



Maritime &  
Coastguard  
Agency



United Kingdom  
Hydrographic Office

# UK Civil Hydrography Programme

Funded and delivered by the MCA, an Executive Agency of the Department for Transport

## Hydrographic Instruction 1594 Version 2

### Smiths Knoll to Leman Bank

13<sup>th</sup> March 2018

Addition to MCA Hydrographic Survey Services in UK and European Waters v 2018

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## Document Versions

Version Number	Date of Issue	Comment
1	05/03/2018	Issued to MCA
2	13/03/2018	MCA final version

## Abbreviated Terms

Symbol	Meaning
BA	British Admiralty
CD	Chart Datum
CORS	Continuously Operating Reference stations
ENC	Electronic Navigational Chart
ETRS	European Terrestrial Reference System
GNSS	Global Navigation Satellite System
HI	Hydrographic Instruction
iaw	In accordance with
IHO	International Hydrographic Organisation
MCA	Maritime & Coastguard Agency
MSL	Mean Sea Level
OD	Ordnance Datum
RoS	Report of Survey
SD	Sounding Datum
UKHO	United Kingdom Hydrographic Office
VORF	Vertical Offshore Reference Frame
WGS	World Geodetic System

## 1. Scope

This document details the project specific requirements for conducting HI1594 – Smiths Knoll to Leman Bank. It is authored by the UK Hydrographic Office (UKHO), on behalf of the Maritime & Coastguard Agency (MCA), for issue to the appropriate contractor. The area is described in the coordinates and diagrams in section 4.

## 2. Related Standards

The following publications are to be adhered to in the conduct of this HI:

- MCA UK Civil Hydrography Programme Survey Specification v 2018

In addition, the following documents should also be referenced and followed where applicable:

- Standards for Hydrographic Surveys. Special Publication No. 44, 5th Edition, February 2008. International Hydrographic Organisation (Order 1A).

## 3. Government Furnished Data

The following Government furnished data will be provided to support this HI:

- All known wrecks within the limits of each survey block.
- BA Charts for the area in GeoTiff format.
- S57 ENC data for the area.
- VORF Model outputs for the area in ASCII format.
- NP54 – North Sea (West).

Note: Government furnished data remains the property of the MCA / UKHO. As such, the data must be returned to the MCA / UKHO once the contract has been completed. All government furnished data is Crown Copyright and must not be duplicated or distributed without the permission of the MCA or UKHO. Government Furnished Data must not be used for navigation.

## 4. Area to be Surveyed

The contractor shall survey the area stated in Table 1 in line with the MCA UK Civil Hydrography Programme Survey Specification v 2018, as shown in Figures 1 and 2, and as stated in Section 7. All coordinates are quoted in ETRS89 in Degrees-Minutes decimal minutes.

Consideration should always be given to extending a survey area if a particular seabed feature such as the edge of a critical bank is not adequately covered by the prescribed areas. If the contractor feels an area should be extended in this way, please consult the MCA as soon as possible.

As stated in the specification, where significant differences to depths for a given area are found, particularly to the controlling depth, a Hydrographic Note (H102) should be immediately sent



to the UKHO notifying them of the critical depth changes and their positions, and copied to the MCA Hydrography & Meteorology and Receiver of Wreck Teams.



Figure 1 - Overview of Survey Area (BA0002)

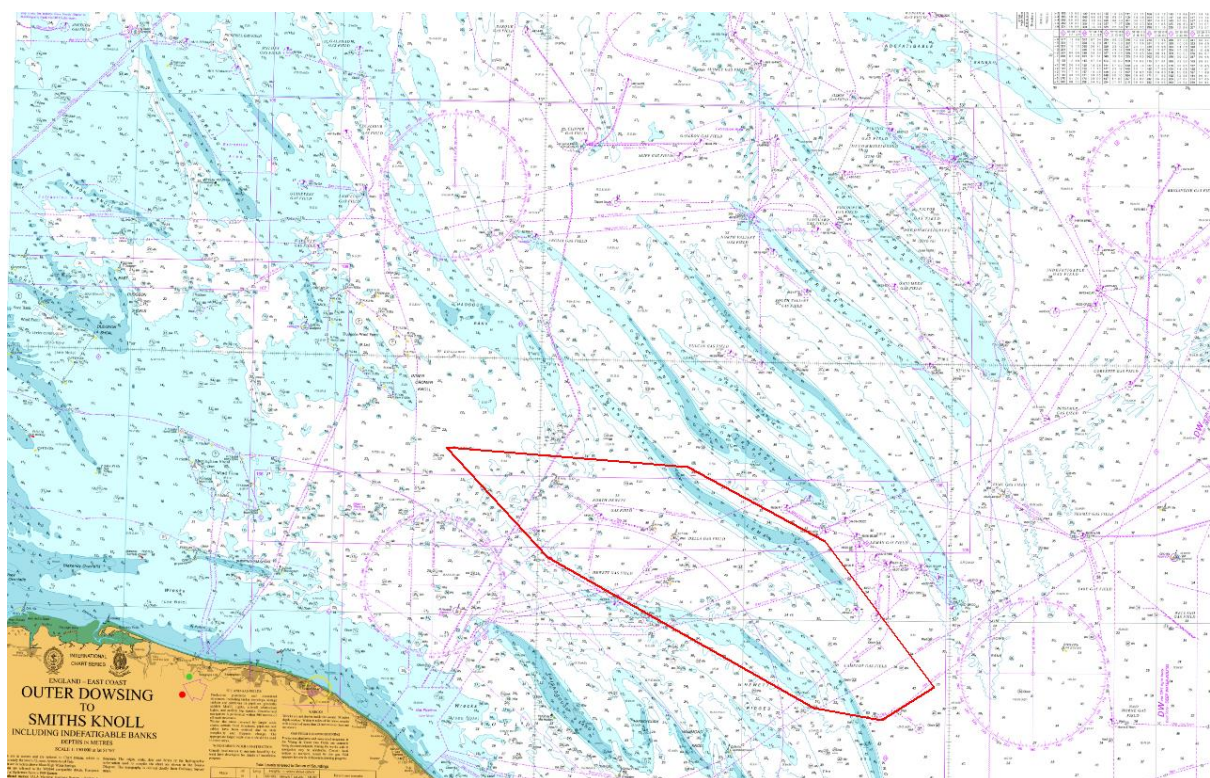


Figure 2 - Close-up of Survey Area (BA1503)

HI1594 - Coordinates – 679.15km <sup>2</sup>		
Point	Latitude (N)	Longitude (E)
01	53-09.7189	001-30.9405
02	53-08.8170	001-54.4358
03	53-04.5949	002-07.7930
04	52-56.1515	002-18.5539
05	52-54.2200	002-13.4703
06	52-54.8771	002-06.9183
07	53-03.4097	001-41.0172
01	53-09.7189	001-30.9405

Table 1 – Survey Coordinates

## 5. Survey Control & Positioning

Positioning System:

In line with specification.

Datum: ETRS89

Spheroid: GRS '80

Projection: UTM Grid Zone 31 North (Central Meridian 3° East)

All positioning data (including bathymetry positioning) and reports rendered as part of this survey shall be quoted in terms of the ETRS89 reference frame. A clear statement shall be included in the Report of Survey (RoS) and any relevant metadata (including appropriate file headers) stating the Reference Frame used.

All rendered positions within RoS shall be quoted as geographical co-ordinates (i.e. in terms of Lat. / Long) as degrees and decimal minutes.

## 6. Tides and Tidal Stream Observations

### 6.1 Confirmation of GNSS System and Application of VORF Model

Not required.

### 6.2 Tidal Data

Not required.

### 6.3 Tidal Stream Data

Not required.

## 7. Bathymetry

Full seafloor coverage shall be achieved within the defined polygon.

## 8. Wreck Database for Area

The UKHO Wreck/Obstruction Database contains the following number of wrecks/obstructions in the survey areas:

**Total: 34      Live: 17      Lift: 1      Dead: 16**

For details see

- [HI1594\\_ListOfSignificantObjectsAndWrecks.csv](#)
- [HI1594\\_ListOfSignificantObjectsAndWrecks.html](#)

Where a category of obstruction or wreck is stated in the csv file the numbers are summarised below:

**Dangerous wreck: 17**

**Non-dangerous wreck: 11**

**Foul ground: 3**

**Wreck showing mast/masts: 1**

## 9. Seabed Sampling and Classification

### 9.1 Seabed Classification

Required in line with specification.

### 9.2 Seabed Sampling

Required in line with specification.

## 10. Sailing Directions

The appropriate Sailing Directions (Pilot) has been supplied in PDF format and should be checked in the field with appropriate amendments rendered. Particular attention should be paid to any recommended approach routes and anchorages within or adjacent to the survey area.

The following specific views are required.

No	Description	From Direction	Position of Stated Feature (Degrees-Minutes decimal minutes)	Type of view (see note below)	NP Page (NP Publication, Paragraph number)
1	Offshore platform 48/29C North Hewett Gas field	Any	53°-05'·819 N 01°-45'866 E	Portrait	206 (NP54/9.14)
2	Della Gas Field Buoy	Any	53°-04'·776 N 01°-53'·288E	Pilotage	206 (NP54)

**Note** - Type of view refers to: Panoramic views, Aerial Oblique views, Pilotage views, Portrait views and Close-up views. Please refer to NP100 (chapter 4.37) for view descriptions.

## 11. Magnetic Anomalies, Eddies and Over-falls

### 11.1 Magnetic Anomalies

There are no charted magnetic anomalies in the survey area.

### 11.2 Eddies and Over-falls

There are no charted eddies or over-falls in the survey area.

## 12. Deliverables

The deliverables and RoS for this survey should not be split into multiple parts. One set of deliverables is requested.

Data should be rendered to the UKHO upon completion of processing and reporting in line with specifications. Please submit all data and reports in digital form on suitable electronic media to the address below:

**Bathymetric Data Management (Survey Receipt)**  
E219  
UK Hydrographic Office  
Admiralty Way  
Taunton  
TA1 2DN

Please note that no named individual should be addressed.