

IHO File N° S3/4505-S1/3022

**CIRCULAR LETTER 07/2021
10 February 2021**

ANNOUNCEMENT OF UKHO VIRTUAL TRAINING EVENTS

Dear Hydrographer,

1. The UK Hydrographic Office (UKHO) has always played an important role in capacity building by providing training courses for the benefit of the hydrographic community. Nowadays, under this pandemic situation, the availability of online education initiatives gains additional importance.
2. This Circular Letter announces that the UKHO will provide three short, free training courses which focus on ENC's, S57 and Navigational Safety in March and April 2021. The courses will be online in several slots for different time-zones. The course modules and the time slots are available in Annex A. Registration is required and should be sent directly to the UKHO International training team (internationaltraining@UKHO.gov.uk) including Name, Organisation, Course Name, date/time and Contact email address.
3. The IHO Secretariat would like to congratulate the UKHO for this timely and important initiative, and thanks them for their continuous support to the IHO Capacity Building and other programmes.

On behalf of the Secretary-General
Yours sincerely,



Luigi SINAPI
Director

Annex: UKHO modules and time slots



UK Hydrographic
Office

Online Training Events

March – April 2021

Introduction

The UK Hydrographic Office is running a series of online training events throughout March and April 2021. The courses will be in **English** and are **free of charge** as part of a pilot for a new UKHO online learning portal.

This brochure provides details of the course content, their intended audience, the dates and times, and instructions for how to book a place.

Course dates:

The UKHO will be running the online courses across multiple dates and time zones to accommodate our partners around the world. The course dates and times are shown below:

Course	Date(s)	Duration	UK (GMT)	Americas (GMT -5)	Singapore (GMT +8)
Understanding ENCs	2 March	Half-day	09:00-13:00	04:00-08:00	17:00-21:00
	4 March	Half-day	07:00-11:00	02:00-06:00	15:00-19:00
	13 April	Half-day	13:00-17:00	08:00-12:00	21:00-01:00
Introduction to S-57	9 March	One day	09:00-16:00	04:00-08:00	17:00-21:00
	10 & 11 March	One day (split over two half-days)	07:00-11:00	02:00-06:00	15:00-19:00
	20 & 21 April	One day (split over two half-days)	13:00-17:00	08:00-12:00	21:00-01:00
Compiling for Navigational Safety	16 March	One day	09:00-16:00	04:00-08:00	17:00-21:00
	17 & 18 March	One day (split over two half-days)	07:00-11:00	02:00-06:00	15:00-19:00
	27 & 28 April	One day (split over two half-days)	13:00-17:00	08:00-12:00	21:00-01:00

How to book:

If a member of your staff is interested in attending any of these courses, please email the UKHO International Training Team at InternationalTraining@ukho.gov.uk with the following information:

- › Name
- › Position
- › Contact telephone number
- › Email address
- › Preferred course date



Understanding Electronic Navigational Charts

Duration:	Dates:	Times (GMT):
Half day	Tuesday 2 March	09:00–13:00 GMT
	Thursday 4 March	07:00–11:00 GMT
	Tuesday 13 April	13:00–17:00 GMT

About the course:

This half-day online course provides an introduction to the structure, function, planning and production of Electronic Navigational Charts (ENCs) and their display in Electronic Chart Display and Information Systems (ECDIS). This course is supported by the ADMIRALTY Guide to the Practical Use of ENCs (NP231). This course is aimed at nautical cartographers and geospatial operators inexperienced in the production of electronic charting, who require a greater understanding of ENCs.

Suitable for:

Nautical cartographers and geospatial operators who are inexperienced in the production of electronic charting, and who require a greater understanding of ENCs.

Content:

- › **ENC scheming:**
 - › Compilation scale and navigational purpose
 - › Resolution of an ENC
 - › Geodetic datum used for ENCs
 - › Metadata stored within ENC cells
 - › How ENCs are schemed

- › **ENC structure and display:**
 - › Naming conventions used for ENC files
 - › Differences between new cells, new editions and updates
 - › Structure of exchange sets
 - › Awareness of S-52 symbology
 - › Use of the safety contour and safety depth
 - › How isolated dangers are displayed
 - › ECDIS display modes

- › **ENC production:**
 - › Overview of ENC production in CARIS HPD
 - › Validation processes in CARIS HPD and CASTLE
 - › The ENC distribution model

- › Introduction to NP231 ADMIRALTY Guide to the Practical Use of ENCs



Introduction to S-57

Duration:	Dates:	Times (GMT):
One day	Tuesday 9 March	09:00–16:00 GMT
	Wednesday 10 & Thursday 11 March (course split over two half-days)	07:00–11:00 GMT
	Tuesday 20 & Wednesday 21 April (course split over two half-days)	13:00–17:00 GMT

About the course

This short one-day online course provides an introduction to the IHO S-57 Data Exchange Standard, which is used to capture and encode digital data in the required format for Electronic Navigational Charts (ENCs). S-57 is also increasingly used by hydrographic offices to encode data for use in geospatial databases and for paper chart production. This course is aimed at nautical cartographers and geospatial operators inexperienced in S-57 data capture for ENCs, databases and when producing paper charts from S-57 data.

Suitable for:

Nautical cartographers and geospatial operators who are inexperienced in S-57 data capture for ENCs, databases and when producing paper charts from S-57 data.

Content:

- › **S-57 objects and attributes:**
 - › How real-world features are encoded in S-57
 - › Different types of allowable geometry
 - › Different types of attributes
- › **S-57 geometry and relationships between features:**
 - › Feature and spatial objects
 - › Concept of shared geometry
 - › Concept of Skin of the Earth
 - › Why soundings are different to other point features
 - › Use of spatial attributes
 - › Master/slave relationships between structure and equipment features
- › **Introduction to CARIS HPD:**
 - › Zoom and pan in Source Editor
 - › Feature selections and 'superselections'
 - › Commonly used windows and their purposes
 - › Digitising new features
- › **Capturing new features in CARIS HPD Source Editor**



- › Population of mandatory and conditional attributes
- › CARIS format for latitude and longitude positions
- › Snapping and intersecting
- › Creating master/slave relationships

- › **Editing existing features**
 - › Moving point features to a specified position
 - › How Edit All Features (or 'Sticky Mode') works
 - › Editing line and area features
 - › Editing soundings
 - › Editing attributes

- › S-57 Encoding Guidance: IHO document 'Use of the Object Catalogue'

- › IHO standards used for the creation and display of ENC's on an ECDIS



Compiling for Navigational Safety

Duration:	Date:	Time (GMT):
One day	Tuesday 16 March	09:00–16:00 GMT
	Wednesday 17 & Thursday 18 March (course split over two half-days)	07:00–11:00 GMT
	Tuesday 27 & Wednesday 28 April (course split over two half-days)	13:00–17:00 GMT

About the course:

This short online course provides an insight into the main navigational dangers that impact on mariners' navigational decision-making, and the main types of Aids to Navigation that are deployed to assist mariners in making effective navigational decisions. The course also provides cartographers with guiding principles into how navigational dangers and Aids to Navigation are clearly and effectively charted. A detailed session on the principles of sounding selection and depth contour compilation is included.

Suitable for:

Nautical cartographers and geospatial operators who are inexperienced in both paper and electronic charting.

Content:

- › Main navigational dangers that mariners face at sea, including rocks, wrecks, obstructions, available depths, water turbulence and other mariners
- › How such dangers are charted safely on both paper charts and ENCs, including a detailed session on the principles of sounding selection and depth contour compilation
- › The use of Aids to Navigation to mark and safely mitigate for navigational dangers: An Introduction to the IALA system of Navigational Buoyage, and of virtual AIS
- › An Introduction to Navigational Lights, including light characteristics, the use of sectored, directional and leading lights and the role of ADMIRALTY List of Lights

