

# Shipping

National Meteorological Library and Archive Fact sheet 8 — The Shipping Forecast

(version 01)

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#### Introduction

The Met Office is the national weather service of the United Kingdom and its general functions include the organisation of voluntary weather observing and the collection of meteorological data by other means over the oceans.

The Met Office was established as the Meteorological Department of the Board of Trade in 1854 when Captain, later Vice-Admiral, Robert FitzRoy was appointed as its first head, and operations commenced in 1855.



Figure 1. Vice-Admiral Robert FitzRoy CB, FRS.

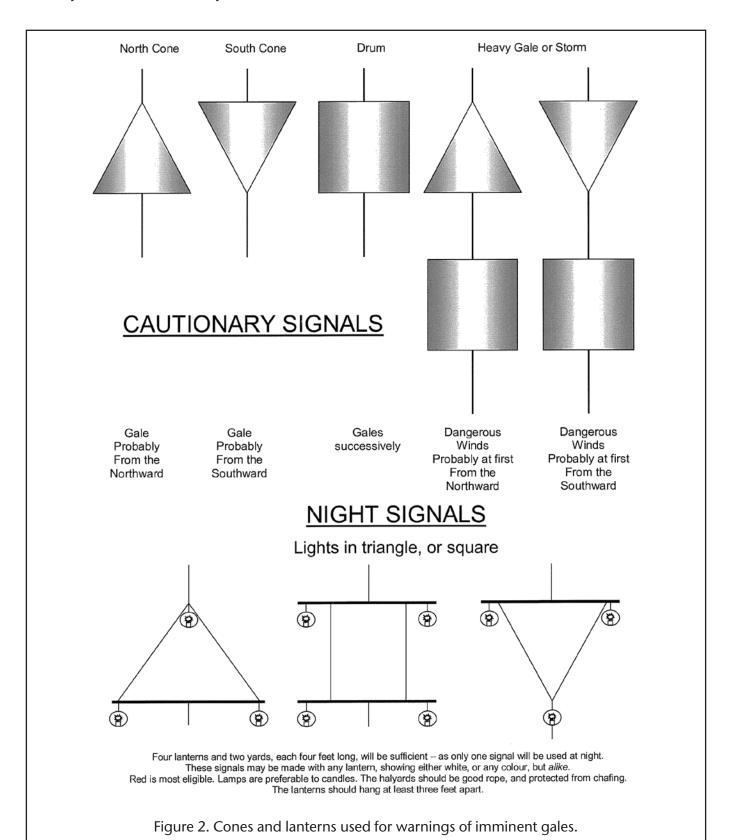
FitzRoy is probably better known for his role as Captain of *H.M.S. Beagle*, a post he held from 1828 to 1836. It was during his second commission, between 1831 and 1836, that he was accompanied by the naturalist, Charles Darwin, on the exploration and surveying voyage around the coasts of South America.

In October 1859, the steam clipper *Royal Charter* founded in a violent storm off the coast of Anglesey in North Wales with the loss of over 450 lives. As a direct result of this disaster, FitzRoy introduced the first British storm warning service for shipping in February 1861, making use of the electric telegraph. FitzRoy was the main influence in the early development of the Met Office, which was then primarily intended to improve safety at sea.

# History of the sea areas used in the BBC and GPO weather bulletins for shipping

The first telegraphic weather warning for shipping was carried out in 1861; by the year 1911, in addition to coastal waters, the North Atlantic was covered by broadcasts of gale warnings.

Gale warnings were issued by telegraph to the observation station(s) likely to be affected. The message would consist of a list of places with the words 'North Cone' or 'South Cone' (for northerly or southerly gales), 'Drum' (for gales successively), or 'Drum and North (or South) Cone' (for heavy gale or storm). On receipt, the station would hoist the appropriate signal on a staff, this being repeated at points along the coast by the Coast Guard or by other authorised stations.



Gale warnings for the British Isles were being broadcast to ships in the Eastern North Atlantic approaching these shores as far back as 1911 but, on the outbreak of war in 1914, this service ceased and it was not until 1921 that any regular weather bulletin for shipping could be resumed.

Commencing in June 1921 a specially prepared weather message for shipping approaching the western coasts of the United Kingdom was broadcast twice a day from the wireless transmission station at Poldhu in Cornwall. This message consisted of the forecast for the Western Coasts in plain language, followed by observations, in code, of barometric pressure, wind direction and force, visibility and barometric tendency taken at 0700 and 1800 GMT at Blacksod Point (County Mayo, Eire), Stornoway (Isle of Lewis), Holyhead, Scilly and Dungeness so that mariners were given some idea as to the weather conditions upon which the forecasts were based.

On 1 January 1924, in appreciation of the valuable help given to the meteorological service of this country by the radio weather reports from ships, a weather bulletin called Weather Shipping was started, broadcast twice daily at 0900 and 2000 GMT, from the powerful Air Ministry station G.F.A. in London, on a wavelength of 4,100 metres using CW (continuous wave) transmission which was capable of being received at a distance of up to 2,400 miles to the west and some 2,000 miles to the south.

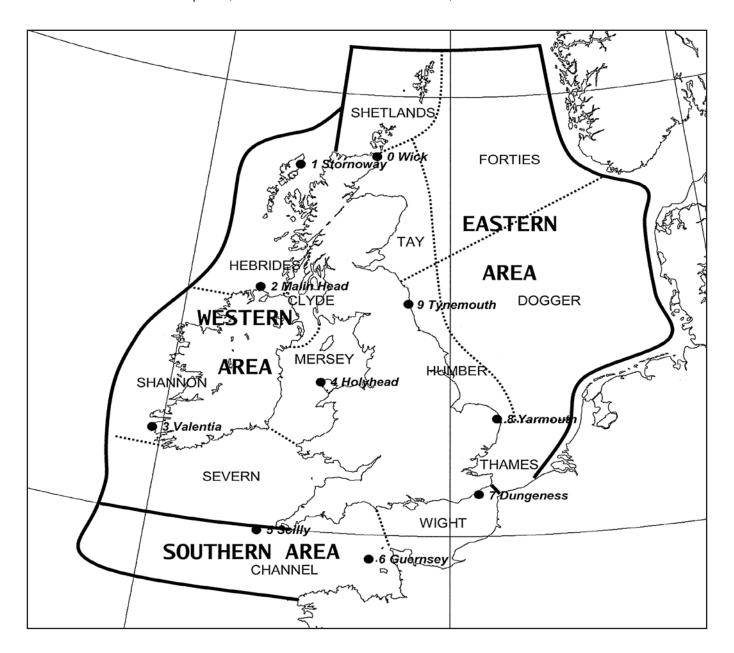


Figure 3. Sea areas and stations as originally used in 1924. The numbers before the names of the stations indicate their code number. The boundaries of the areas are defined by the plain black lines and the coast line. These areas are sub-divided into districts named after islands, rivers or banks within them.

Most large ocean-going ships by this time were fitted for CW wireless telegraphy reception but there were still quite a number of the smaller ocean-going vessels and some coasters fitted for the reception of Spark transmission only, so that it was not long before pressure was being brought to bear for this bulletin to be broadcast on Spark as well as CW for their benefit. By the end of 1924 Spark transmissions of the bulletin were made from the coast stations at Valencia and Seaforth for the western area, Niton for the southern area and Cullercotes for the eastern area.

#### The bulletin was in six parts:

Part 1 gave a general inference of weather conditions over the British Isles which usually included information of the pressure systems influencing the weather, and their positions.

Part 2 gave actual observations in code, with station number, barometric pressure and tendency, visibility, direction and force of wind, at the ten British stations shown in figure 3, numbered from 0 to 9.

Parts 3, 4 and 5 were forecasts of wind and visibility for the 12 hours following the time of observations for the areas shown on the chart.

Part 6 commencing 'outlook' gave a general statement of the expectation of weather after the period of the forecast.

From October 1925 this bulletin, with the exception of Part 2 – which was in code – was broadcast by telephony from the BBC station 5XX at Daventry twice daily on 1,600 metres. In 1932, a Northern area was added to the shipping bulletins (see figure 4) mainly for the benefit of the increasing number of trawlers fishing within its limits.

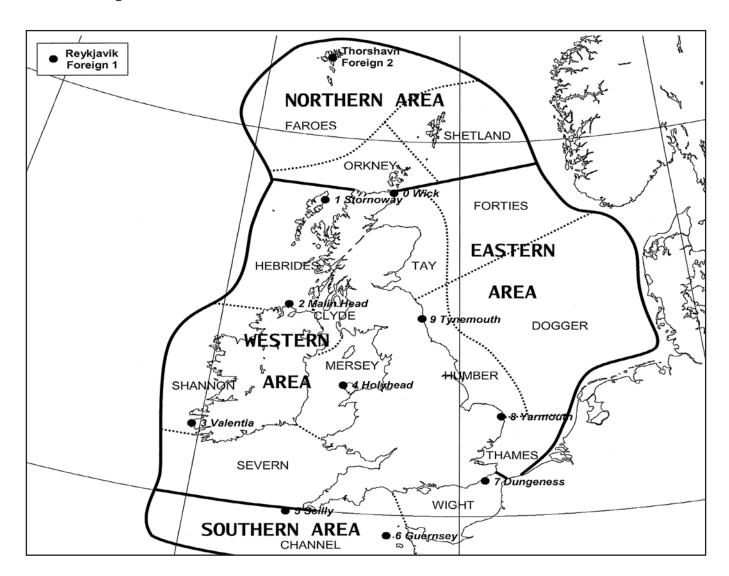


Figure 4. Sea areas as amended in 1932.

Radio weather bulletins for shipping ceased on the outbreak of hostilities in 1939. They were resumed again in 1945 in much the same form as in 1939.

By 1948 most shipping services had returned to normal and a need was felt for shipping forecasts to cover a wider area. Figure 5, shows the considerable extension of forecasts agreed in that year and introduced in 1949 when the chart was given a new format; the northern, southern, eastern and western area divisions shown on previous charts were omitted.

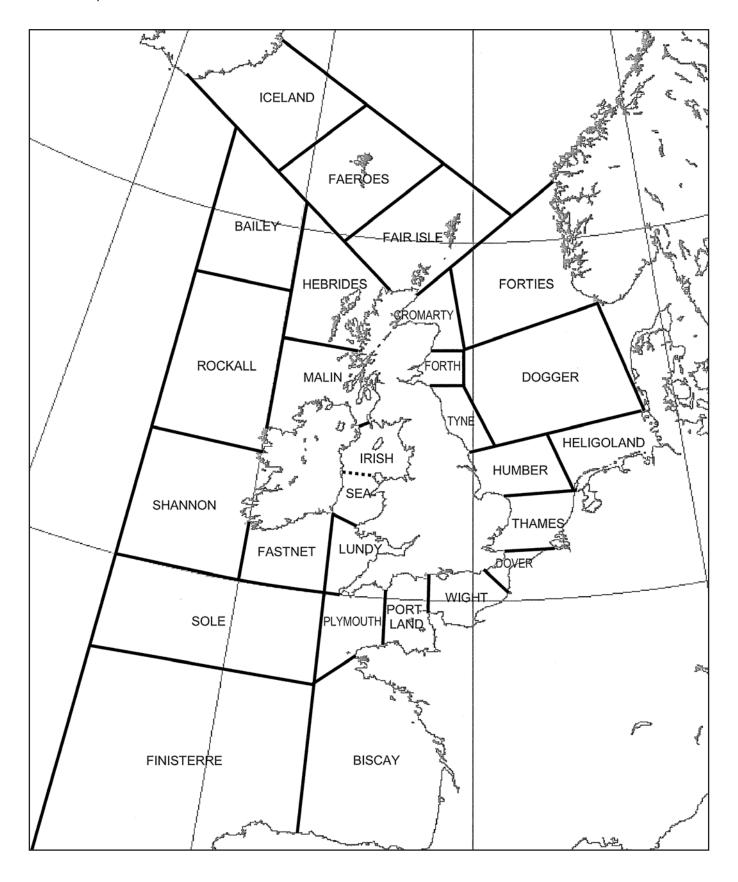


Figure 5. Sea areas adopted in 1949.

In 1955 a meeting of meteorologists representing countries bordering the North Sea recommended that the area then designated 'Heligoland' by the United Kingdom should be renamed 'German Bight', the name it was generally known by on the other side of the North Sea. Three other changes were also recommended at this meeting. These were that the area Dogger be divided and the north-eastern half named 'Fisher', and that the area 'Forties' be divided and the northern half named 'Viking'. Both these new areas are names of banks within their boundaries well known to mariners.

The area then known as 'Iceland' was to be renamed 'South-east Iceland' to clearly identify its position. After full consultation with the authorities concerned, these changes were introduced in 1956. Figure 6 shows these new areas.

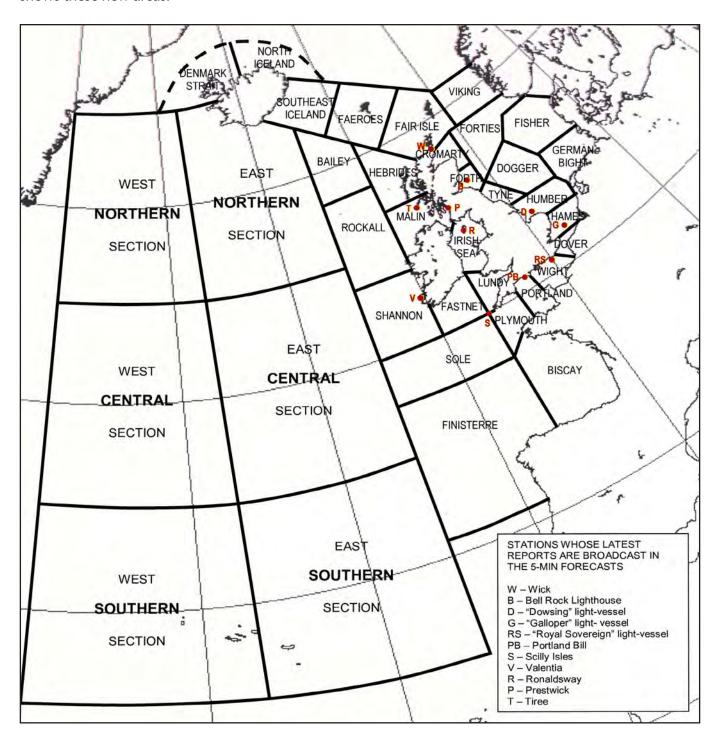


Figure 6. Sea areas as used until August 1984.

The areas Denmark Strait, North Iceland and the Northern, Central and Southern Sections are used in the North Atlantic Weather Bulletin which is provided for these areas. In all of these maps the forecast subdivisions are named after islands, rivers, or banks within them to that they may be easily memorised – i.e. they are names which at once identify the areas to the mariner.

As from August 1984, new common area boundaries for shipping forecasts were introduced throughout the North Sea region. This was the result of a special agreement reached between all the countries bordering the North Sea.

Two new areas, North and South Utsire, were introduced at that time to refine the forecast detail in that area. These areas were named after the small island of Utsira off Norway's west coast, known mainly for the increase in its small population at the time of the spring herring fisheries. See Figure 7.

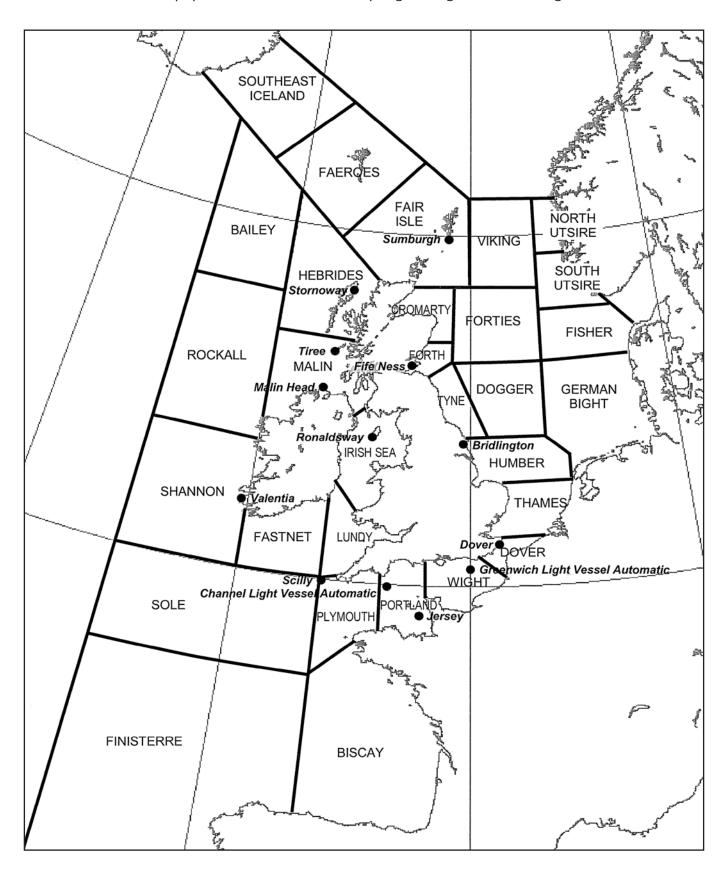


Figure 7. Sea areas used between August 1984 and February 2002.

In February 2002, in recognition of Admiral Robert FitzRoy work in forming the Met Office in 1854, the sea area 'Finisterre' was renamed 'FitzRoy'. This also corresponded with some subtle changes to the boundaries of the sea areas in the western approaches. See figure 8.

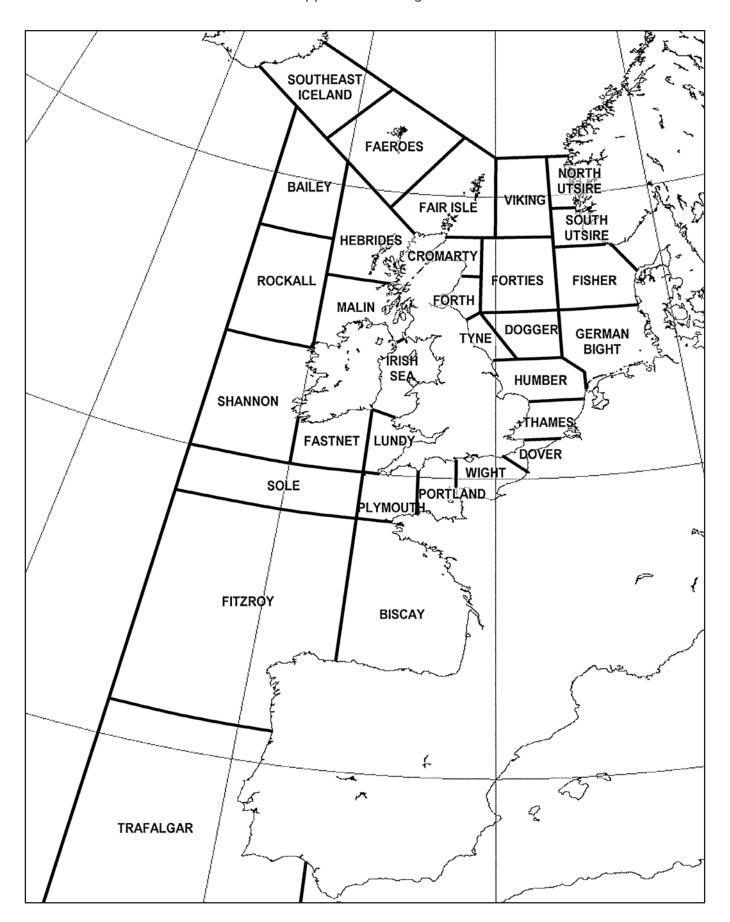


Figure 8. Sea areas used from February 2002 onwards.

Coastal sea areas	Coordinates	Coastal sea areas	Coordinates	Coastal sea areas	Coordinates
Viking	61°00'N 000°00'W 61°00'N 004°00'E 58°30'N 004°00'E 58°30'N 000°00'W	North Utsire	61°00'N 004°00'E 61°00'N 005°00'E 59°00'N 005°35'E 59°00'N 004°00'E	South Utsire	59°00'N 004°00'E 59°00'N 005°35'E 57°45'N 007°30'E 57°45'N 004°00'E
Forties	58°30'N 001°00'W 58°30'N 004°00'E 56°00'N 004°00'E 56°00'N 001°00'W	Cromarty	57°00'N 002°10'W 57°00'N 001°00'W 58°30'N 001°00'W 58°30'N 003°00'W	Forth	55°40'N 001°50'W 56°00'N 001°00'W 57°00'N 001°00'W 57°00'N 002°10'W
Tyne	54°15'N 000°20'W 54°15'N 000°45'E 56°00'N 001°00'W 55°40'N 001°50'W	Dogger	57°00'N 002°30'E 56°00'N 001°00'W 54°15'N 000°45'E 54°15'N 004°00'E 56°00'N 004°00'E	Fisher	57°45′N 004°00′E 56°00′N 004°00′E 56°00′N 008°10′E 57°05′N 008°35′E 57°45′N 007°30′E
German Bight	56°00'N 008°10'E 56°00'N 004°00'E 54°15'N 004°00'E 53°35'N 004°40'E 52°45'N 004°40'E	Humber	52°45'N 001°40'E 52°45'N 004°40'E 53°35'N 004°40'E 54°15'N 004°00'E 54°15'N 000°20'W	Thames	51°15'N 001°25'E 51°15'N 002°55'E 52°45'N 004°40'E 52°45'N 001°40'E
Dover	50°45′N 000°15′E 50°15′N 001°30′E 51°15′N 002°55′E 51°15′N 001°25′E	Wight	50°35'N 001°55'W 49°45'N 001°55'W 50°15'N 001°30'E 50°45'N 000°15'E	Portland	50°25'N 003°30'W 48°50'N 003°30'W 49°45'N 001°55'W 50°35'N 001°55'W
Plymouth	50°05'N 005°45'W 50°00'N 006°15'W 48°27'N 006°15'W 48°27'N 004°45'W 48°50'N 003°30'W 50°25'N 003°30'W	Biscay	48°27'N 006°15'W 43°35'N 006°15'W 48°27'N 004°45'W - -	FitzRoy	48°27'N 015°00'W 41°00'N 015°00'W 41°00'N 008°40'W 43°35'N 006°15'W 48°27'N 006°15'W
Trafalgar	35°00'N 015°00'W 35°00'N 006°15'W 41°00'N 008°40'W 41°00'N 015°00'W	Sole	50°00'N 006°15'W 50°00'N 015°00'W 48°27'N 015°00'W 48°27'N 006°15'W	Lundy	52°30'N 006°15'W 50°00'N 006°15'W 50°05'N 005°45'W 52°00'N 005°05'W
Fastnet	51°35′N 010°00′W 50°00′N 010°00′W 50°00′N 006°15′W 52°30′N 006°15′W	Irish Sea	54°50'N 005°05'W 54°45'N 005°45'W 52°30'N 006°15'W 52°00N 005°05'W	Shannon	53°30'N 015°00'W 50°00'N 015°00'W 50°00'N 010°00'W 51°35'N 010°00'W 53°30'N 010°05'W
Rockall	58°00'N 010°00'W 58°00'N 015°00'W 53°30'N 015°00'W 53°30'N 010°05'W 54°20'N 010°00'W	Malin	57°00'N 005°50'W 57°00'N 010°00'W 54°20'N 010°00'W 54°45'N 005°45'W 54°50'N 005°05'W	Hebrides	60°35′N 010°00′W 57°00′N 010°00′W 57°00′N 005°50′W 58°40′N 005°00′W
Bailey	62°25'N 015°00'W 58°00'N 015°00'W 58°00'N 010°00'W 60°35'N 010°00'W	Fair Isle	61°50′N 002°30′W 59°30′N 007°15′W 58°40′N 005°00′W 58°30′N 003°00′W 58°30′N 000°00′W 61°00′N 000°00′W	Faeroes	63°20'N 007°30'W 61°10'N 011°30'W 59°30'N 007°15'W 61°50'N 002°30'W
Southeast Iceland	63°35'N 018°00'W 61°10'N 011°30'W 63°20'N 007°30'W 65°00'N 013°35'W				

Table 1. Co-ordinates of the sea areas used in the shipping forecast.

# **Shipping forecast areas names**

Sea area	Reason for name
Viking	Sand bank in the North Sea
North Utsire	Utsira – island off the west coast of Norway
South Utsire	Utsira – island off the west coast of Norway
Forties	Sand bank in the North Sea
Cromarty	River estuary or place (Cromarty Firth/Cromarty)
Forth	River estuary (Firth of Forth)
Tyne	River estuary (River Tyne)
Dogger	Sand bank in the North Sea
Fisher	Sand bank in the North Sea
German Bight	An area between the two headlands of The Netherlands and Denmark
Humber	River estuary (River Humber)
Thames	River estuary (River Thames)
Dover	Place (port on the south coast of England)
Wight	Island (Isle of Wight)
Portland	Place (port on the south coast of England)
Biscay	Place (Bay of Biscay)
Trafalgar	Headland (Cape Trafalgar – Spain)
FitzRoy	Founder of the Met Office (Vice-Admiral Robert FitzRoy)
Sole	Sand bank, west of the Scilly Isles
Lundy	Lundy Island – island in the Bristol Channel
Fastnet	Fastnet Rock – a rocky island 6.5 miles to the southwest of Cape Clear, in southwest Ireland. Fastnet Rock is the most southerly point in the Irish Republic
Irish Sea	Place (Irish Sea)
Shannon	River estuary (River Shannon)
Rockall	Island/rock stack in the Atlantic Ocean
Malin	Place (Malin Head)
Hebrides	Place (Hebrides)
Bailey	Sand bank, in the north Atlantic Ocean between Scotland and Iceland
Fair Isle	Place (Fair Isle, between Orkney and Shetland)
Faeroes	Place (The Faroe Islands)
Southeast Iceland	Place (areas of the Atlantic Ocean southeast of Iceland)

Table 2. Locations from where the sea areas names are derived.

Over the years many of the stations that report in the shipping forecast have changed. Many factors have influenced this and these factors are outside of the Met Office's control. Automation of light vessels, or their replacement by unmanned buoys, may prevent the continuation of accurate reports from a station whose reports are used in the forecasts. Hence the Smith's Knoll light vessel, long established off Norfolk's east coast, with its Met Office Automatic Weather Station installed in 1989, was withdrawn by Trinity House at the end of September 1993. Regular reports already being received from Bridlington for use in the inshore waters forecast are now used in place of Smith's Knoll.

Other changes of closure of reporting stations, introduced by external organisations for economic or technical reasons, may necessitate adjustments over which the Met Office has no control, but the most appropriate available reporting stations are always used.

# Example of a shipping forecast

And now the Shipping Forecast issued by the Met Office, on behalf of the Maritime and Coastguard Agency, at 1130 UTC on Thursday 03 February 2011 for the period 1200 UTC Thursday 03 February to 1200 UTC Friday 04 February 2011.

There are warnings of gales in all areas except Biscay and Trafalgar.

#### The General Synopsis at 0600

Developing Atlantic low, moving rapidly north-eastwards, expected 100 miles north of Fair Isle by 0600 tomorrow. New low expected 230 miles west of Rockall by the same time.

#### The area forecasts for the next 24 hours

#### Viking, North Utsire, South Utsire

Westerly 6 to gale 8, backing southerly then veering westerly later, 7 to severe gale 9, occasionally storm 10 in Viking and North Utsire. Very rough or high. Rain or squally showers. Moderate or good, occasionally poor.

#### Forties, Cromarty, Forth

West, backing south for a time, 6 to gale 8, increasing gale 8 to storm 10, perhaps violent storm 11 later in Cromarty. Very rough or high. Rain or squally showers. Moderate or good, occasionally poor.

#### Tyne, Dogger, Fisher, German Bight

Southwest 5 to 7, occasionally gale 8 in Dogger, increasing 7 to severe gale 9, perhaps storm 10 later. Rough or very rough. Rain or showers. Moderate or good, occasionally poor.

#### Humber, Thames, Dover, Wight

Southwest 4 or 5, increasing 6 to gale 8, perhaps severe gale 9 later. Moderate or rough. Occasional rain. Moderate or good.

#### Portland, Plymouth

Southwest 4 or 5, increasing 6 to gale 8. Moderate or rough, occasionally very rough later. Occasional rain. Moderate or good, occasionally poor.

#### Biscay, FitzRoy

Southwesterly 4 or 5, increasing 6 to gale 8 in north Fitzroy. Rough or very rough. Mainly fair. Moderate or good.

## Sole, Lundy, Fastnet, Irish Sea, Shannon

Southwest 6 to gale 8, increasing severe gale 9 at times, occasionally storm 10 later in Shannon. Rough or very rough in Lundy and Irish Sea, otherwise very rough or high, occasionally very high in Shannon. Occasional rain. Moderate or good, occasionally poor.

#### Rockall, Malin, Hebrides, Bailey

Southerly or southwesterly, becoming cyclonic or westerly for a time, severe gale 9 to violent storm 11, occasionally hurricane force 12 in Rockall, Hebrides and South Bailey, decreasing 5 to 7 for a time later. High or very high, Rain or squally showers. Moderate or good, occasionally poor.

#### Fair Isle, Faeroes

West 7 to severe gale 9, backing south or southeast then becoming cyclonic or west later, gale 8 to storm 10, increasing violent storm 11 at times. High or very high. Rain or squally showers. Moderate or good, occasionally poor.

#### Southeast Iceland

Southerly or southwest, veering west or northwest, 6 to gale 8, occasionally severe gale 9 at first. High or very high. Squally wintry showers. Moderate or good.

# Guide to the shipping forecast

The shipping forecast is issued four times a day, 2300, 0500, 1100, 1700 GMT and covers the next 24 hours.

The waters around the British Isles are divided into 31 sea areas shown on the map in figure 8.

The forecast contains details of gale warnings in force, a general synopsis and sea-area forecasts containing forecast wind direction and force, weather and visibility.

#### **Gale warnings**

Gale warnings are issued as required throughout the day (for winds of Gale Force 8 or more).

These are displayed with the Shipping forecast.

General guide to the shipping and inshore waters forecasts.

There is an upper word limit, imposed by the BBC of 350 words. The BBC also prefers the forecast to be 'not too short'. This word limit is extended to 380 words, for the midnight broadcast, to accommodate inclusion of sea area 'Trafalgar'.

# Radio broadcast times

Weather bulletins for shipping are broadcast daily on BBC Radio 4 at the following times:

0048 and 0520 (long wave and FM) 1201 and 1754 (normally long wave only)

The bulletins consist of a gale warning summary, general synopsis, sea-area forecasts and coastal station reports. In addition, gale warnings are broadcast at the first available programme break after receipt. If this does not coincide with a news bulletin, the warning will be repeated after the next news bulletin.

In addition, some bulletins include a forecast for all UK inshore waters, as distinct from the coastal waters. This can be heard on BBC Radio 4 at the end of programmes (approximately 0048), and on BBC Radio 3 at 0535. The forecast covers the area up to 12 miles offshore and is for the period up to 1800 the next day. It includes a general synopsis, the forecast of wind direction and force, visibility and weather. The broadcast on Radio 4 also includes the latest available reports of wind direction and force, visibility, sealevel pressure and tendency for approximately 20 stations around the UK.

#### **Gale summary**

The forecast should begin with the gale summary. This should be consistent with all gales currently in force. It should also be consistent with any gales in the body of the forecast. If there are four or fewer areas with no gales the summary should read '...in all areas except...'

#### **Inshore waters forecast**

Forecasts for UK inshore waters are issued four times a day and cover a period of 24 hours from 0000, 0600, 1200 and 1800 UTC.

The coastal waters, up to 12 miles offshore, around the British Isles are divided into 19 areas shown on the map in Figure 9 below. The forecast contains details of forecast wind direction and force, weather, visibility and sea state. Strong coastal winds (strong breeze force 6 or more) are displayed for the first 24 hours of the inshore waters forecast.

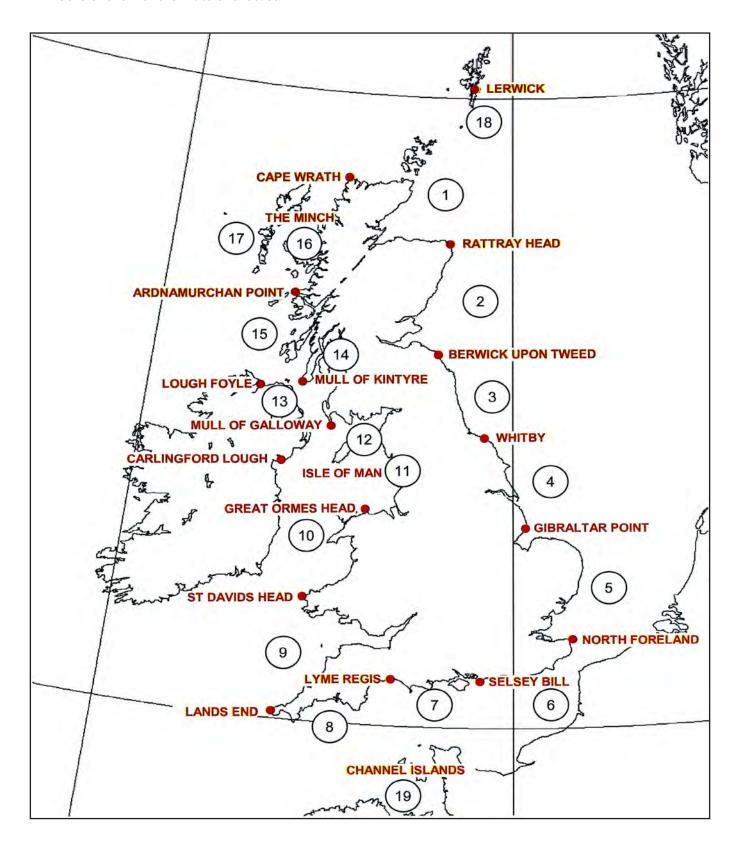


Figure 9. Locations used in the inshore waters forecast.

Number	Area
1	Cape Wrath to Rattray Head including Orkney
2	Rattray Head to Berwick upon Tweed
3	Berwick upon Tweed to Whitby
4	Whitby to Gibraltar Point
5	Gibraltar Point to North Foreland
6	North Foreland to Selsey Bill
7	Selsey Bill to Lyme Regis
8	Lyme Regis to Lands End including the Isles of Scilly
9	Lands End to St David's Head including the Bristol Channel
10	St David's Head to Great Ormes Head including St George's Channel
11	Great Ormes Head to Mull of Galloway
12	Isle of Man
13	Lough Foyle to Carlingford Lough
14	Mull of Galloway to Mull of Kintyre including Firth of Clyde and North Channel
15	Mull of Kintyre to Ardnamurchan Point
16	The Minch
17	Ardnamurchan Point to Cape Wrath
18	Shetland Isles and 60 nautical mile radius of Lerwick
19	Channel Islands

Table 3. Areas used in the inshore waters forecast.

# **Example of the inshore waters forecast**

Issued by the Met Office at 1100 UTC on Thursday 03 February 2011.

Inshore Waters Forecast to 12 miles offshore for the period 1200 UTC Thursday 03 February to 1200 UTC Friday 04 February 2011.

## **General Situation**

Intense areas of low pressure will bring very unsettled and very windy conditions to the United Kingdom during the next few days with the prospect of very stormy winds at times in the north.

# Cape Wrath to Rattray Head including Orkney – (SWW)

24 hour forecast: Westerly or southwesterly, backing southerly for a time, 7 to severe gale 9, occasionally violent storm 11 in north, decreasing 5 to 7 later. Rough or very rough, occasionally high in west and moderate in Moray Firth. Rain or squally showers. Moderate or good, occasionally poor.

Outlook for the following 24 hours: Westerly or southwesterly 5 to 7 increasing 7 to severe gale 9, occasionally storm 10 in north for a time. Moderate in east, otherwise rough or very rough, but high or very high in north. Rain, then squally wintry showers. Moderate or good, occasionally poor.

# Rattray Head to Berwick upon Tweed – (SWW)

24 hour forecast: Southerly or southwesterly 5 or 6, increasing 7 to severe gale 9, occasionally storm 10 in north, decreasing 5 or 6 later. Moderate or rough. Rain or squally showers. Moderate or good.

Outlook for the following 24 hours: Southerly veering westerly or southwesterly 4 or 5, increasing 6 to gale 8. Rough or very rough. Rain then squally showers. Moderate or good, occasionally poor.

# Berwick upon Tweed to Whitby – (SWW)

24 hour forecast: Southwest 4 or 5, increasing 7 to severe gale 9, decreasing 5 or 6 later. Moderate or rough. Rain at times. Moderate or good.

*Outlook for the following 24 hours:* West or southwest 5 or 6, increasing 7 or gale 8 for a time. Moderate or rough. Occasional rain. Moderate or good, occasionally poor.

#### Whitby to Gibraltar Point – (SWW)

24 hour forecast: Southwest 4 or 5, increasing 7 to severe gale 9, decreasing 5 or 6 later. Moderate or rough. Rain at times. Moderate or good, occasionally poor.

*Outlook for the following 24 hours:* West or southwest 5 or 6, increasing 7 or gale 8 for a time. Moderate or rough. Occasional rain. Moderate or good, occasionally poor at first.

#### Gibraltar Point to North Foreland – (SWW)

**24** hour forecast: Southwesterly 4 or 5, increasing 6 to gale 8, perhaps severe gale 9 later in south. Moderate or rough. Rain later. Good, becoming moderate, occasionally poor later.

*Outlook for the following 24 hours:* Southwesterly 6 to gale 8, occasionally severe gale 9 at first in south. Moderate or rough. Occasional rain. Moderate or good, occasionally poor at first.

## North Foreland to Selsey Bill – (SWW)

24 hour forecast: Southwesterly 4 or 5 increasing 6 to gale 8, perhaps severe gale 9 later in east. Moderate or rough. Mainly fair, occasional drizzle later. Good, becoming moderate, occasionally poor later.

*Outlook for the following 24 hours:* Southwesterly 6 to gale 8, occasionally severe gale 9 at first. Rough or very rough. Occasional rain or drizzle. Moderate or good, occasionally poor.

#### Selsey Bill to Lyme Regis – (SWW)

24 hour forecast: Southwest 4 or 5, increasing 6 or 7, occasionally gale 8 later. Moderate or rough. Fair then occasional drizzle. Good, becoming moderate, occasionally poor.

*Outlook for the following 24 hours:* Southwest 6 to gale 8. Rough or very rough. Occasional rain or drizzle. Moderate or good, occasionally poor.

# Lyme Regis to Lands End including the Isles of Scilly – (SWW)

24 hour forecast: Southwesterly 4 or 5, increasing 6 or 7, occasionally gale 8 later. Moderate or rough, becoming very rough or high in west. Fair then occasional drizzle. Good, becoming moderate, occasionally poor.

Outlook for the following 24 hours: Southwesterly 6 to gale 8, occasionally severe gale 9 in west for a time. Rough or very rough in east, very rough or high in west. Occasional rain or drizzle. Moderate or good, occasionally poor.

## Lands End to St Davids Head including the Bristol Channel – (SWW)

24 hour forecast: Southwesterly 4 or 5 increasing 6 to gale 8, occasionally severe gale 9 later in northwest. Moderate or rough, becoming very rough or high in west. Occasional rain later. Good, becoming moderate, occasionally poor later.

Outlook for the following 24 hours: Southwesterly 6 to gale 8, occasionally severe gale 9 in west for a time. Moderate or rough in east, very rough or high in west. Occasional rain or drizzle. Moderate or good, occasionally poor.

# St Davids Head to Great Orme Head, including St Georges Channel – (SWW)

24 hour forecast: Southwest 6 to gale 8, increasing severe gale 9 at times. Moderate or rough, occasionally very rough in west. Occasional rain later. Good, becoming moderate, occasionally poor later.

Outlook for the following 24 hours: Southwest 6 to gale 8, occasionally severe gale 9 for a time, decreasing 5 or 6 later. Rough or very rough, occasionally high near St David's Head. Occasional rain or drizzle. Moderate or good, occasionally poor.

## Great Orme Head to the Mull of Galloway – (SWW)

24 hour forecast: South 5 to 7, veering southwest 7 to severe gale 9, then veering west 5 or 6 for a time. Moderate or rough, occasionally very rough. Occasional rain. Moderate or good, occasionally poor.

Outlook for the following 24 hours: Southwest 6 to gale 8, occasionally severe gale 9 for a time, veering west 4 or 5 later. Rough or very rough. Occasional rain or drizzle. Moderate, occasionally poor.

#### Isle of Man – (SWW)

24 hour forecast: South or southwest 6 to gale 8, in severe gale 9 at times, veering west or southwest 5 or 6 for a time. Moderate or rough, occasionally very rough. Rain at times. Good, becoming moderate or poor.

*Outlook for the following 24 hours:* Southwest 5 or 6, increasing 7 to severe gale 9 for a time. Moderate or rough, occasionally very rough. Rain at times. Moderate or good.

## Lough Foyle to Carlingford Lough – (SWW)

24 hour forecast: Southerly or southwesterly, veering westerly for a time, 7 to severe gale 9, occasionally storm 10 in far northwest, decreasing 4 or 5 for a time. Moderate or rough, but very rough or high in north. Rain or squally showers. Moderate or good, occasionally poor.

*Outlook for the following 24 hours:* Southwesterly 7 to severe gale 9, veering westerly 5 to 7. Moderate or rough, but very rough or high in north. Occasional rain. Moderate or good, occasionally poor.

# Mull of Galloway to Mull of Kintyre including the Firth of Clyde and North Channel – (SWW)

24 hour forecast: South or southwest, veering west for a time, 7 to severe gale 9, decreasing 4 or 5 for a time. Moderate or rough, occasionally very rough in far northwest. Rain or squally showers. Moderate or good, occasionally poor.

*Outlook for the following 24 hours:* Southwest 7 to severe gale 9, veering west 5 to 7. Moderate or rough, occasionally very rough in far northwest. Occasional rain. Moderate or good, occasionally poor.

# Mull of Kintyre to Ardnamurchan Point – (SWW)

24 hour forecast: South veering southwest 7 to severe gale 9, veering westerly severe gale 9 to violent storm 11 for a time, decreasing 5 or 6 later. High or very high. Rain then squally showers. Moderate, occasionally poor, becoming good.

*Outlook for the following 24 hours:* Southwest 7 to severe gale 9, veering west 5 to 7. High or very high. Rain then squally showers. Moderate or good, occasionally poor at first.

# The Minch – (SWW)

24 hour forecast: South, veering west or southwest, 7 to severe gale 9, increasing severe gale 9 to violent storm 11, decreasing 5 or 6 later. Moderate or rough, but very rough or high in far north and south. Rain then squally showers. Moderate, occasionally poor, becoming good.

Outlook for the following 24 hours: Southerly or southeasterly 5 to 7, soon veering west or southwesterly 7 to severe gale 9, occasionally storm 10 for a time. Rough, but very rough or high in south and far north. Rain then squally wintry showers. Moderate or good, occasionally poor.

# Ardnamurchan Point to Cape Wrath – (SWW)

24 hour forecast: Southerly, veering westerly or southwesterly, 7 to severe gale 9, increasing severe gale 9 to violent storm 11, increasing hurricane force 12 for a time west of the Outer Hebrides, decreasing 5 or 6 later. High or very high. Rain then squally showers. Moderate, occasionally poor, becoming good.

Outlook for the following 24 hours: Southerly or southeasterly 5 to 7, soon veering west or southwesterly 7 to severe gale 9, occasionally storm 10 for a time. High or very high, becoming phenomenal for a time in west. Rain then squally wintry showers. Moderate or good, occasionally poor.

## For Coastal areas up to 60 nautical miles from Lerwick, Shetland

Valid Thursday 03 Feb 2011 at 1200 UTC until Friday 04 Feb 2011 at 0000 UTC: West 6 to gale 8 backing south or southeast gale 8 to storm 10, veering southwest gale 8 or severe gale 9 later. Very rough or high, occasionally very high in the west, but rough at first in the east. Rain for a time. Moderate or poor.

Outlook for 12 Hours from 0000 UTC on Friday 04 Feb until 1200 UTC on Friday 04 Feb: Southwest gale 8 or severe gale 9 veering west severe gale 9 to violent storm 11, decreasing 7 or gale 8 later. Very rough or high, occasionally rough in the east, becoming very high in the west. Rain or wintry showers. Moderate or poor.

# Channel Islands – (SWW)

24 hour forecast: Southwest 3 to 4, increasing 4 to 5 by mid-afternoon and 5 in the south to 7 in the north overnight, occasionally gale 8 mid-channel later. Slight to moderate, increasing moderate in the south to rough in the north overnight. Patchy light drizzle on Friday. Moderate to good, locally poor in drizzle.

Outlook for the following 24 hours: Southwest 5 to 7, occasionally gale 8 in mid-channel. Moderate in the south to rough in the north of the area. Risk of patchy a little drizzle at times. Moderate to good.

# Glossary of terms used in marine forecasts

Gale warning terms		
Term	Description	
Gale	Winds of at least Beaufort force 8 (34–40 knots) or gusts reaching 43–51 knots	
Severe gale	Winds of force 9 (41–47 knots) or gusts reaching 52–60 knots	
Storm	Winds of force 10 (48–55 knots) or gusts reaching 61–68 knots	
Violent storm	Winds of force 11 (56–63 knots) or gusts of 69 knots or more	
Hurricane force*	Winds of force 12 (64 knots or more)	

<sup>\*</sup>Note: The term used is 'hurricane force'; the term 'hurricane' on its own means a true tropical cyclone, not experienced in British waters.

Time periods		
Term	Description	
Imminent	Expected within six hours of time of issue	
Soon	Expected within six to 12 hours of time of issue	
Later	Expected more than 12 hours from time of issue	

Visibility terms		
Term	Description	
Very poor	Visibility less than 1,000 metres	
Poor	Visibility between 1,000 metres and 2 nautical miles	
Moderate	Visibility between 2 and 5 nautical miles	
Good	Visibility more than 5 nautical miles	

Movement of pressure systems		
Term	Description	
Slowly	Moving at less than 15 knots	
Steadily	Moving at 15 to 25 knots	
Rather quickly	Moving at 25 to 35 knots	
Rapidly	Moving at 35 to 45 knots	
Very rapidly	Moving at more than 45 knots	

Pressure tendency in station reports			
Term	Description		
Rising (or falling) more slowly	Pressure rising (or falling) at a progressively slower rate through the preceding three hours		
Rising (or falling) slowly	Pressure change of 0.1 to 1.5 hPa in the preceding three hours		
Rising (or falling)	Pressure change of 1.6 to 3.5 hPa in the preceding three hours		
Rising (or falling) quickly	Pressure change of 3.6 to 6.0 hPa in the preceding three hours		
Rising (or falling) very rapidly	Pressure has been falling (rising) or steady in the preceding three hours, but at the time of observation was definitely rising (falling)		
Note: For those more familiar with the millibar, 1 hPa = 1 mb			

Wind			
Term	Description		
Wind direction	Indicates the direction from which the wind is blowing		
Becoming cyclonic	Indicates that there will be considerable change in wind direction across the path of a depression within the forecast area		
Veering	The changing of the wind direction clockwise, e.g. SW to W		
Backing	The changing of the wind in the opposite direction to veering (anticlockwise), e.g. SE to NE		

Note: An 'erly' used to describe the wind direction (e.g. southerly) is always used if:

If a place name has a compass direction. (e.g. North Utsire, South Utsire, Southeast Iceland).

If a compass direction is described in the wind field text. (e.g. 'increasing force 7 in west of Forties' or 'decreasing 3 later in east' or 'backing southerly 6 to gale 8 later in south').

Also, note that in the same line of text, there must be consistency in using an 'erly'. (e.g. 'south backing southeasterly' is not permissible, but 'south backing southeast' and 'southerly backing southeasterly' are both ok.

Sea state		
Term	Description	
Smooth	Wave height less than 0.5 m	
Slight	Wave height of 0.5 to 1.25 m	
Moderate	Wave height of 1.25 to 2.5 m	
Rough	Wave height of 2.5 to 4.0 m	
Very rough	Wave height of 4.0 to 6.0 m	
High	Wave height of 6.0 to 9.0 m	
Very high	Wave height of 9.0 to 14.0 m	
Phenomenal	Wave height more than 14.0 m	

# Music of the shipping forecast

The music played before the 0048 Shipping Forecast on Radio 4 is 'Sailing By' composed by Ronald Binge.

The CD 'Sailing By – The Music of Ronald Binge' which includes this short piece of music is available from most good record shops or online retailers.

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