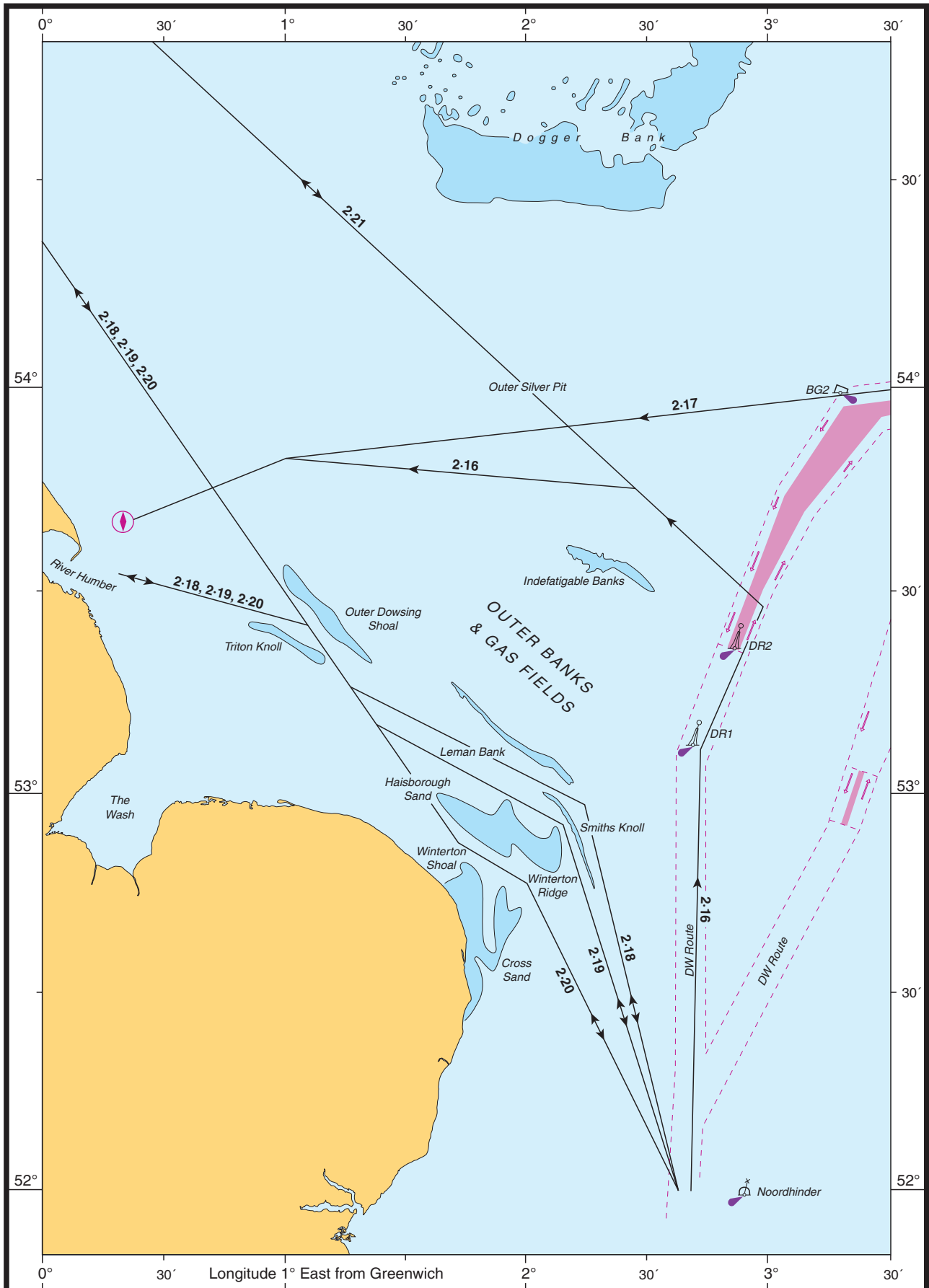


Chapter 2 - The Western part of the North Sea



Arrows indicate the waterway described. Numbers refer to paragraphs in the chapter

CHAPTER 2

THE WESTERN PART OF THE NORTH SEA

GENERAL INFORMATION

Scope of the chapter

2.1

- 1 This chapter provides a general description of the off-lying features in the W part of the North Sea beyond a distance of about 20 miles from the coast.

Routes

2.2

- 1 There are few defined routes in offshore part of the North Sea covered by this volume.

Hazards

2.3

- 1 **Offshore oil and gas operations.** Numerous offshore oil and gas exploration and production rigs are located in the area. See 1.25.

The major oil and gas fields which lie within the limits of this volume are in two main groups. Those which lie to the extreme NE are generally oil fields, whilst those to the S are all gas fields. Most fields lie offshore but a few gas fields in the S are mentioned in the coastal route directions.

- 2 All the gas fields and some of the oil fields are connected to the shore by pipelines. Those oil fields which are not so connected rely on SPMs or FPSOs to offload their oil direct to tankers.

A list of all oil and gas production platforms in the North Sea is contained in *ADMIRALTY List of Lights and Fog Signals Volume A*.

Caution. See 2.6.

- 3 **Wind farms**, which are best seen on the chart, are being established well offshore in the North Sea. Meteorological masts, survey vessels and wind farm construction and service vessels may be encountered throughout the area.

- 4 **Naval exercise areas.** Surface warships exercise in the approaches to the Firth of Forth in an area centred on 56°10'00N 2°00'00W. See 1.20.

Submarines exercise in areas centred on 54°05'00N 2°32'00E, and 54°25'97N 0°21'50E and the approaches to the Firth of Forth centred on 56°10'00N 2°00'00W. See 1.22.

- 5 **Aircraft exercise areas.** Large areas of the W part of the North Sea are used for military aircraft exercises. Within the limits of this volume no areas are now used for surface weapon firing.

For further details see 1.21.

- 6 **Unexploded ordnance** may be encountered on the seabed throughout the region covered by this chapter. Periodically, unexploded munitions are recovered in fishing nets or located during offshore oil and gas operations. For instructions regarding munitions picked up at sea refer to *The Mariner's Handbook*. See also 2.5.

- 7 **Fishing.** Fishing vessels may be encountered throughout the waters of the North Sea. See 1.16.

Wrecks and obstructions are numerous throughout the North Sea and some, particularly in the shallower parts, may be a danger to shipping.

Pilotage

2.4

- 1 *ADMIRALTY List of Radio Signals Volume 6(1)* lists pilotage authorities bordering the English Channel, North Sea and NW Europe who provide licensed Deep Sea Pilots. Arrangements can be made to embark the pilot by helicopter.

Dumping grounds

2.5

- 1 Underwater explosives may still remain in areas 40 miles E of Flamborough Head and 30 miles NE of Whitby, which were formerly used as dumping grounds.

- 2 Underwater explosives may also remain in former dumping grounds off East Anglia as follows:

Within an area bounded by 52°25'00N, 53°12'00N, 2°00'00E, 3°15'00E.

Within 3 miles each side of a line joining 52°05'00N 2°32'00E and 52°20'00N 3°00'00E.

In the vicinity of positions 52°46'40N 1°41'90E and 53°22'00N 1°31'00E.

Regulations

2.6

- 1 Unauthorised navigation is prohibited within 500 m of all offshore oil and gas structures, including storage tankers, which can swing about their moorings. Tankers manoeuvring in the vicinity of platforms and offshore moorings should be given a wide berth. For further information see *The Mariner's Handbook*.

Aids to navigation

2.7

- 1 **Oceanographical data buoys.** Data gathering and ODAS buoys may be encountered in the vicinity of the routes described in this chapter. For further information see 1.12.

Natural conditions

2.8

- 1 **Tidal streams.** Details of tidal streams are given on the charts and in *ADMIRALTY Tidal Stream Atlas: North Sea, North-Western Part* and *ADMIRALTY Tidal Stream Atlas: North Sea, Southern Part*. For details of the tidal regime see 1.73.

Tidal heights. See 1.80.

OFFSHORE PASSAGES

GENERAL INFORMATION

Area covered

2.9

- 1 There are few defined routes in offshore part of the North Sea covered by this volume. However the area has numerous features relevant to the mariner.
There are no specific directions for the offshore passages in this chapter, the chart being the best guide.
- 2 Described routeing in the region is mentioned below:
Deep-draught vessel route (2.16).
German Bight to River Humber (2.17).
Outer Dowsing Channel and Leman Bank route (2.18).
- 3 Middle Ground route (2.19).
The Wound and Haisborough Gat (2.20).
Northern United Kingdom to Near Continent (2.21).
Routes to North Sea Oil and Gas Fields (2.22).

Depths

2.10

- 1 **Latitude of Rattray Head to Dogger Bank.** From the latitude of Rattray Head (57°36'·60N) to the Dogger Bank (54°45'·00N 2°15'·00E) the area is open with few marked features and depths are generally in excess of 50 m throughout. There are a number of North Sea oil fields along the N and E boundaries of this area.
- 2 Turbot Bank (57°27'·00N 0°50'·00W) lies in the NW corner of the area covered by this book. Aberdeen Bank is 22 miles S of Turbot Bank and Marr Bank a further 48 miles SSW. There are a number of wrecks and patches with less than 50 m over them to the NE and SE of Marr Bank.
- 3 **Caution.** There are a number of obstructions and dangerous wrecks on Dogger Bank and South West Patch.
Outer Well Bank (54°09'·00N 2°00'·00E), South-West Spit (54°12'·00N 1°30'·00E) and The Hills (54°20'·00N 0°55'·00E) are smaller shoals lying about 10 to 20 miles SW of Dogger Bank.
- 4 **Outer Silver Pit** (54°00'·00N 2°10'·00E) is a deep which separates the banks above from the large area of shoals which lie to the NE of the coast between the River Humber (53°34'·00N 0°06'·00E) and Great Yarmouth (52°34'·50N 1°44'·00E). The edges of the deep are often marked by tide ripples. The W end of Outer Silver Pit is known as Skate Hole and the E end as Botney Cut.
- 5 To S and SW of Outer Silver Pit, and interspersed between the banks which lie offshore, are numerous offshore gas fields, which form the greatest concentration of production platforms in the North Sea (2.3).
- 6 **Indefatigable Banks** (53°35'·00N 2°20'·00E), two narrow shoals, lie 52 miles offshore. They are the outermost of a series of narrow sandbanks running NW/SE in roughly parallel lines which lie to the SW of the Indefatigable Banks. Depths over the banks from Swarte Bank (53°24'·00N 2°10'·00E) SW are less than 10 m in places and over those farthest SW there are

depths less than 5 m. The shallow areas may be indicated by smooth rippling when the tidal stream is strong; this rippling can be detected by radar. The sea breaks over the banks in rough weather. Depths between the banks may exceed 30 m but there are patches with depths of less than 15 m.

- 7 **Caution.** The banks are generally unmarked and care should be taken when approaching them. The banks should not be crossed, especially in rough weather, unless the position of the vessel is known accurately.

The channels are relatively narrow in places and the adjacent banks are liable to change.

Hazards

2.11

- 1 See 2.3.

Pilotage

2.12

- 1 See 2.4.

Dumping grounds

2.13

- 1 See 2.5.

Regulations

2.14

- 1 See 2.6.

Natural conditions

2.15

- 1 See 2.8.

DEEP-DRAUGHT VESSEL ROUTE

General information

Route

2.16

- 1 Deep-draught vessels on passage between Dover Strait and ports on the E coast of the United Kingdom are recommended to follow the DW Route via DR1 Light Buoy (53°06'·69N 2°40'·68E) (see *North Sea (East) Pilot*) and then to approach the coast through Outer Silver Pit (2.10), passing N of the Hornsea Wind Farms (53°55'·34N 1°47'·77E). This route avoids the offshore banks between Great Yarmouth and River Humber.

GERMAN BIGHT TO RIVER HUMBER

General information

Route

2.17

- 1 Vessels proceed on a direct course W from the German Bight TSS (see *North Sea (East) Pilot*) to the River Humber. The track leads through Outer Silver Pit (2.10), passing N Hornsea Wind Farms (53°55'·34N 1°47'·77E) and the offshore sandbanks which lie in its vicinity.
- 2 **Caution.** In strong NW winds, vessels are advised to proceed SW of Leman Bank (53°06'·00N 1°59'·00E) and thence through Outer Dowsing Channel. See 2.18.

OUTER DOWSING CHANNEL AND LEMAN BANK ROUTE

General information

Route 2.18

- ¹ The route, which is described at 9.7, passes through the channel between Leman Bank (53°06'·00N 1°59'·00E) and Smiths Knoll (52°53'·00N 2°12'·00E). It is used by vessels proceeding between ports on the E coast of the United Kingdom and the near continental ports of The Netherlands and Belgium. It is used also by vessels proceeding from ports on the E coast of the United Kingdom to the Thames Estuary and to Dover Strait. The latter vessels usually join the SW-going lane of the TSS to E of Falls Bank. See *Dover Strait Pilot*.

MIDDLE GROUND ROUTE

General information

Route 2.19

- ¹ An alternative and well-used route passes between the routes described at 2.18 and 2.20. It leads SE over The Middle Ground (52°50'·00N 2°09'·00E) passing NE of Haisborough Sand (52°55'·00N 1°42'·00E), Hammond Knoll (52°52'·70N 1°54'·50E) and Winterton Ridge (52°50'·00N 2°01'·00E), and SW of Smiths Knoll (52°53'·00N 2°12'·00E).

THE WOULD AND HAISBOROUGH GAT

General information

Route 2.20

- ¹ The route, which is described at 9.13, is used by vessels proceeding between ports in the Wash or on the E coast of the United Kingdom and the near

continental ports of The Netherlands and Belgium. It is used also by vessels proceeding S along the coast of the United Kingdom and by vessels proceeding to Dover Strait. The latter join the SW-going lane of the TSS to W of Falls Bank. See *Dover Strait Pilot*.

NORTHERN UNITED KINGDOM TO NEAR CONTINENT

General information

Route 2.21

- ¹ Vessels bound from Scotland or northern England to the near continental ports of The Netherlands or Belgium can proceed SW of Dogger Bank and E of Indefatigable Banks (53°35'·00N 2°20'·00E) (2.10) to join the shipping lanes of the S part of the North Sea (See *North Sea (East) Pilot* and *Dover Strait Pilot*). By so doing, the offshore sandbanks and most of the oil and gas installations are circumvented.

ROUTES TO NORTH SEA OIL AND GAS FIELDS

General information

Route 2.22

- ¹ North Sea Oil and Gas Fields are served by a number of E coast ports. In the N, Peterhead (57°30'·00N 1°47'·00W) (3.15), Aberdeen (57°08'·73N 2°03'·51W) (3.45), Montrose (56°42'·19N 2°26'·25W) (3.95) and Dundee (56°27'·50N 2°56'·00W) (3.142) serve the oil fields which lie to their E and NE. In the S, Great Yarmouth (52°34'·50N 1°44'·00E) (9.50) and Lowestoft (52°28'·31N 1°45'·38E) (9.75) serve the concentration of gas fields in the S part of the North Sea. The approaches to these ports are therefore likely to be busy with supply-vessel traffic.

UKHO

[NP54-No 53-Wk 50/23]