SEAFØRCE POWERBOATS

RYA SRC (VHF)

Syllabus

Kelvin Harbour, 150 Pointhouse Place, Glasgow, G3 8RS | www.seaforcepowerboats.co.uk
info@seaforcepowerboats.co.uk | +44 07545903626

Aim
To obtain an operators license and develop the necessary skills to operate a VHF radio including Digital Selective Calling (DSC).

Course Duration
- Option 1: A day in the classroom (Some homework has to be undertaken before attendance)
- Option 2: Complete the course online

On completion of the course it's a requirement to attend a training centre and undertake a separate written and practical exam on real VHF radios

Minimum Age
16 years of age on the day of the final exam

What's Included
- VHF course book or e-book
- Modern facilities with hot/cold drinks and refreshments
- Very experienced instructors and radio operators that are passionate about going through the course content with you in a relaxed manner.

Prior Knowledge and Experience
No prior knowledge or experience is required to undertake this course!

A knowledge of the Phonetic alphabetic and a working knowledge of DSC and voice procedures is a requirement for the classroom course.

Skills Gained
Have the ability and confidence to operate any VHF DSC radio and other modern electronic search and rescue equipment covered in the course.

Opportunities After The Course
The VHF radio operators license can be used to support your application for a commercial endorsement on any RYA commercially endorsed certificate of competence.

Suggested Courses
Sea Survival
First Aid
PW Jet Ski

Course Content

Types of communication of the Maritime Mobile Service

- Distress, urgency and safety communications
- Public correspondence
- Port operations service
- Ship movement service
- Intership communication
- On board communications

Types of Station in the Maritime Mobile Service

- Ship stations
- Coast stations
- Pilot stations, port stations etc
- Aircraft stations
- Rescue Co-ordination Centres (RCC)

Knowledge of Radio Frequencies and Channels

- The concept of frequency
- Propagation on VHF frequencies
- Range for voice communications.
- Range for DSC transmissions
- The usage of VHF frequencies in the maritime mobile service
- The concept of radio channel: simplex, semi-duplex and duplex
- Channel plan for VHF, including allocations for the GMDSS
- Distress and safety channels National channels for small craft safety
- Intership communications, Port operations
- Ship movement
- Calling channels
- Public correspondence channels

Ship Station Equipment

- Sources of energy of ship stations
- Batteries; types and characteristics, charging, maintenance
- Detailed Working Knowledge of Radio Equipment

The VHF Radio Installation

- Radio channels
- Channel selection and controls
- Dual watch facilities and controls
- Basic controls and usage
- Connecting and power.
- Press to transmit switch
- High/low output power switch
- Volume control
- Squelch control
- Dimmer
- Portable two-way VHF radios
- Marine VHF antennas

Purpose and use of Digital Selective Calling (DSC)

- The general principles and basic features of DSC
- DSC messages
- DSC attempt
- Call acknowledgement
- Call relay

Types of Call

- Distress call
- All ships call
- Call to individual station
- Geographical area call
- Group call

The Maritime Mobile Service Identity (MMSI) Number System

Nationality identification

- Maritime Identification Digits (MID)
- Ship station numbers
- Coast station numbers

Call Categorisation and Priority

- Distress
- Urgency
- Safety
- Ship's business
- Routine

Call Telecommand and Traffic Information

- Distress alerts
- Other calls
- Working channel information

VHF DSC Facilities and Usage

- Channel 70 instant alert selector.
- DSC data entry and display
- Updating vessel position
- Entering pre-set message
- Entering traffic information
- Reviewing received messages
- DSC watch keeping functions and controls

Operational Procedures of the GMDSS and Detailed Practical Operation of GMDSS Subsystems and Equipment Preparation of Navigational Plan for Short Coastal Passages

Search and Rescue (SAR) Procedures in the Global Maritime Distress and Safety System (GMDSS)

- Sea Areas and access to GMDSS facilities
- The role of RCCs
- Organisation of search and rescue

Distress, Urgency and Safety Communication Procedures in the GMDSS

- Distress communications via VHF DSC equipment.
- DSC distress alert
- The definition of a distress alert
- Transmission of a distress alert
- Transmission of a shore-to-ship distress alert relay
- Transmission of a distress alert by a station not itself in distress
- Receipt and acknowledgement of VHF DSC distress alert
- Acknowledgement procedure
- Receipt and acknowledgement by a coast station
- Receipt and acknowledgement by a ship station
- Handling of distress alerts
- Preparations for handling of distress traffic
- Distress traffic terminology
- On-scene communications

SAR Operation

- Urgency and Safety communications via DSC equipment
- The meaning of urgency and safety communications
- Procedures for DSC urgency and safety calls
- Urgency communications
- Safety communication

Protection of Distress Frequencies

- Avoiding harmful interference
- Avoiding the transmission of false alerts
- Status of Channel 70
- Transmission during distress traffic
- Prevention of unauthorised transmissions
- Test protocols and procedures
- Testing DSC equipment
- Radiotelephone test procedures
- Avoidance of transmissions in VHF guard bands
- Procedures to follow when a false distress alert is transmitted

Maritime Safety Information

- The NAVTEX system
- Purpose and capabilities, including distress and safety functions

Alerting and Locating

- Purpose and definition.
- Emergency Position Indication Radio Beacons (EPIRBs)
- Registration and coding.
- Operation, including automatic and manual activation
- COSPAS/SARSAT 406 MHz EPIRB
- Inmarsat-E 1.6 GHZ EPIRB
- VHF-DSC EPIRB
- 121 .5MHz homing function
- Mounting consideration
- Routine maintenance
- Testing
- Checking battery expiry date
- Checking the float-free mechanism

Search and Rescue Transponder (SART)

- Operation
- Operating height
- Effect of radar reflector
- Range of a SART transmitter

Operational Procedures and Regulations for VHF Radiotelephone Communications

Ability to Exchange Communications Relevant to the Safety of Life at Sea (SOLAS)

- Distress communications
- Distress signal
- The correct use and meaning of the signal MAYDAY
- Distress call
- Distress message
- Acknowledgement of a distress message
- Obligation to acknowledge a distress message
- Correct form of acknowledgement
- Action to be taken following acknowledgement
- The control of distress traffic
- The correct use and meanings of the signal
- SEELONCE MAYDAY SEELONCE FEENEE

Correct Use and Meaning of the Signal MAYDAY RELAY

Urgency Communications

- Urgency signal
- The correct use and meaning of the signal PAN PAN
- Urgency message: obtaining urgent medical advice through a coast station

Safety Communication

- Safety signal: the correct use and meaning of the signal SECURITE
- Safety message
- Special procedures for communication with appropriate national organisations on matters affecting safety
- Reception of MSI by VHF radiotelephone
- Awareness of the existence and use of the IMO Standard Marine Navigational
- Vocabular

Knowledge of the Following Transmissions

- All after, all before
- Correct, correction
- I say again, I spell
- In figures, in letters
- Out, over
- Read back, received
- Say again, station calling
- Text, this is, all after
- Word after, word before
- Wrong

Use of the International Phonetic Alphabet

Regulations Obligatory Procedures and Practices

- Awareness of international documentation and availability of national publications
- Knowledge of the international regulations and agreements governing the maritime mobile service
- Requirement for Ship Station Licence
- Regulations concerning control of the operation of radio equipment by the holder of an appropriate certificate of competence
- National regulations concerning radio record keeping
- Preservation of the secrecy of correspondence
- Types of call and types of message which are prohibited

Practical and Theoretical Knowledge of Radiotelephone Call Procedures

- Method of calling a Coast Station by radiotelephony
- Ordering a manually switched link-call
- Ending the call
- Calls to ships from Coast Stations
- Special facilities of calls
- Method of calling a Coast Station DSC for general communications
- Electing an automatic radiotelephone call

Traffic Charges

- International charging system
- Accounting Authority Identification Code (AAIC)
- Practical traffic routines
- Correct use of call signs
- Procedure for establishing communication
- Intership, public correspondence, small craft safety, port operations and ship movement channels
- Procedure for unanswered calls and garbled calls
- Control of communications

SEAFØRCE
POWERBOATS

Like what you see?
Get booked.

(Last minute booking? Or need flexible dates? Get in touch)

www.seaforcepowerboats.co.uk

Gotta Question?

(We should have the answer on our FAQs page)

FAQs

Kelvin Harbour, 150 Pointhouse Place, Glasgow, G3 8RS | www.seaforcepowerboats.co.uk
info@seaforcepowerboats.co.uk | +44 07545903626