider with a module that can be offered to Employers and Course Participants in need.

Session	Confidence in Water (CIW)
Location	Swimming Pool (Shallow Water, with the depth of no greater than 1.5m is advised)
Time Allocation	Is seen as 60 minutes for 6 delegates, however as this programme will not be audited by OPITO, timing will be subject to the needs of the delegates to gain confidence
Aims of the session	To provide delegates with water confidence prior to actual pool exercises, the principal outcome of the session is to assess a candidate's ability and build their confidence in water and manage their in water stress level. In addition the session reinforces the need for delegates to understand the importance of wearing a floatation device whilst working offshore.
Equipment Required	Overalls, suitable covered footwear, Safety line and floats to be fixed and arranged across the width in case needed by the delegate
Staff Required	1 Lead Instructor plus 1 pool safety personnel with an instructor to delegate ratio of 1:3, in water ratio's for non swimmers to be 1:1 Close supervision of delegates is expected by the training centre personnel with the course participants in water.

Responsibility The Training Provider is to ensure the Lead Instructor and pool safety personnel are competent to carry out this session, and the Lead Instructor is responsible for the safety of the delegates. Training Personnel are to be proficient as per Section E (Pool Safety Life Guard) plus trained to provide TIER 1 response per the MER Audit Criteria Document.

Confidence in Water (CIW) practical

1. Participants to be dressed in swimwear, coveralls and neoprene booties or suitable footwear
2. Lead Instructor, Pool Safety Personnel to ensure participants are correctly dressed
3. Course Instructor/Pool Safety personnel carries out pool safety brief/TBT
4. All delegates are to practice entering the pool via ladder, jumping in and stepping (step off) into water should be carried out into water of adequate depth, moving around in water, face submersion, underwater breath hold, delegate should be given an opportunity to use a mask and breathing through a snorkel for EBS related training this is seen as being very beneficial, likewise giving delegates nose clips has proven to improve confidence in water. Under close supervision delegates should attempt to swim as far as they're comfortable across the shallow end of the pool width without any flotation, giving delegates an opportunity to use a device to simulate opening a push out window underwater is also beneficial.

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