

Interim arrangements for Electro-Technical Officer Certificate of Competence.

Introduction

The Seafarer Training Certification and Watchkeeping Convention and Code (STCW) 2010 amendments brought in, through Regulation III/6 (see Annex 1), a Certificate of Competence (**CoC**) for Electro-Technical Officers (**ETO**). The ETO CoC was introduced to give those working in these capacities formal recognition of their technical abilities and provide an international standard which would enhance employment opportunities.

A Senior ETO (SETO) CoC was proposed but not incorporated by the IMO in the STCW 2010 amendments. The inclusion of a non STCW SETO CoC will be proposed to be included in the UK certification structure to enhance the career path of those employed in this field. This proposal will be incorporated in the STCW 2010 legislation consultation and not addressed further in this notice.

Does a ship have to carry an ETO?

It is not compulsory for a ship to carry an ETO unless it has been agreed between the owner/operator and the Flag Administration (the MCA in the case of UK Flagged ships). This would then be stated on the ship's Safe Manning Document (**SMD**). It should be noted that, at the time of writing this notice, less than 10 UK registered ships have ETOs listed on their SMDs.

Do I need an ETO CoC?

If you sign on a ship as an ETO you must hold an STCW ETO CoC whether or not an ETO is listed on the SMD. However, paragraph 5 of STCW Reg. III/6 states that you are permitted to carry certain functions of an ETO for which you are qualified, even if you do not hold a STCW ETO CoC. This means you may be employed on a ship in a position such as Electrician or Systems Engineer which may or may not be part of the Safe Manning requirement. Whether you are filling a position on the SMD or not it is the ship's owner / operators' responsibility to define the competencies required, taking into account the duties which you are expected to perform, and ensure that you have the necessary competences to carry out these duties.

How to gain an STCW ETO UK CoC

I am new to the industry and have no electro-technical qualifications

The UK has been running an approved pilot training programme, incorporating a Foundation Degree, leading to the issue of a STCW ETO CoC at South Tyneside College since 2009. This programme has gained full approval during this summer (2013), as has Warsash Maritime Academy. It is expected that similar programmes will be available at other colleges in the near future. There is an approved SQA HND (Marine Electro-Technology) meeting the ETO CoC requirements. This qualification has not yet been incorporated in any MNTB approved training programme. However, it is being used in a collaborative training programme between South Tyneside College and AMET University, Chennai, India.

These approved programmes are made up of three college phases and two sea phases <http://www.careersatsea.org/>

I undertook a hybrid EOOW / ETO Cadetship

Hybrid EOOW/ETO Cadetships were delivered at South Tyneside College and Warsash Maritime Academy. These HND/Foundation degree programmes contained electrical / electronic units which were sometimes delivered as additional units to the whole EOOW programme and sometimes replaced the units that gained exemption from Chief Engineer Applied Heat and/or Chief Engineer Applied Mechanics.

If you undertook a hybrid EOOW/ETO cadetship and passed an FD or HND that included:

- standard EOOW units:
 - Engineering Science;
 - Marine Electrical Systems;
 - Operation and Maintenance of Electrical Plant;
 - Instrumentation and Control Principles
- additional ETO optional units:
 - Radio Communication (Engineering)
 - Electronic Navigation Systems
 - Navigation Systems and Fault Diagnosis

You have completed the necessary academic requirements for a UK ETO CoC.

To be issued with an ETO CoC you need to:

- Have documentary evidence of at least 12 months service in the last five years as ETO or carrying out the functions of an ETO on board ship
- Complete a MNTB/MCA High Voltage (Management Level) course¹ or have your CoC endorsed as not permitted to carry out maintenance on High Voltage Systems
- Complete an AMERC GMDSS Radio Maintenance course² or have your CoC endorsed as not permitted to carry out maintenance on Radio Equipment
- Complete an MNTB/MCA approved Human Element Leadership and Management (HELM) (Operational Level) course;
- Hold a current Medical Certificate (ENG1 or accepted equivalent)
- Pass an MCA oral examination

Any endorsement may be removed at a later date if the appropriate criteria are met.

I have been serving as an ETO (or similar capacity) without STCW Certification

After discussions with industry and training representatives the following interim arrangement was agreed:

To be issued with an ETO CoC you will need to:

- Have documentary evidence of at least 12 months service in the last five years as ETO or as carrying out the functions of an ETO on board ship
- Complete the Electro Technical Officer Training Record Book
 - These training record books are available through the UK recognised colleges and Training Providers

¹ If you undertook a High Voltage course prior to the 1st July 2013 which meets the criteria given in Annex 1 you must submit the original certificate and course syllabus with the application.

² If you do not hold this AMERC certificate your ETO optional units may gain you exemption from some elements of this examination – you should contact the college where you studied, or contact AMERC through their website <http://www.amerc.ac.uk>.

- Each competence must be signed off by the Chief Engineer, or Ship's Superintendent
- In order to sign off on competencies, the Chief Engineer or Ships Superintendent must hold either a UK STCW Reg III/2 Chief Engineer CoC, or UK Certificate of Equivalent Competency (CEC) endorsing a non UK STCW Reg III/2 Chief Engineer CoC
- Tasks may be signed off retrospectively providing the person signing has personal knowledge that the task was completed.
- Pass the following written examinations³
 - SQA Chief Engineer Electro-Technology
 - AMERC Electronic Principles
- Hold the basic STCW safety training certificates⁴
 - Proficiency in personal survival techniques (Table A-VI/1-1)
 - Proficiency in fire prevention and fire fighting (Table A-VI/1-2)
 - Proficiency in elementary first aid (Table A-VI/1-3)
 - Proficiency in personal safety and social responsibilities (Table VI/1-4)
- Hold the advanced STCW safety training certificates⁵
 - Proficiency in survival craft and rescue boats other than fast rescue boats (Table VI/2-1)
 - Proficiency in Advanced Fire Fighting (Table VI/3)
 - Proficiency in Medical First Aid (Table VI/4-1)
- Complete a MNTB/MCA High Voltage (Management Level) course⁶ or have your CoC endorsed as not permitted to carry out maintenance on High Voltage Systems;
- Complete an AMERC Electronic Navigation Equipment Maintenance (ENEM) course or have your CoC endorsed as not permitted to carry out maintenance on Navigational Systems
- Complete an AMERC GMDSS Radio Maintenance course or have your CoC endorsed as not permitted to carry out maintenance on Radio Equipment.
- Complete an MNTB/MCA approved Human Element Leadership and Management (HELM) (Operational Level) course;
- Hold a current Medical Certificate (ENG1 or equivalent)
- Pass an MCA oral examination

³ If you already hold an appropriate qualification (e.g. HNC/D in Electrical / Electronic Engineering) issued under the authority of a EU Member State you may be able to demonstrate equivalence to these examinations. It will be your responsibility to contact the authority that issued your academic qualification, in order for them to produce a statement demonstrating equivalence (i.e. the content of the educational programme you undertook must be mapped to the syllabi of these examinations). It would be acceptable for "top up" educational programmes under the authority of an EU Member State to be undertaken to fill any gaps found in the mapping process

⁴ The courses will be accepted if issued under the authority of any Administration on the STCW "White List"

⁵ The courses will be accepted if issued under the authority of any one of the following Administrations:

- Any EU Member State
- Canada
- India
- New Zealand
- Pakistan
- South Africa

⁶ If you undertook a High Voltage course prior to the 1st July 2013 that meets the criteria given in Annex 1 the original certificate and course syllabus must be submitted with the application.

Application

Annex 1

High Voltage Courses

Courses undertaken prior to 1 July 2013 do not need to be MCA approved, however you must provide documentary evidence confirming the course covered:

- The hazards associated with High Voltage systems;
- The functional, operational and safety requirements for a marine high-voltage system;
- Arrangement of High Voltage systems and their protective devices;
- Safety procedures related to High Voltage systems;
- Remedial action necessary during faults in a high-voltage system;
- Assignment of suitably qualified personnel to carry out maintenance and repair of high-voltage switchgear of various types;
- Producing a switching strategy for isolating components of a high-voltage system;
- Selecting suitable apparatus for isolation and testing of high-voltage equipment;
- Carrying out a switching and isolation procedure on a marine high-voltage system, complete with safety documentation; and
- Performing tests of insulation resistance and polarization index on high-voltage equipment.

Acceptable courses are unlikely to have less than 24 hours contact time.