PUB. 114

LIST OF LIGHTS

RADIO AIDS AND FOG SIGNALS

2004

BRITISH ISLES, ENGLISH CHANNEL AND NORTH SEA

IMPORTANT

THIS PUBLICATION SHOULD BE CORRECTED EACH WEEK FROM THE NOTICE TO MARINERS

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NATIONAL GEOSPATIAL-INTELLIGENCE AGENCY
Bethesda, MD

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LIST OF LIGHTS LIMITS
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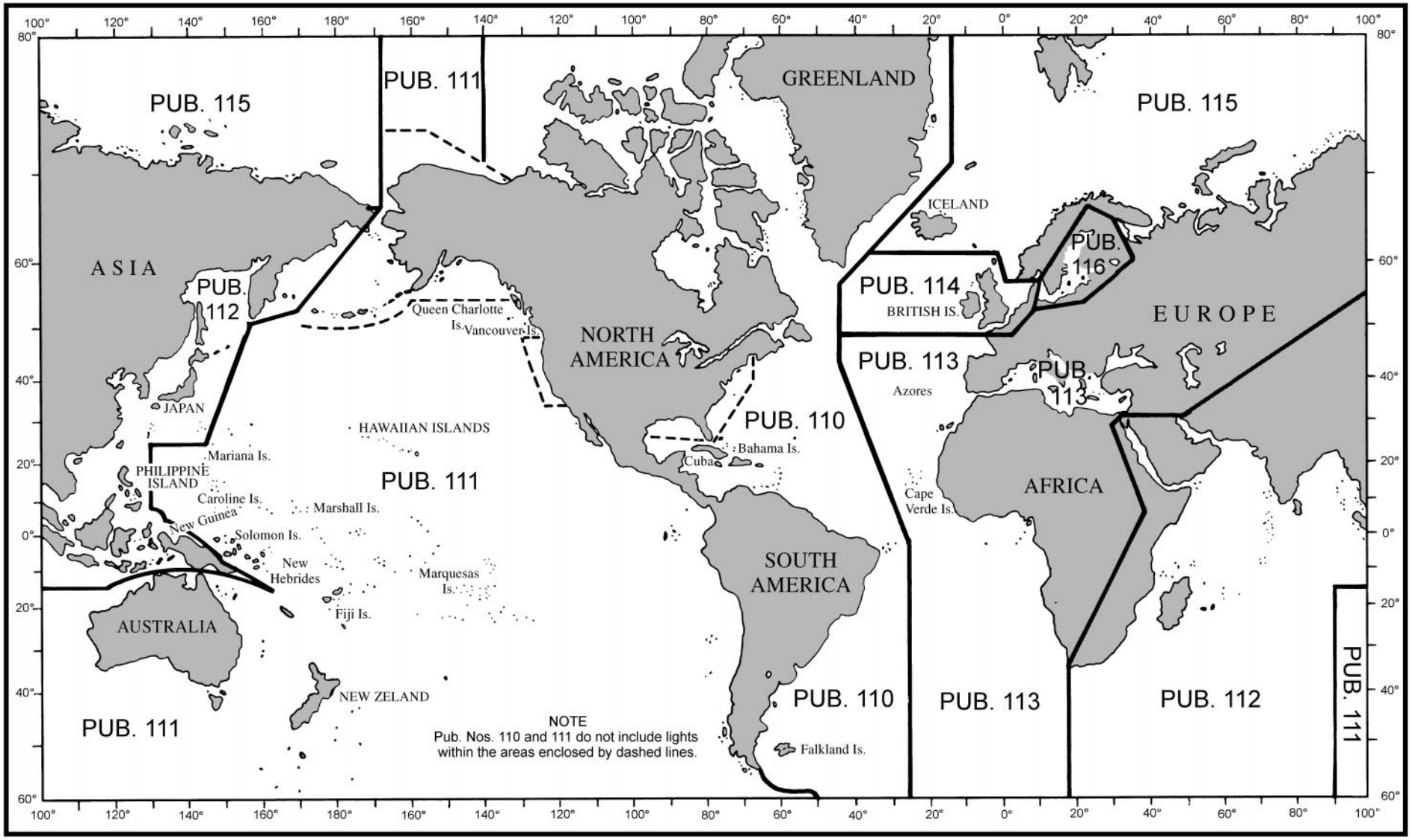

WARNING ON USE OF FLOATING AIDS TO NAVIGATION TO FIX A NAVIGATIONAL POSITION

The aids to navigation depicted on charts comprise a system consisting of fixed and floating aids with varying degrees of reliability. Therefore, prudent mariners will not rely solely on any single aid to navigation, particularly a floating aid.

The buoy symbol is used to indicate the approximate position of the buoy body and the sinker which secures the buoy to the seabed. The approximate position is used because of practical limitations in positioning and maintaining buoys and their sinkers in precise geographical locations. These limitations include, but are not limited to, inherent imprecisions in position fixing methods, prevailing atmospheric and sea conditions, the slope of and the material making up the seabed, the fact that buoys are moored to sinkers by varying lengths of chain, and the fact that buoy and/or sinker positions are not under continuous surveillance but are normally checked only during periodic maintenance visits which often occur more than a year apart. The position of the buoy body can be expected to shift inside and outside the charting symbol due to the forces of nature. The mariner is also cautioned that buoys are liable to be carried away, shifted, capsized, sunk, etc. Lighted buoys may be extinguished or sound signals may not function as the result of ice or other natural causes, collisions, or other accidents.

For the foregoing reasons, a prudent mariner must not rely completely upon the position or operation of floating aids to navigation, but will also utilize bearings from fixed objects and aids to navigation on shore. Further, a vessel attempting to pass close aboard always risks collision with a yawing buoy or with the obstruction the buoy marks.

PREFACE

The 2004 edition of Pub. 114, List of Lights, Radio Aids and Fog Signals for the British Isles, English Channel and North Sea, cancels the previous edition of Pub. 114.

This edition contains information available to the National Geospatial-Intelligence Agency (NGA) up to 21 February 2004, including Notice to Mariners No. 8 of 2004.

A summary of corrections subsequent to the above date will be in Section II of the Notice to Mariners which announced the issuance of this publication.

In the interval between new editions, corrective information affecting this publication will be published in the Notice to Mariners and must be applied in order to keep this publication current.

Nothing in the manner of presentation of information in this publication or in the arrangement of material implies endorsement or acceptance by NGA in matters affecting the status and boundaries of States and Territories.

RECORD OF CORRECTIONS
PUBLISHED IN WEEKLY NOTICE TO MARINERS

NOTICE TO MARINERS

YEAR 2004				YEAR 2005			
1.....	14.....	27.....	40.....	1.....	14.....	27.....	40.....
2.....	15.....	28.....	41.....	2.....	15.....	28.....	41.....
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INTRODUCTION

The National Geospatial-Intelligence Agency publishes a List of Lights, Radio Aids and Fog Signals in seven volumes divided geographically as shown on the index chartlet on the inside front cover of this book. Major fixed and outermost floating aids to navigation, such as sea buoys, safety fairway buoys, traffic separation buoys, etc., are listed. Other floating aids are not generally listed. Storm signals, signal stations, radio direction finders, radiobeacons, RACONs and RAMARKs located at or near lights are found in this List. Radiobeacons are listed in a separate section in the back of this publication.

The date to which this publication has been corrected can be found in the Preface. In the interval between new editions, corrective information affecting this publication will be published in Section II of Notice to Mariners, and must be applied to keep this publication current. All of these corrections should be applied in the appropriate places and their insertion noted in the "Record of Corrections."

Mariners and other users are requested to forward new or corrective information useful in the correction of this publication to:

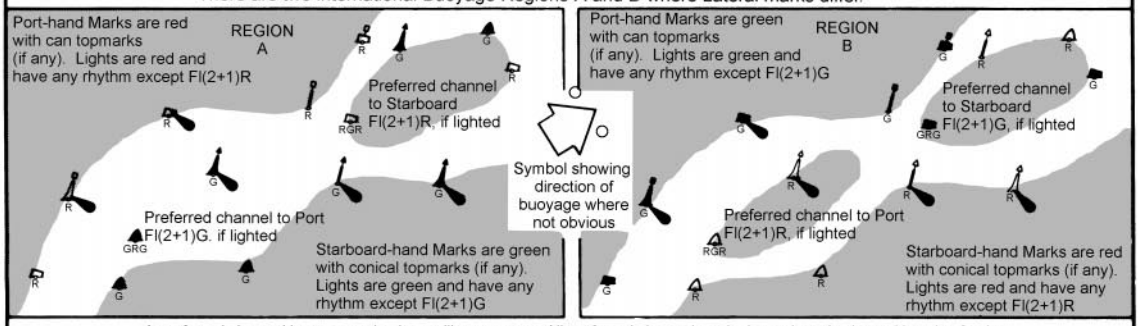
MARITIME SAFETY INFORMATION DIVISION
ST D 44
NATIONAL GEOSPATIAL-INTELLIGENCE AGENCY
4600 SANGAMORE ROAD
BETHESDA, MD 20815-5003

Buoys and Beacons IALA* Buoyage System

Where in force, the IALA System applies to all fixed and floating marks and occasionally lighthouses, sector lights, range marks, lightships and LANBY's (large automatic navigational buoys).

The standard buoy shapes are cylindrical (can), conical, spherical, pillar (including high focal plane), and spar, but variations may occur, for example lightfloats. In the illustrations below, only the standard buoy shapes are used. In the case of fixed beacons (lighted or unlighted), only the shape of the topmark is of navigational significance.

Lateral Marks (used in conjunction with a conventional direction of buoyage) are generally for well-defined channels. There are two international Buoyage Regions-A and B-where Lateral marks differ.



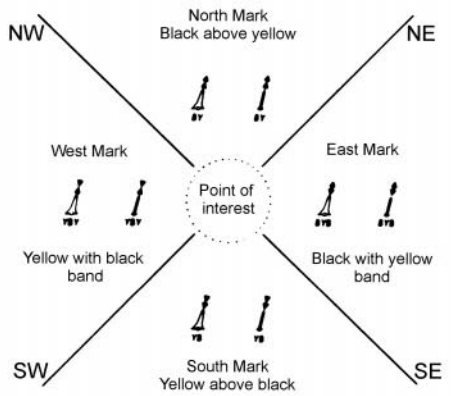
A preferred channel buoy may also be a pillar or a spar All preferred channel marks have three horizontal bands of color

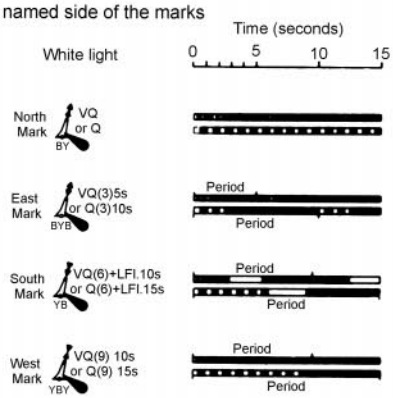
All marks other than Lateral Marks are the same in REGIONS A and B

UNLIGHTED MARKS | **LIGHTED MARKS**

Cardinal Marks indicating navigable water to the named side of the marks

Topmark 2 black cones





* The same abbreviations are used for lights on spar buoys and beacons The periods, 5s, 10s and 15s, may not always be charted.

Isolated Danger Marks, stationed over dangers with navigable water around them.

Body black with red band (s)
Topmark: 2 black balls

Safe Water Marks, such as mid-channel and landfall marks.

Body red and white stripes
Topmark (if any): red ball

Special Marks, not primarily to assist navigation but to indicate special features.

Body (shape optional): yellow
Topmark (if any) yellow X

BEACONS with IALA System topmarks are charted by upright symbols. eg. (minor beacon) or, on smaller-scale charts:

Beacon towers are charted: etc (occasionally lighted)

RADAR REFLECTORS on buoys and beacons are not generally charted.

COLOR ABBREVIATIONS under symbols, especially those of spar buoys, may be omitted, or may be at variance with symbols shown above.

LIGHTFLOATS: The IALA System is not usually applied to large lightfloats (replacing manned lightships) but may be applied to smaller lightfloats.

* IALA is an abbreviation of International Association of Lighthouse Authorities

THE NATIONAL GEOSPATIAL-INTELLIGENCE AGENCY MARITIME SAFETY INFORMATION DIVISION WEBSITE

The National Geospatial-Intelligence Agency (NGA) Marine Navigation Website provides worldwide remote query access to extensive menus of maritime safety information 24 hours a day.

Databases made available for access, query and download include Chart Corrections, Publication Corrections, NGA Hydrographic Catalog Corrections, Chart and Publication Reference Data (current edition number, dates, title, scale), NGA List of Lights, USCG Light Lists, WorldWide Navigational Warning Service (WWNWS) Broadcast Warnings, Maritime Administration (MARAD) Advisories, Department of State Special Warnings, Mobile Offshore Drilling Units (MODUs), Anti-Shipping Activity Messages (ASAMs), World Port Index, and Radio Navigational Aids. Publications that are also made available as PDF files include the U.S. Notice to Mariners, U.S. Chart No. 1, The American Practical Navigator (Bowditch), International Code of Signals, Radio Navigational Aids, World Port Index, Distances Between Ports, Sight Reduction Tables for Marine and Air Navigation, Radar Navigation and Maneuvering Board Manual.

The Maritime Safety Information Division Website can be accessed via the NGA Homepage (**www.nga.mil**) under the Products and Services link or directly at (**http://pollux.nss.nga.mil**). Any questions concerning the Maritime Safety Information Division Website should be directed to:

MARITIME SAFETY INFORMATION DIVISION
ATTN: NSS STAFF
ST D 44
NATIONAL GEOSPATIAL-INTELLIGENCE AGENCY
4600 SANGAMORE ROAD
BETHESDA, MD 20816-5003

Telephone: (1) 301-227-3296 or DSN 287-3296
Fax: (1) 301-227-4211
E-mail: webmaster_nss@nga.mil

DESCRIPTION

(Lights, Buoys, RACONs, RAMARKs)

Information is tabulated in eight columns as follows:

Column 1: The number assigned to each light, RACON or RAMARK by this Agency. International numbers are listed below this number in italic type and in a cross reference in the back of the book. RACONs and RAMARKs located at a light are listed with the light. Those not located at a light are assigned separate numbers.

Column 2: Name and descriptive location of the light or buoy, RACON or RAMARK. A dash (-) or dashes (--) in this column is used to reduce repetition of principal geographic names. This column is intended to describe the location of the navigational aid and to distinguish it from others in proximity. Differences in type indicate the following:

Bold-faced: Lights intended for landfall or having a visibility (range) of 15 miles or more.

Italics: Floating aids.

ITALICS CAPITALS: Lightships and LANBYs.

Roman: All other lights not mentioned above.

Column 3: Approximate latitude and longitude of a navigational aid to the nearest tenth of a minute, intended to facilitate chart orientation (use column 2 and the appropriate chart for precise positioning).

Column 4: Light, buoy, RACON or RAMARK characteristic (see Characteristics of Lights chart for explanation of lights).

Column 5: Height of light in feet (Roman type) equivalent measurement (below) given in meters (Bold-faced type).

Column 6: Range. The distance, expressed in nautical miles, that a light can be seen in clear weather or that a RACON or RAMARK can be received.

Column 7: Description of the structure and its height in feet.

Note–Stripes are vertical. Bands are horizontal. The use of the term “diagonal stripes” is the exception.

Column 8: Remarks–sectors, fog signals, radar reflectors, minor lights close by, radiobeacons, storm signals, signal stations, radio direction finders, and other pertinent information.

Geographic names or their spellings do not necessarily reflect recognition of the political status of an area by the United States Government.

The names of lights may differ from geographic names on charts.

ABBREVIATIONS

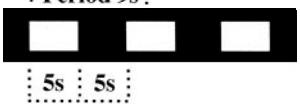
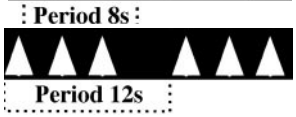
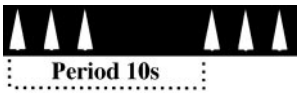
Where the lights of different countries intermingle in the list they are distinguished by the following letters:

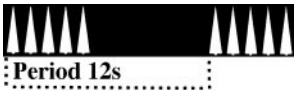
(Bm.)	Belgium
(F.)	Norway
(G.)	Germany
(N.)	Netherlands
(U.K.)	United Kingdom

Other abbreviations:

Al.—alternating
bl.—blast
Bu.—blue
Dir.—directional
ec.—eclipsed
ev.—every
F.—fixed
Fl.—flashing
fl.—flash
G.—green
horiz.—horizontal
intens.—intensified
I.Q.— interrupted quick flashing
Iso.—isophase
I.V.Q.—interrupted very quick flashing
Km.— kilometer (0.62137 mile)
L.Fl.—long flashing
lt.—lit
Mo.—Morse code
min.—minute
obsc.—obscured
Oc.—occulting
Or.—orange
Q.—quick flashing
R.—red
s.—seconds
si.—silent
U.Q.—ultra quick flashing
unintens.—unintensified
vert.—vertical
Vi.—violet
vis.—visible
V.Q.— very quick flashing
W.—white
Y.—yellow

CHARACTERISTICS OF LIGHTS

TYPE	ABBR.	GENERAL DESCRIPTION	ILLUSTRATION
Fixed	F.	A continuous and steady light.	
Occulting	Oc.	The total duration of light in a period is longer than the total duration of darkness and the intervals of darkness (eclipses) are usually of equal duration. Eclipse regularly repeated.	
Group occulting	Oc.(2)	An occulting light for which a group of eclipses, specified in number, is regularly repeated.	
Composite group occulting	Oc.(2+1)	A light similar to a group occulting light except that successive groups in a period have different numbers of eclipses.	
Isophase	Iso.	A light for which all durations of light and darkness are clearly equal.	
Flashing	Fl.	A light for which the total duration of light in a period is shorter than the total duration of darkness and the appearances of light (flashes) are usually of equal duration (at a rate of less than 50 flashes per minute).	
Long flashing	L.Fl.	A single flashing light for which an appearance of light of not less than 2 sec. duration (long flash) is regularly repeated.	
Group flashing	Fl.(3)	A flashing light for which a group of flashes, specified in number, is regularly repeated.	
Composite group flashing	Fl.(2+1)	A light similar to a group flashing light except that successive groups in a period have different numbers of flashes.	
Quick flashing	Q.	A light for which a flash is regularly repeated at a rate of not less than 50 flashes per minute but less than 80 flashes per minute.	
Group quick flashing	Q.(3)	A light for which a specified group of flashes is regularly repeated; flashes are repeated at a rate of not less than 50 flashes per minute but less than 80 flashes per minute.	
	Q.(9)		
	Q.(6)+L.Fl.		

TYPE	ABBR.	GENERAL DESCRIPTION	ILLUSTRATION
Interrupted quick flashing	I.Q.	A light for which the sequence of quick flashes is interrupted by regularly repeated eclipses of constant and long duration.	
Very quick flashing	V.Q.	A light for which a flash is regularly repeated at a rate of not less than 80 flashes per minute but less than 160 flashes per minute.	
Group very quick flashing	V.Q.(3)	A light for which a specified group of very quick flashes is regularly repeated.	
	V.Q.(9)		
	V.Q.(6)+L.Fl.		
Interrupted very quick flashing	I.V.Q.	A light for which the sequence of very quick flashes is interrupted by regularly repeated eclipses of constant and long duration.	
Ultra quick flashing	U.Q.	A light for which a flash is regularly repeated at a rate of not less than 160 flashes per minute.	
Interrupted ultra quick flashing	I.U.Q.	A light for which the sequence of ultra quick flashes is interrupted by regularly repeated eclipses of constant and long duration.	
Morse code	Mo.(U)	A light for which appearances of light of two clearly different durations are grouped to represent a character or characters in Morse Code.	
Fixed and flashing	F.Fl.	A light for which a fixed light is combined with a flashing light of greater luminous intensity.	
Alternating light	Al.	A light showing different colors alternately.	

NOTE - Alternating lights may be used in combined form with most of the previous types of lights.

NOMENCLATURE OF LIGHTS

Lights exhibit a distinctive appearance by which they are recognized, e.g. Fixed, Flashing, Group Flashing, etc. The properties of their appearance, by which they are distinguished, are referred to as the *characteristics* of the light. The principal characteristics are generally the sequence of intervals of light and darkness, and, in some cases, the sequence of colors of light exhibited.

Fixed lights—those which exhibit a continuous steady light.

Rhythmic lights—those which exhibit a sequence of intervals of light and eclipse (repeated at regular intervals) in a manner described in Chart No. 1 and this volume.

Alternating lights—rhythmic lights which exhibit different colors during each sequence.

Period of a light—the time occupied by an entire cycle of intervals of light(s) and eclipse(s).

Range: Meteorological visibility—the greatest distance at which a black object of suitable dimensions can be seen and recognized against the horizon sky or, in the case of night observations, could be seen and recognized if the general illumination were raised to the normal daylight level.

Luminous range of a light—the greatest distance at which a light can be seen merely as a function of its luminous intensity, the meteorological visibility, and the sensitivity of the observer's eyes.

Nominal range of the light—the luminous range of a light in a homogeneous atmosphere in which the meteorological visibility is 10 nautical miles.

Geographical range of a light—the greatest distance at which a light can be seen as a function of the curvature of the earth, the height of the light source and the height of the observer.

The visibility of a light is usually the distance that it can be seen in clear weather and is expressed in nautical miles. Visibilities listed are values received from foreign sources.

Range lights—two or more lights at different elevations, so situated to form a range (leading line) when brought into transit. The light nearest the observer is the *front light* and the one farthest from the observer is the *rear light*. The front light is normally at a lower elevation than the rear light.

Directional lights—lights illuminating a sector of very narrow angle and intended to mark a direction to be followed.

Vertical lights—Two or more lights disposed vertically or geometrically to form a triangle, square, or other figure. If the individual lights serve different purposes, those of lesser importance are called *Auxiliary lights*.

Occasional lights—lights exhibited only when specially needed:

(a) *Tidal light*—shown at the entrance of a harbor, to indicate tide and tidal current conditions within the harbor.

(b) *Fishing light*—for the use of fishermen and shown when required.

(c) *Private light*—maintained by a private authority for its own purposes. The mariner should exercise special caution when using a private light for general navigation.

Seasonal lights—usually shown only during the navigation season or for a lesser time period within that season.

Articulated lights—offshore aids to navigation consisting of a length of pipe attached directly to a sinker by means of a pivot or such other device employing the principle of the universal joint. The positional integrity is intermediary between that of a buoy and a fixed aid.

Aeronautical lights—lights of high intensity which may be the first lights observed at night from vessels approaching the coast. Those lights situated near the coast are listed in the List of Lights in order that the navigator may be able to obtain more information concerning their description.

These lights are not designed or maintained for marine navigation and they are subject to change without prompt notification.

These lights are indicated in this List by the designation AVIATION LIGHT and are placed in geographical sequence in the body of the text along with lights for surface navigation.

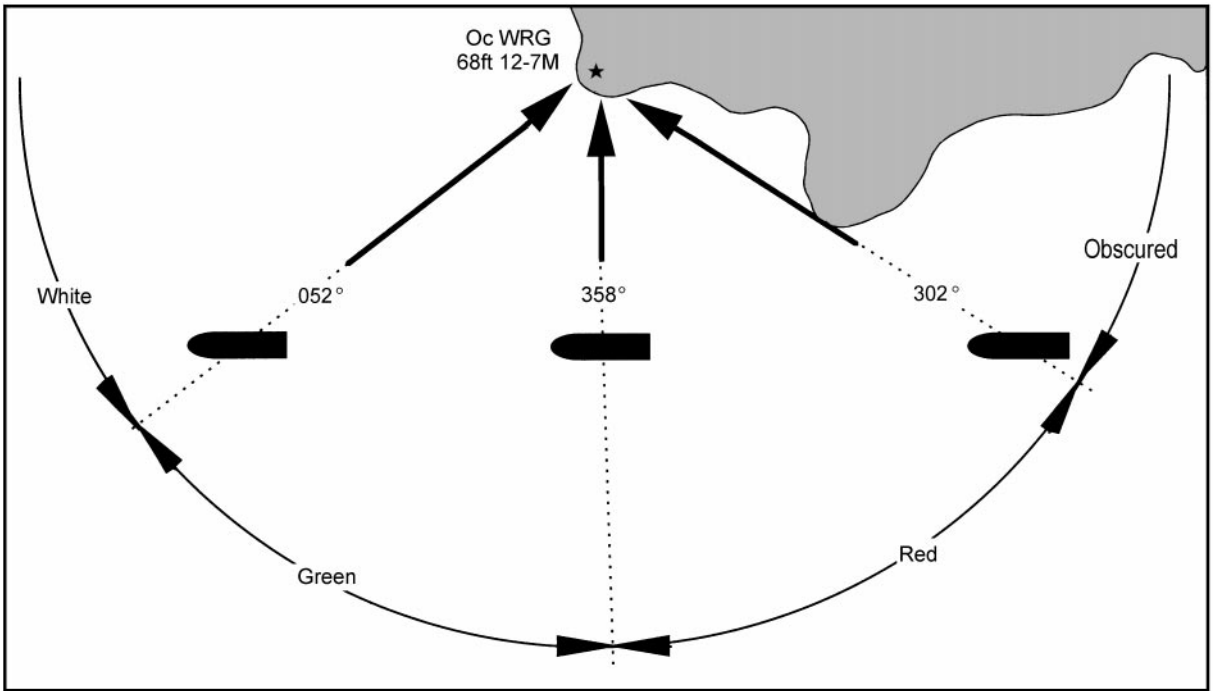
Aeromarine lights—marine-type lights for which part of the beam is deflected to an angle of 10 to 15 degrees above the horizon to facilitate use by aircraft.

Sector limits and arcs of visibility—these are arranged clockwise and are given from seaward toward the light. Thus, in the diagram, the sectors of the light are defined as: obscured from shore to 302˚, red to 358˚, green to 052˚, white to shore. These are bearings of the light as seen from a vessel crossing the sector lines.

Under some conditions of the atmosphere, white lights may have a reddish hue. The mariner should not judge solely by color where there are sectors but should verify this position by taking a bearing of the light. On either side of the line of demarcation between white and red there is always a small sector of uncertain color, as the edges of a sector of visibility cannot be clearly defined.

When a light is obscured by adjoining land and the arc of visibility is given, the bearing on which the light disappears may vary with the distance from which it is observed. When the light is cut off by a sloping point of land or hill, the light may be seen over a wider arc by a ship farther off than by one closer.

Bearings—all bearings are true, measured clockwise from 000˚, and given in degrees or degrees and minutes.


Oc WRG
68ft 12-7M
White
052°
358°
302°
Obscured
Green
Red

Courses should be set to pass all floating aids to navigation with sufficient clearance to avoid the possibility of collision from any cause. Experience shows that floating aids to navigation cannot be safely used as leading marks to be passed close aboard, but should always be left broad off the course, whenever searoom permits.

When approaching a lightship, superbuoy, or a station on a submarine site on radio bearings, the risk of collision will be avoided by insuring that the radio bearing does not remain constant.

Most lightships and large buoys are anchored with a very long scope of chain and, as a result, the radius of their swinging circle is considerable. The charted position is the location of the anchor. Furthermore, under certain conditions of wind and current, they are subject to sudden and unexpected sheers which are certain to hazard a vessel attempting to pass close aboard.

During extremely heavy weather and due to their exposed locations, lightships may be carried off station. The mariner should, therefore, not implicitly rely on a lightship maintaining its precisely charted position during and immediately following severe storms. A lightship known to be off station will secure her light, fog signal, and radiobeacon and fly the International Code signal "LO" signifying "I am not in my correct position."

The following regulations have been established respecting the several lightships on the coasts of the *British Isles:*

A white riding light is exhibited from the forestay of each lightship, at a height of 6 feet (1.8 meters) above the rail, for the purpose of showing in which direction the vessel is riding when at her station.

If from any cause a lightship is unable to exhibit her usual characteristic lights while on station, the riding light only will be shown.

During fog or low visibility, on the near approach of traffic to a lightship the bell will be rung rapidly during the silent intervals between each sounding of the vessel's prescribed station fog signal until all risk of collision is past.

At lightships where a hand horn is used, the interval will be shortened as vessels approach and, should a vessel come dangerously close, the sound will be continuous until she has passed.

When a lightship is out of position having been driven from her proper station or under tow, and is no use as a guide to shipping, the characteristic light will not be shown and the fog signal will not be sounded.

The following signals will be made:

By day—two large black balls will be shown, on forward and one aft, and the International Code signal "LO" indicating "I am not in my correct position" will be hoisted where it may best be seen.

By night—a fixed red light will be shown at bow and stern of the vessel and red and white flares will be shown simultaneously every 15 minutes or at more frequent intervals on the near approach of traffic; the flares will be shown from where they can best be seen at a distance of about 10 feet (3 meters) apart in a horizontal line. If the use of flares is impracticable, a red light and a white light will be displayed simultaneously for about a minute.

Lightship under tow by day—the International Code signal "LO" indicating "I am not in my correct position" will be hoisted where it can best be seen. In accordance with Rule 24 of the International Regulations fro Preventing Collisions at Sea 1972, a diamond shape will be displayed where it can best be seen.

Lightship under tow at night—sidelights and a sternlight will be exhibited in accordance with Rule 24 of the International Regulations fro Preventing Collisions at Sea 1972.

In fog or low visibility, lightships out of position will give the fog signal required for a vessel at anchor.

It should be remembered that lightships, through collisions or other causes, are liable to be withdrawn fro repairs without notice, and in some cases may not be replaced by relief vessels.

The name of the station is painted on the sides of the vessel or float, but relief vessels may carry the word "Relief" or "Reserve." A lightship under way shows the same lights and makes the same sound signals as other vessels under way.

Some lightships have been replaced by superbuoys.

Oil and gas permanent platforms and drilling rigs are marked by:

Mo(U) 15s 15M

Horn Mo(U) 30s

Mo(U)R 15s 3M may mark projections.

They may be encountered anywhere in the waters covered by this volume.

Belgian, *Dutch*, *German*, and *Danish* lightships carry a white light on the forestay.

French lightships, when out of position, discontinue their characteristic lights and fog signals and exhibit in their place the following signals:

By day—the International Code signal "LO" and two black balls, one forward and one aft.

By night—two red lights, one forward and one aft. Also two flare-ups, one white and one red, will be burned simultaneously every 15 minutes.

Dutch and *Belgian* lightships, when out of position, discontinue their characteristic lights and fog signals.

By day—the distinguishing mastheads marks are struck, two black balls are shown, one forward and one aft, and the International Code signal "LO" is hoisted.

By night—two red lights, one forward and one aft, are shown; also one red and one white flare simultaneously or

one red and one white light every 15 minutes.

German lightships, when out of position, by day hoist the International Code signal "LO", two red flags, one forward and one aft, and the distinguishing masthead mark is lowered; by night two red lights are shown, one forward and one aft; in addition, at intervals of less than 15 minutes, one white and one red light are displayed horizontally 9 feet (3 meters) apart from the deck for a period of one minute. In fog only the bell fog signals prescribed in the navigation regulations are sounded. If a vessel is seen standing in danger a gun will be fired (groups of 2 reports at intervals of 3 minutes), the bell will be rung and signals made accordance with the International Code of Signals. Lightships are liable to be driven from their stations by ice, but are replaced as soon as circumstances allow.

Danish lightships—lights are shown from 15 minutes after sunset to 15 minutes before sunrise. When out of position, they discontinue their characteristic lights and fog signals. If they have drifted out of position, they will exhibit the following signals:

By day—two black balls, one forward and one aft. The International Code Signal "LO" will be hoisted;

By night—two red lights will be shown, one forward and one aft; also, one red and one white light will be shown simultaneously over the gunwale at least every 15 minutes.

A lightship under way shows the same signals as other vessels under way, and if proceeding under its own power, hoists two black balls, one forward and one aft.

It should be remembered that lightships are liable to be withdrawn without notice, and may not be replaced by relief vessels.

Should the mechanical fog signals be disabled, a hand fog horn is used. Should a vessel be seen standing into danger the Morse letter U(••–) will be made by siren or flashing light, and the International Code flag "U" hoisted. When lightships can furnish pilots they display at the masthead a flag, upper half white, lower half red. By night they answer pilot signals by burning a flare.

Many radiobeacons within the European maritime area transmit only a carrier signal keyed to provide a Morse call-sign for identification of the station. The composition of signals is based on a one-minute duration. These radiobeacons operate individually and continuously instead of within a group (sequence) of beacons.

DISTRESS SIGNALS

For lightships and lighthouses on islands or isolated rocks and offshore light structures in the *British Isles:*

(1) Light stations in the above categories are equipped with radiotelephones capable of transmitting messages to summon assistance for themselves or for vessels or aircraft they observe to be in distress, in accordance with recognized procedures. In addition to transmitting such messages, they may make use of one or more of the visual distress signals indicated in paragraph (2). Light stations which are themselves in need of assistance will in any event make use of one or more of the visual distress signals in addition to the radiotelephone message.

(2) Visual Distress Signals:

(a) a rocket or rockets throwing red stars. Each rocket preceded or accompanied by either a detonating signal or sound rocket—the whole signal repeated at regular intervals;

(b) a signal consisting of a square flag having above or below it a ball;

(c) the International Code Signal of distress ("NC" or "DZ").

NOTE—a detonating signal has the following characteristics:

By night—on firing, a small yellowish-white flash and a small sharp report; on reaching zenith of trajectory (about 300 feet), a very large yellowish-white flash with a loud cracking report.

By day—as for night, but in addition a small puff of whitish smoke on firing and, on reaching zenith of trajectory, a large compact cloud of whitish smoke.

Reply from shore:

By day—orange smoke signal.

By night—white star rocket.

(3) Certain light stations under the jurisdiction of the Northern Lighthouse Board, which covers *Scotland* and the *Isle of Man*, have, in addition to radiotelephones, white star rockets to acknowledge a ship's distress signal and to indicate that assistance has been summoned.

DANGER SIGNALS

When from any lightship (and certain lighthouses) a vessels is seen standing into danger, the flag signal "NF" of the International Code, "You are running into danger," or signal flag "U", "You are standing into danger," will be hoisted and kept flying until answered. In addition to the above flag signal, the lightship or lighthouse may fire a rocket sound signal, or a detonating signal, and repeat it at short intervals until observed by the vessel. The letter "U" in Morse flashed by lamp or sounded on a horn may also be used.

In the case of lightships the signal "PS", "You should not come any closer," may be used when a vessel is observed to be coming dangerously close.

Call Signals (not Distress)—Lightships and certain lighthouses wishing to attract the attention of a passing vessel will:

By day—hoist the appropriate International Code signal.

By night—make the call sign or letter "K" by signal light.

In the case of a lightship, white flare may also be exhibited. In fog or low visibility, when the signal cannot be used, the letter "K" may be made by hand horn.

French lights may be shown by day in poor visibility. The heights of structures are measured from the focal plane of the light on the ground.

FOG SIGNALS

The function of a fog signal in the system of aids to navigation is to warn of danger and to provide the mariner with an audible means of approximating his position relative to the fog signal when the station, or any visual signal which it displays, is obscured from view by atmospheric conditions.

Fog signals depend upon the transmission of sound through air. As aids to navigation, they have certain inherent defects that should be considered. Sound travels through the air in a variable and frequently unpredictable manner.

It has been established that:

fog signals are heard at greatly varying distances and that the distance at which a fog signal can be heard may vary with the bearing of the signal and may be different on different occasions;

under certain conditions of atmosphere, when a fog signal has a combination of high and low tones, it is not unusual for one of the tones to be inaudible. In the case of sirens, which produce a varying tone, portions of the blast may not be heard;

there are occasionally areas close to the signal in which it is wholly inaudible. This is particularly true when the fog signal is screened by intervening land or other obstructions;

fog may exist a short distance from a station and not be observable from it, so that the signal may not be in operation;

even though a fog signal may not be heard from the deck or bridge of a ship when the engines are in motion, it may be heard when the ship is stopped, or from a quiet position. Sometimes it may be heard from aloft though not on deck;

the intensity of the sound emitted by a fog signal may be greater at a distance than in immediate proximity.

All these considerations point to the necessity for the utmost caution when navigating near land in fog. Particular attention should be given to placing lookouts in positions in which the noises in the ship are least likely to interfere with hearing a fog signal. Fog signals are valuable as warnings, but the mariner should not place implicit reliance upon them in navigating his vessel. They should be considered solely as warning devices.

Among the devices in common use as fog signals are:

Radiobeacons which broadcast simple dot-and-dash combinations by means of a transmitter emitting modulated continuous waves;

Diaphones which produce sound by means of a slotted reciprocating piston actuated by compressed air. Blasts may consist of two tones of different pitch, in which case the first part of the blast is high and the last of a low pitch. These alternate pitch signals are called “two-tone;”

Diaphragm horns which produce sound by means of a diaphragm vibrated by compressed air, steam, or electricity. Duplex or triplex horn units of differing pitch produce a chime signal;

Nautophones, electrically operated instruments, each comprising a vibrating diaphragm, fitted with a horn, which emits a high note similar in power and tone to that of the reed;

Reed horns which produce sound by means of a steel reed vibrator by compressed air;

Sirens which produce sound by means of either a disk or a cup-shaped rotor actuated by compressed air or electricity;

Whistles which produce sound by compressed air emitted through a circumferential slot into a cylindrical bell chamber;

Bells which are sounded by means of a hammer actuated by hand, wave motion, by a descending weight, compressed gas, or electricity;

Guns and explosive signals which are produced by firing of explosive charges, the former being discharged from a gun, and the latter being exploded in midair;

Fog Detector Lights—certain light stations, in addition to the main light, are equipped with fog detector lights for automatic detection of fog. These lights sweep back and forth through an area over which the fog watch is necessary, showing a powerful bluish-white flash of about 1 second in duration. The interval between successive flashes will vary with the position of the vessel within the sector. At the limits of the sector the duration of the flash may be considerably longer than 1 second.

Fog detector lights operate continuously.

Standby fog signals are sounded at some of the light and fog signal stations when the main fog signal is inoperative. Some of these standby fog signals are of a different type and characteristic than the main fog signal.

Radiobeacons, RACONs, RAMARKs, and radio direction-finders are mentioned in the List of Lights, but for detailed information, including the synchronization of radio signals and sound signals for distance finding, the navigator should consult Pub. 117, Radio Navigational Aids.

Note—use Chart No. 1 for the complete list of symbols and abbreviations commonly used in presenting the essential characteristics of lights, fog signals, and radio aids found on charts.

VISIBILITY TABLE

Table of distances at which objects can be seen at sea according to their respective elevations and the elevation of the eye of the observer.

Height in Feet	Distance in geographic or nautical miles	Height in feet	Distance in geographic or nautical miles	Height in feet	Distance in geographic or nautical miles	Height in feet	Distance in geographic or nautical miles	Height in feet	Distance in geographic or nautical miles	Height in feet	Distance in geographic or nautical miles
1	1.2	23	5.6	45	7.8	135	13.6	340	21.6	600	28.7
2	1.7	24	5.7	46	7.9	140	13.8	350	21.9	620	29.1
3	2.0	25	5.9	47	8.0	145	14.1	360	22.2	640	29.5
4	2.3	26	6.0	48	8.1	150	14.3	370	22.5	660	30.1
5	2.6	27	6.1	49	8.2	160	14.8	380	22.8	680	30.5
6	2.9	28	6.2	50	8.3	170	15.3	390	23.1	700	31.0
7	3.1	29	6.3	55	8.7	180	15.7	400	23.4	720	31.4
8	3.3	30	6.4	60	9.1	190	16.1	410	23.7	740	31.8
9	3.5	31	6.5	65	9.4	200	16.5	420	24.0	760	32.3
10	3.7	32	6.6	70	9.8	210	17.0	430	24.3	780	32.7
11	3.9	33	6.7	75	10.1	220	17.4	440	24.5	800	33.1
12	4.1	34	6.8	80	10.5	230	17.7	450	24.8	820	33.5
13	4.2	35	6.9	85	10.8	240	18.1	460	25.1	840	33.9
14	4.4	36	7.0	90	11.1	250	18.5	470	25.4	860	34.3
15	4.5	37	7.1	95	11.4	260	18.9	480	25.6	880	34.7
16	4.7	38	7.2	100	11.7	270	19.2	490	25.9	900	35.1
17	4.8	39	7.3	105	12.0	280	19.6	500	26.2	920	35.5
18	5.0	40	7.4	110	12.3	290	19.9	520	26.7	940	35.9
19	5.1	41	7.5	115	12.5	300	20.3	540	27.2	960	36.3
20	5.2	42	7.6	120	12.8	310	20.6	560	27.7	980	36.6
21	5.4	43	7.7	125	13.1	320	20.9	580	28.2	1000	37.0
22	5.5	44	7.8	130	13.3	330	21.3				

Explanation.—The line of sight connecting the observer and a distant object is at maximum length tangent with the spherical surface of the sea. It is from this point of tangency that the tabular distances are calculated. The table must accordingly be entered twice to obtain the actual geographic visibility of the object—first with the height of the object, and second with the height of the observer's eye—and the two figures so obtained must be added. Thus, if it is desired to find the maximum distance at which a powerful light may be seen from the bridge of a vessel where the height of eye of the observer is 55 feet above the sea, from the table:

	Nautical Miles
55 feet height of observer(visible)	8.7
200 feet height of light(visible)	16.5
Distance visible	25.2

CONVERSION TABLE — FEET TO WHOLE METERS

(FOR HEIGHTS OF LIGHTS)

1 foot = 0.3048 meter

Feet	Meters	Feet	Meters	Feet	Meters	Feet	Meters	Feet	Meters	Feet	Meters
		40	12	80	24	120	37	160	49	200	61
1	0	41	12	81	25	121	37	161	49	300	91
2	1	42	13	82	25	122	37	162	49	400	122
3	1	43	13	83	25	123	37	163	50	500	152
4	1	44	13	84	26	124	38	164	50	600	183
5	2	45	14	85	26	125	38	165	50	700	213
6	2	46	14	86	26	126	38	166	51	800	244
7	2	47	14	87	27	127	39	167	51	900	274
8	2	48	15	88	27	128	39	168	51	1000	305
9	3	49	15	89	27	129	39	169	52		
10	3	50	15	90	27	130	40	170	52		
11	3	51	16	91	28	131	40	171	52		
12	4	52	16	92	28	132	40	172	52		
13	4	53	16	93	28	133	41	173	53		
14	4	54	16	94	29	134	41	174	53		
15	5	55	17	95	29	135	41	175	53		
16	5	56	17	96	29	136	41	176	54		
17	5	57	17	97	30	137	42	177	54		
18	5	58	18	98	30	138	42	178	54		
19	6	59	18	99	30	139	42	179	55		
20	6	60	18	100	30	140	43	180	55		
21	6	61	19	101	31	141	43	181	55		
22	7	62	19	102	31	142	43	182	55		
23	7	63	19	103	31	143	44	183	56		
24	7	64	20	104	32	144	44	184	56		
25	8	65	20	105	32	145	44	185	56		
26	8	66	20	106	32	146	45	186	57		
27	8	67	20	107	33	147	45	187	57		
28	9	68	21	108	33	148	45	188	57		
29	9	69	21	109	33	149	45	189	58		
30	9	70	21	110	34	150	46	190	58		
31	9	71	22	111	34	151	46	191	58		
32	10	72	22	112	34	152	46	192	59		
33	10	73	22	113	34	153	47	193	59		
34	10	74	23	114	35	154	47	194	59		
35	11	75	23	115	35	155	47	195	59		
36	11	76	23	116	35	156	48	196	60		
37	11	77	23	117	36	157	48	197	60		
38	12	78	24	118	36	158	48	198	60		
39	12	79	24	119	36	159	48	199	61		

RADIOBEACONS

RADIO DIRECTION-FINDER SETS ON SHIPS

Radio direction-finder sets on board ship enable bearings to be taken of transmissions from other ships, aircraft, shore stations, marine radiobeacons, and the coastal stations of the radio communication network. When located in the pilothouse or on the navigating bridge, the direction-finder enables the navigating officer to obtain bearings himself without reference to others and without delay.

Due to the great value of radio bearings, particularly when visibility is poor and when celestial observations cannot be obtained, the radio direction-finder on board ship deserves the same consideration and care as are given to the sextant and compass. It has the following characteristics in common with the two latter navigational instruments: the readings are subject to certain errors; these errors may be reduced by skillful and intelligent operation; the dangers of using erroneous readings may be greatly reduced by the intelligence and good judgment of the mariner. In order to acquire experienced judgment in the operation of the instrument, it is essential that the mariner use it as much as practicable.

Troubles from interference and weak signals are greatly reduced by the use of direction-finders of proper selectivity. The bearings must be corrected for radio deviation as shown by the calibration curve of the set.

Types of Radiobeacons

1. Directional radiobeacons which transmit radio waves in beams along fixed bearings.
2. Rotating radiobeacons by which a beam of radio waves is resolved in azimuth in a manner similar to the beam of light sent out by rotating lights.
3. Circular radiobeacons which send out waves of approximately uniform strength in all directions so that ships may take radio bearings of them by means of the ship's radio direction-finder sets. This is the most common type of radiobeacon.

To extend the usefulness of marine radiobeacons to ships and aircraft employing automatic radio direction finders, U.S. marine radiobeacons on the Atlantic and Pacific Coasts and Great Lakes have been modified to transmit a continuous carrier signal during the entire radiobeacon operating period with keyed modulation providing the characteristic signal. Unless a beat frequency oscillator is installed, the continuous carrier signals are not audible to the operator of an aural null direction finder. A ten second dash has been included in the characteristic of these radiobeacons, to enable the navigator using a conventional aural null direction finder to refine his bearing. Vessels with direction finders will be able to use the United States radiobeacons located on the Atlantic and Pacific Coasts, and Great Lakes at any time in their assigned sequence.

Aeronautical Radio Aids

Aeronautical radiobeacons and radio ranges are often used by navigators of marine craft in the same manner as marine radiobeacons are used for determining lines of positions. They are particularly useful along coasts where marine broadcast coverage is inadequate. Aeronautical aids situated inland become less trustworthy, so far as ships are concerned, when high land intervenes between them and the coast. They are established to be of primary usefulness to aircraft, and surface craft should use these aids with caution. Only those aeronautical radiobeacons considered to be of use to the mariner have been selected for inclusion in this publication.

AERONAUTICAL RADIOBEACONS. Like marine radiobeacons, these aids broadcast a characteristic signal on a fixed frequency.

NOTE: The assigned frequency of aeronautical radiobeacons is normally from 200 to 415 kHz while the frequency of marine radiobeacons is normally from 285 to 325 kHz. Aeronautical radiobeacons not within the marine radiobeacon band will not normally be listed in this publication.

The range signals are interrupted at intervals to permit broadcast of the identification signal. In aviation publications the range leg bearings are most often given as magnetic bearings toward the station; in this publication they are given as true bearings toward the station. Unless otherwise stated in the station details, aeronautical radio aids mentioned in this publication transmit continuously.

NOTE: Mariners are advised that changes to and deficiencies in aeronautical radio facilities are not always immediately available to maritime interests and the positions are approximate and listed to the nearest minute only.

Obligations of Administrations Operating Radiobeacons

The obligations of nations and other administrations operating radiobeacons are given in Article 43 of the Radio Regulations of the International Telecommunication Union, Geneva.

Accuracy of Bearings Taken Aboard Ship

No exact rules can be given as to the accuracy to be expected in radio bearings taken by a ship as the accuracy depends to a large extent upon the skill of the ship's opera-

tor, the condition of the ship's equipment, and the accuracy of the ship's calibration curve. Mariners are urged to obtain this information by taking frequent radio bearings when their ship's position is accurately known and by recording the results. Normally, United States radiobeacons are operated in a group of six, each station in a group using the same frequency and transmitting for one minute in its proper sequence, and operate during all periods, either sequenced or continuously, regardless of weather conditions.

SKILL OF OPERATOR: Skill in the operation of the radio direction-finder can be obtained only by practice and by observing the technical instructions for the set in question. For these reasons the operator should carefully study the instructions issued with the set and should practice taking bearings frequently.

OPERATOR'S ERROR: As the operator obtains bearings by revolving the direction-finder coil until the signal disappears or becomes a minimum, the operator can tell by the size of the arc of silence or of minimum strength approximately how accurately the bearing has been taken. For instance, if the minimum is broad and the residual signal covers about 10° with equal strength, it is doubtful if the bearing can be accurately estimated. On the other hand, if a sharp minimum can be obtained, the operator can determine the bearing to within a half of a degree.

In this connection it should be noted that a properly operating and correctly adjusted direction-finder should in no case produce other than a point or arc of absolute silence. That is, there should be no "residual" signal at the point or arc of observation. The sharpness and completeness of the arc of silence are the best indications of a properly operating direction-finder, and their absence is the best indication of the presence of "night effect."

SUNRISE, SUNSET, OR NIGHT EFFECT: Bearings obtained from about half an hour before sunset to about half an hour after sunrise may be subject to errors due to night effect. On some nights this effect is more pronounced than on others and effect is usually greatest during the hours of twilight. Night effect may be detected by a broadening of the arc of minimum signals and by a fluctuation in the strength of the signals. It may also be indicated by difficulty in obtaining a minimum or by a rapidly shifting minimum. It is sometimes accompanied by an actual shift in the direction of the bearings. If it is essential to obtain a bearing when the night effect is pronounced, several bearings should be taken over a short period of time and an average taken of them.

RADIO DIRECTION FINDER WITHOUT GYRO REPEATERS: The ship's compass must be read as the bearing is taken or an error may be introduced equal to the amount that the ship has yawed in the interval between taking the bearing and reading the compass. Any error in the ship's compass must be applied to the bearing.

RECIPROCAL BEARINGS: In some direction-finder sets, the operator cannot tell from which side of the ship the signals are coming. With these sets the operator shall correct both bearings for their respective deviations and give both corrected bearings to the person who is plotting the bearings on the chart. If the mariner is in doubt as to the side of the ship from which the bearings are coming, this difficulty can usually be solved by having another bearing taken after the ship has steamed a short distance and noting in which direction the bearing is changing.

CALIBRATION: It is essential that the radio direction-finder be accurately calibrated in order that the bearings may be corrected for deviation. While the bearings are being taken, other radio antennas on board must be in the same condition as they were when the calibration was made; movable parts of the ship's superstructure such as booms, davits, wire rigging, etc., must be secured in the positions which they occupied when the direction-finder was calibrated. Unusual cargoes such as large quantities of metals and extraordinary conditions of loading may cause errors.

The direction-finder should be recalibrated after any changes have been made in the set or its surroundings (this includes alterations to or changes in position of antennas, wire rigging, boat davits, booms, etc.) whenever there is reason to believe that the previous calibration has become inaccurate, and also at periodic intervals.

The calibration must be made on approximately the same frequency or frequencies as will be used to take bearings because the deviation for several frequencies is not likely to be the same. It is believed that one calibration curve is satisfactory for the normal radiobeacon frequency (285 to 325 kHz), but the instructions issued by the manufacturer of the particular direction-finder in question should be studied in this connection.

To facilitate the calibration of ship's direction-finders, special arrangements have been made by some services for operation of their radiobeacons at times other than their published schedules. Information as to the arrangements made by the United States stations in this respect is as follows:

Sequenced radiobeacons cannot broadcast at any time other than on their assigned operating minute for the purpose of enabling vessels to calibrate their radio direction finders without causing interference. Special radio direction finder calibration transmitters of short range are operated at certain localities to provide continuous calibration service.

The position given for the antenna is the point from which the radiobeacon signal is emitted.

If it is not practicable to determine the time of calibration sufficiently in advance to contact the district commander, request may be made directly to the stations by means of telephone, telegraph, or a whistle signal consisting of three long blasts; followed by three short blasts.

This whistle signal is to be repeated until it is acknowledged by the station through the starting of the transmitter. The same group of signals should be sounded at the termination of calibration.

The work of the station personnel is not confined to standing watch and there may be times when the whistle request for calibration is not immediately heard, due to the noise from operating station machinery, etc. Usually, a repeated signal not too far from the station will attract attention.

"COMPENSATED" RADIO DIRECTION-FINDERS: Many radio direction-finders are "compensated" and no calibration chart or curve is used. Attention is invited to the fact that such compensation is just as vulnerable as the calibration data due to changes made in the set or its surroundings.

CHECK THE CALIBRATION: The calibration of compensation should be checked frequently by taking bearings when the ship's position is accurately known and the results should be recorded for future reference.

CALIBRATION RADIOBEACONS: In the United States and certain other areas special radiobeacons, primarily for calibrating shipboard direction-finders are in operation. These radiobeacons transmit either continuously during scheduled hours or upon request, as indicated in station details.

COASTAL REFRACTION (OR LAND EFFECT): Errors may occur in bearings taken by ships so located that the line of observation to the radiobeacon passes over land or along the shore line. However, many observations seem to indicate that such errors are negligible when the observing vessel is well out from the shore. Bearings secured entirely over water areas are to be preferred since "land effect" is thus eliminated. Bearings taken at sunset and sunrise are likely to be erratic, and observations taken at these hours should therefore be repeated and checked as may be feasible.

PROGRAM BROADCASTING STATIONS: Before taking bearings on a station broadcasting entertainment programs a mariner should consider that frequency may differ widely from the frequency for which the set is calibrated, that the published location of the station may be that of its studio and not that of its transmitting antenna, that if the station is synchronized with other stations it may be impossible to tell on which station the bearing was taken, and that as the majority of these stations are inland, the coastal refraction may be excessive.

Station Details

FREQUENCY: The frequency listed is that used by the station in transmitting its "Characteristic Signal." Calling frequencies, if any, will be given under "remarks."

RANGE: In this book the range of radiobeacons is only approximate and is given merely to assist mariners in planning their voyages and to inform them of several radiobeacons they will probably hear first. Frequently, when conditions for radio reception are good, radiobeacons may be heard at greater distances than indicated. The mariner who is at a greater distance than the range indicated should attempt to obtain bearings when necessary, and not assume that the radiobeacon will be unheard beyond its indicated range.

GROUP SEQUENCE: Selected radiobeacons are grouped together on the same operating frequency and are assigned a specific sequence of transmission within this group. This reduces station interference and unnecessary returning.

ANTENNA LEAD-IN: Included in the details of many radiobeacons located at or near light stations is a statement of the distance and bearing of the radiobeacon transmitting antenna from the light tower. Use should be made of this information when calibrating the ship's direction-finding equipment by means of simultaneous visual and radio bearings.

Plotting Radio Bearings

The procedure for converting radio (great circle) bearings as received by direction-finder equipment aboard ship is identical with that used in converting radio bearings supplied by direction-finder stations on shore and is described in section 100E "Plotting Radio Bearings" of Pub. 117, Radio Navigational Aids.

Synchronization for Distance Finding

At some radiobeacon stations, sound signals, either submarine or air or both, are synchronized with the radiobeacon signals for distance finding. Ordinarily, the sound signals do not operate during the transmission period of the radio signal in clear weather. The methods in use employ, as a rule, distinctive signals to indicate the point of synchronization, and make use, for determining distance, of the lag of signals traveling through air or water as compared to the practically instantaneous travel of the radio signals.

In the case of some sound signals, a series of short radio dashes is transmitted at intervals following the synchronizing point, so that by counting the number of such short dashes heard after the distinctive radio signal and before hearing the corresponding distinctive sound signal, the observer obtains the distance, in miles equal to the number of dashes counted, from the sound signal apparatus unless stated otherwise.

In the case of other signals, the observer notes the number of seconds intervening between the reception of the distinctive radio signal and the corresponding sound signal and uses a factor to determine distances in miles as follows:

Submarine signals–multiply the observed numbers of seconds by 0.8 or divide by 1.25 distance in nautical miles.

Air signals–multipy the observed number of seconds by 0.18 or divide by 5.5. For more approximate results or for statute miles, multiply the observed number of seconds by 0.2 or divide by 5.

Tables for finding distance

Interval in seconds	Distances in nautical miles from sound signal source	
	Air	Submarine
1	0.18	0.8
2	0.36	1.6
3	0.54	2.4
4	0.72	3.2
5	0.90	4.0
6	1.08	4.8
7	1.26	5.6
8	1.44	6.4
9	1.62	7.2
10	1.80	8.0
20	3.60	16.0
30	5.40	24.0
40	7.20	
50	9.00	
60	10.80	

REMARKS: Average speed of sound travel in water is 1 nautical mile in 11/4 seconds.

The speed of sound travel is influenced by a number of conditions making it impracticable to state a factor that will give exact results under all conditions. The results obtained by the methods described may be accepted as being accurate to within 10 percent of the distance.

Methods of synchronizing the signals vary and are described or illustrated in official announcements regarding them. It is essential to note carefully the point of synchronization used so that no error will be made through taking time on the wrong signal or the wrong part of it.

In observing air signals it is usually sufficient to use a watch with second hand, although a stop watch is helpful. For submarine signals where the interval is shorter and a time error correspondingly more important, it is essential that a stop watch or other timing device be used. Where the radiobeacon and submarine signals are not received at the same point on the vessel, means of instant communication between two observers should be available or synchronized stop watches provided for each.

Ships not equipped with a DF receiver can take advantage of the distance-finding feature of a radiobeacon station, if equipped with a radio receiver capable of receiving the transmission. In the case of obtaining distance from a radiobeacon station which is synchronized with a submarine sound signal, the ship must also be equipped with a device for picking up submarine sound signals.

Rotating Loop Radiobeacon

MODE OF OPERATION:

(1) The radiobeacon consists of a rotating loop transmitter having directional properties by which an observer in a ship can obtain his bearing from the beacon without the use of a direction-finder. Any ordinary receiving set capable of being tuned to the radiobeacon's frequency may be used. The only other equipment required is a reliable stop watch or chronograph with a sweep second hand. Stop watches and clocks with dials graduated in degrees may be used, from which bearings may be read directly without any mathematical calculation.

(2) During each revolution of the beacon, the signals received by the observer will rise and fall in intensity, passing through a maximum and a minimum twice each minute. The positions of minimum intensity, which occur at intervals of thirty seconds from one another, are very sharp and can be accurately observed. These are, therefore, used for navigation purposes.

The beacon may be regarded as having a line or beam of minimum intensity which rotates at a uniform speed of 360˚ in 1 minute (i.e. 6˚ in 1 second) based on the true meridian as starting point. Therefore, if the observer can (a) identify the beacon and (b) measure the number of seconds which this minimum beam takes to reach their position starting from the true meridian, this number multiplied by six will give their true bearing from the beacon or its reciprocal.

The signals which enable the beacon to be identified and the bearing to be calculated are described in the following paragraphs:

Signals transmitted by the beacon: Each transmission from the beacon lasts for 4 minutes; the beacon is then silent for 8 minutes, and automatically starts again at the end of the silent period. Each transmission consists of two parts: (a) the identification signal of the station set at a slow speed for the first minute, commencing when the minimum beam is true east and west and followed by a long dash of about 12 seconds duration; (b) the signal group commencing when the minimum beam is approaching the true meridian, and consisting of (i) the north starting signal, which is the letter V followed by two dots (••• – ••); (ii) a long dash of about 12 seconds duration; (iii) the east starting signal, which is the letter B followed by two dots (– ••• ••); and (iv) a long dash for about 42 seconds.

The navigation signals are repeated during the remainder of the transmission and signals cease when the minimum beam is in the east and west position.

INSTRUCTIONS FOR TAKING BEARINGS

(i) Set stop watch to zero.

(ii) Listen for identification signal.

(iii) When the first long dash begins (at A on diagram) get ready for the "north signal."

(iv) After the "north signal," start stop watch exactly at beginning of long dash (see "00 seconds" on diagram) counting one-two with the two preceding dots, and 3 for the start of the stop watch.

(v) Listen for minimum and note its exact time by stop watch.

NOTE: If stop watch is graduated in degrees note exact angle, which is the bearing.

(vi) Multiply number of seconds by 6˚ for bearing.

(vii) Determine whether bearing is direct or reciprocal.

(viii) If the "north signal" is faint, use the "east signal," but add 090˚ to final bearing.

Particular attention is directed to the following:

(a) The stop watch must be started exactly at the beginning of the long dash for each series of observations.

(b) The time of occurrence of the minimum must be read to the nearest fifth of a second.

(c) The bearing obtained will be either the direct bearing or its reciprocal.

(d) When using the east signal, add 090˚ to obtain bearings from true north.

(e) The beacon is set up on the true meridian, and no correction is required for magnetic variation.

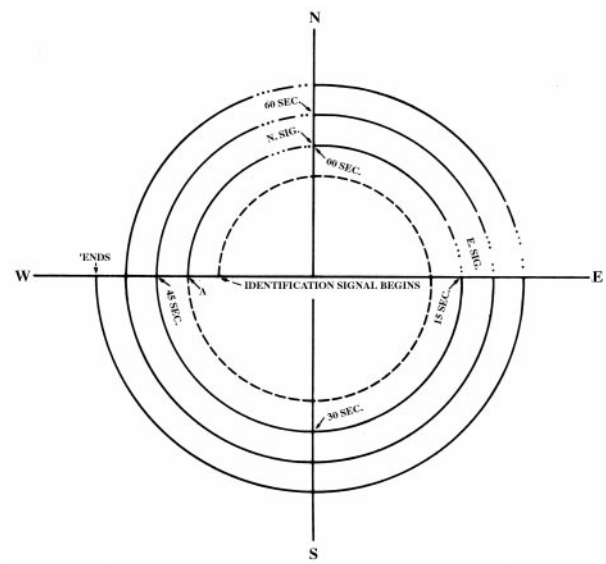
(f) No quadrantal error arises, and no corrections are necessary except as in (c) and (d) above.

(A correction must, of course, be made for convergency; this should be applied as if the beacon were a shore radio direction-finder station.)

(g) A comparatively large error of bearing may occur due to inaccuracy in the stop watch, and to obviate this, observers or navigators should check their stop watches on the beacon station before taking bearings. This can easily be done by checking the time by stop watch of the complete revolution of the beacon transmission. Any error found can then be allowed for.

Caution

Due to the many factors which enter into the transmission and reception of radio signals, a mariner cannot practically estimate its distance from a radiobeacon either by the strength of the signals received or by the time at which the signals were first heard. Mariners should give this fact careful consideration in approaching radiobeacons. A diagram showing the signals used is given below.



ROTATING RADIOBEACON
SIGNAL DIAGRAM

DESCRIPTION

(Radiobeacons)

Information is tabulated in eight columns as follows:

column 1: The number assigned to each radiobeacon by this Agency.

column 2: Name and/or descriptive location of the radiobeacon.

column 3: Approximate latitude and longitude of the radiobeacon to the nearest tenth of a minute.

column 4: Radiobeacon characteristics. Included in this column are the Morse code, period in seconds, length of transmission and silence time.

column 5: Range (approximate) in nautical miles.

column 6: Group sequence. Selected radiobeacons are grouped together on the same operating frequency and are assigned a specific sequence of transmission within this group. This reduces station interference and unnecessary return.

column 7: Frequency (given in kilohertz) and amplitude modulation (see Table Symbols).

column 8: Remarks. Transmission synchronization, type of radiobeacon (marine, aero, etc.), calibration, antenna lead-in, calling frequencies, distance-finding information, service charges, hours of transmission, directional signals and other pertinent information.

ABBREVIATIONS

aero . . . . . aeronautical
tr . . . . . transmission
si . . . . . silence
s. . . . . .seconds
(4) . . . . . 4 times
Transmission is continuous unless otherwise stated.

TABLE OF SYMBOLS

LEGEND

(1) Type of modulation of the main carrier.
(2) Nature of signal(s) modulating the main carrier.
(3) Type of "information" to be transmitted. "Information" does not include information of a constant, unvarying nature such as provided by standard frequency emissions, continuous wave and pulse radars, etc.

AMPLITUDE MODULATION:

N0N

(1) Emission of an unmodulated carrier.
(2) No modulating signal.
(3) No information transmitted.

A1A

(1) Double-sideband.
(2) Single channel containing quantized or digital information without the use of a modulating subcarrier.
(3) Telegraphy (for aural reception).

A2A

(1) Double-sideband.
(2) Single channel containing quantized or digital information with the use of a modulating subcarrier.
(3) Telegraphy (for aural reception).

A3E

(1) Double-sideband.
(2) Single channel containing analog information.
(3) Telephony (including sound broadcasting).

R3E

(1) Single-sideband (reduced or variable level carrier).
(2) Single channel containing analog information.
(3) Telephony (including sound broadcasting).

B8E

(1) Independent sidebands.
(2) Two or more channels containing analog information.
(3) Telephony (including sound broadcasting).

H2A

(1) Single-sideband (full carrier).
(2) Single channel containing quantized or digital information with the use of a modulating subcarrier.
(3) Telegraphy (for aural reception).

H3E

(1) Single-sideband (full carrier).
(2) Single channel containing analog information.
(3) Telephony (including sound broadcasting).

J3E

(1) Single-sideband (suppressed carrier).
(2) Single channel containing analog information.
(3) Telephony (including sound broadcasting).

A3C

(1) Double-sideband.
(2) Single channel containing analog information.
(3) Facsimile.

A3F

(1) Double-sideband.
(2) Single channel containing analog information.
(3) Television (video).

B7D

(1) Independent sidebands.
(2) Two or more channels containing quantized or digital information.
(3) Data transmissions, telemetry, telecommand.
Note: With 6 kHz. EDW operation in the bands below 30 MHz allocated exclusively for Maritime Mobile Service (FC, MO).

FREQUENCY (OR PHASE) MODULATION:

F1B

(1) Frequency modulation.
(2) Single channel containing quantized or digital information without the use of a modulating subcarrier.
(3) Telegraphy (for automatic reception).

F2A

(1) Frequency modulation.
(2) Single channel containing quantized or digital information with the use of a modulating subcarrier.
(3) Telegraphy (for aural reception).

F3E

(1) Frequency modulation.
(2) Single channel containing analog information.
(3) Telephony (including sound broadcasting).

F3C

(1) Frequency modulation.
(2) Single channel containing analog information.
(3) Facsimile.

F3F

(1) Frequency modulation.
(2) Single channel containing analog information.
(3) Television (video).

P1B

(1) Sequence of unmodulated pulses.
(2) Single channel containing quantized or digital information without the use of a modulating subcarrier.
(3) Telegraphy (for automatic reception).

Pulse Modulation:
GHz = gigahertz
kHz = kilohertz
MHz = megahertz

DIFFERENTIAL GLOBAL POSITIONING SYSTEM (DGPS)

Differential Global Positioning System (DGPS) is a radio-based navigation system that eliminates errors in a GPS receiver that will allow the accuracy level to be significantly enhanced. DGPS accuracy can be 10 meters or better, compared with 100 meters or better with GPS. This is possible by placing a high-performance GPS receiver (reference station) at a known location. Because the receiver knows its exact location, it can determine the errors in the satellite signals. The satellite measures the ranges to each satellite using the signals received and comparing these measured ranges to the actual ranges calculated from its known position. The total error is the difference between the measured and calculated range. The error data for each tracked satellite is formatted into a correction message and transmitted to GPS users. The correction message format follows the standard established by the Radio Technical Commission for Maritime Services, Special Committee 104 (RTCM-SC104). These differential corrections are then applied to the GPS calculations, thus removing most of the satellite signal error and improving accuracy.

Terms for understanding DGPS:

DGPS Correction Receiver

A DGPS correction receiver decodes the signals received from a reference site. Data is formatted into a serial RTCM SC104 data stream and provided to the remote GPS receiver. There are many types of DGPS correction receivers.

GPS Receivers

The GPS receiver measures ranges to each satellite, but before the measurements are used to calculate position, corrections received from the DGPS receiver are applied to the measurements. The position is then calculated using the corrected range measurements providing vastly increased accuracy.

Modulator

Depending on the transmission format, the modulator encodes the data as necessary for transmission.

Reference Station

The refrence station GPS receiver knows exactly the position of its antenna, therefore it knows what each satellite range measurement should be. It measures the ranges to each satellite using the received signals just as if it was going to calculate position. The measured ranges are subtracted from the known ranges and the result is range error. The range error values for each satellite are formatted into messages in the RTCM SC104 format and transmitted continuously.

Transmitter

The transmitter is basically a power amplifier which is connected to an antenna system. The modulated carrier is amplified and driven to the antenna. In the United States Coast Guard system, the transmitter is 250-1000 Watts and operates in the 300Khz frequency range. The amplified signal is radiated via the antenna to remote DGPS receivers for real-time position correction.

DESCRIPTION

(Differential GPS Stations)

Information is tabulated in eight columns as follows:

column 1: The number assigned to each DGPS Station by this Agency.

column 2: Name of the DGPS Station

column 3: Approximate latitude and longitude of the DGPS Transmitting Station to the nearest tenth of a minute.

column 4: Station ID which can be found in the IALA Master list. No two stations have the same ID. **T** dentoes the Transmitting Station, **R** denotes the Reference Station.

column 5: Range (approximate) in nautical miles.

column 6: Frequency in kHz.

column 7: Transfer Rate which equates to the baud rate and will be published as a whole number without any additional abbreviations such as “bps” (bits per second)

column 8: Remarks. This column contains information about the reference stations and messages types transmitted. GPS Message Type Numbers are 1, 3, 4, 5, 6, 7, 9, 15 and 16. *(Refer to message type descriptions below)*

GPS MESSAGE TYPE NUMBER INDICATORS

1	Differential GNSS corrections (full set of satellites)
3	Reference stations parameters
4	Datum used
5	Constellation health
6	Null frame (no information)
7	Radiobeacons Almanacs
9	Sub-set differential GNSS corrections
15	Ionospheric corrections
16	Special messages

Section 1

South Coast of England
Including Scilly Isles

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
			ENGLAND-SCILLY ISLES				
4 *A 0002*	**Bishop Rock.**	49° 52.3′ N 6° 26.7′ W	**Fl.(2)W.** period 15s fl. 0.3s, ec. 1.6s fl. 0.3s, ec. 12.8s	144 **44**	**24**	Gray round granite tower; 167. Helicopter platform.	Obscured 211°-233°, 236°-259°. Partially obscured 204°-211°. Distress signals. **Horn:** Mo.(N) ev. 90s.
	RACON		**T(–)**		**18**		Azimuth coverage 254°-215°.
8 *A 0006*	**Peninnis Head.**	49° 54.2′ N 6° 18.2′ W	**Fl.W.** period 20s fl. 0.5s, ec. 19.5s	118 **36**	**17**	White round metal tower, black cupola; 46.	Visible 231°-117°, at distances of less than 5M obscured in places 048°-083°. F.R. lights on radio masts (3) 0.7 to 1.7 miles NE. 2 F.R. (horiz.) on wind generator 1.4 miles NE.
12 *A 0008*	St. Mary′s Pool, pier, head.	49° 55.1′ N 6° 19.0′ W	**Fl.W.R.G.** period 2s	16 **5**	4	Building, white roof; 10.	R. 070°-100°, W.-130°, G.-070°.
16 *A 0018*	**Round Island.**	49° 58.7′ N 6° 19.3′ W	**Fl.W.** period 10s fl. 0.4s, ec. 9.6s	180 **55**	**18**	White round tower; 63.	Visible 021°-288° and between islands. Distress signals. Shown 24 hours. **Nautophone:** 4 bl. ev. 60s.
	RACON		**M(– –)** period 60s		10		
20 *A 0020*	*SEVEN STONES LIGHTFLOAT.*	50° 03.6′ N 6° 04.3′ W	**Fl.(3)W.** period 30s fl. 0.5s, ec. 4.5s fl. 0.5s, ec. 4.5s fl. 0.5s, ec. 19.5s	40 **12**	**25**	Red hull, light tower amidships.	Distress signals. Also shown by day when fog signal is operating. **Nautophone:** 3 bl. ev. 60s.
	RACON		**O(– – –)**		**15**		
			ENGLAND-SOUTH COAST				
24 *A 0028*	**Longships.**	50° 04.0′ N 5° 44.8′ W	**Iso.W.R.** period 10s	115 **35**	W. **16** R. **15** R. 13	Gray round granite tower; 115. Helicopter platform.	R. 189°-327°, W.-189°, R. (unintensified) 208°-307°. Distress signals. Shown 24 hours. **Nautophone:** 1 bl. ev. 10s.
28 *A 0030*	**Wolf Rock.**	49° 56.7′ N 5° 48.4′ W	**Fl.W.** period 15s	112 **34**	**23**	Gray round granite tower, black lantern on gallery; 135. Helicopter platform.	Shown 24 hours. **Nautophone:** 1 bl. ev. 30s (bl. 2.5s, si. 27.5s).
	RACON		**T(–)**		10		
32 *A 0032*	**Tater-du.**	50° 03.1′ N 5° 34.6′ W	**Fl.(3)W.** period 15s fl. 0.2s, ec. 2.3s fl. 0.2s, ec. 2.3s fl. 0.2s, ec. 9.8s	112 **34**	**23**	White round tower; 50.	Visible 241°-074°, obscured elsewhere. **Horn:** 2 bl. ev. 30s.
			F.R.	102 **31**	13		Visible 060°-074°, over Runnelstone and in places 074-077° within 4M.
36 *A 0034*	Mousehole, N. pier, head.	50° 05.0′ N 5° 32.2′ W	**2 F.G.** (vert.)	26 **8** 20 **6**	4	Gray metal column; 10.	F.R. shown when harbor is closed.
40 *A 0038*	Newlyn Harbour, S. pier, head.	50° 06.1′ N 5° 32.5′ W	**Fl.W.** period 5s fl. 1s, ec. 4s	34 **10**	9	White round metal tower, red base; 34.	Visible 253°-336°. **Siren:** 1 bl. ev. 60s.

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
			ENGLAND-SOUTH COAST				
44 *A 0040*	-N. pier, head.	50° 06.1′ N 5° 32.6′ W	**F.W.G.**	13 **4**	2	Red metal post.	G. 238°-248°, W. over the harbor. F.R. shown from inner head. F.R. range lights mark fish market.
46 *A 0045*	The Gear.	50° 06.6′ N 5° 31.6′ W	**Fl.(2)W.** period 10s			ISOLATED DANGER BRB, beacon, topmark.	
	PENZANCE:						
48 *A 0046*	-S. pier, head.	50° 07.1′ N 5° 31.6′ W	**Fl.W.R.** period 5s	37 **11**	W. **17** R. 12	White round tower, black base; 31.	R. (unintensified) 159°-224°, R.-268°, W.-344°30′, R.-shore.
52 *A 0048*	-Albert pier, head.	50° 07.1′ N 5° 31.7′ W	**2 F.G.** (vert.)	36 **11** 30 **9**	2	Gray metal column; 20.	
56 *A 0051*	-Dock entrance, NW. side.	50° 07.0′ N 5° 31.8′ W	**2 F.R.** (vert.)	20 **6**	2	Post; 13.	
60 *A 0056*	Porthleven, on pier, S. side.	50° 04.9′ N 5° 19.1′ W	**F.G.**	33 **10**	4	Green metal column; 20.	Shown only when inner harbor is open to shipping. F.G. (occas.) shown inside harbor 033°-067° when required for vessels entering.
64 *A 0060*	**Lizard Point.**	49° 57.6′ N 5° 12.1′ W	**Fl.W.** period 3s fl. 0.1s, ec. 2.9s	230 **70**	**26**	White octagonal tower; 61.	Visible 250°-120°, partially visible 235°-250°. F.W. may also be seen within 12M. Storm signals. **Horn:** 1 bl. ev. 30s. **DGPS Station.**
	FALMOUTH:						
68 *A 0062*	**-St. Anthony.**	50° 08.5′ N 5° 01.0′ W	**Iso.W.R.** period 15s	72 **22**	W. **16** R. 14	White octagonal tower; 62.	W. 295°-004°, R.-022° over Manacle rocks, W.-172°. **Fog detector light L.Fl.W. 5s 18m 16M (ev. 5 min.), visible 148°45′-151°15′.** Shown 24 hours. **Horn:** 3 bl. ev. 30s.
70	*-Southover Scorpio Lighted Buoy.*	50° 08.3′ N 4° 59.8′ W	**Q.(6)+L.Fl.W.** period 15s			S. CARDINAL YB, pillar, topmark.	
	-RACON		**D(– • •)** period 30s		10		
72 *A 0064*	-E. breakwater, head.	50° 09.3′ N 5° 02.9′ W	**2 F.R.** (vert.)	6 **2**			2 meters apart.
80 *A 0065*	-W. breakwater, head.	50° 09.4′ N 5° 03.2′ W	**Q.W.**	62 **19**	3	Gray mast; 53.	
84 *A 0066*	-Custom House quay, head.	50° 09.1′ N 5° 03.8′ W	**2 F.R.** (vert.)	16 **5**		Gray column; 16.	
88 *A 0068*	-Fish Strand quay.	50° 09.3′ N 5° 04.0′ W	**2 F.R.** (vert.)	16 **5**		Red column, red square daymark; 13.	
92 *A 0069*	-Prince of Wales pier, head.	50° 09.4′ N 5° 04.1′ W	**2 F.R.** (vert.)	21 **6**		White concrete column; 16.	
96 *A 0070*	-Greenbank quay.	50° 09.6′ N 5° 04.4′ W	**Fl.R.** period 2s	21 **6**		Gray column; 16.	
100 *A 0078*	Mevagissey, S. breakwater, head.	50° 16.1′ N 4° 46.9′ W	**Fl.(2)W.** period 10s fl. 1.5s, ec. 2s fl. 1.5s, ec. 5s	30 **9**	12	White metal tower; 27.	**Diaphone:** 1 bl. ev. 30s. Occasional.
102 *A 0080*	Charlestown, N. breakwater, head.	50° 19.8′ N 4° 45.3′ W	**2 F.G.** (vert.)	16 **5**	1		

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
			ENGLAND-SOUTH COAST				
102.5 *A 0080.2*	S. breakwater, head.	50° 19.8′ N 4° 45.3′ W	**2 F.R.** (vert.)	16 **5**	1		
	FOWEY:						
104 *A 0082*	-St. Catherines Point.	50° 19.6′ N 4° 38.8′ W	**L.Fl.W.R.** period 5s fl. 2s, ec. 3s	92 **28**	W. 11 R. 9	White octagonal tower, red lantern; 20.	R. 284°-295°, W.-028°, R.-054°, obscured elsewhere. F.R. on radio mast 13.7 miles NE.
108 *A 0084*	-Whitehouse Point.	50° 20.0′ N 4° 38.2′ W	**Iso.W.R.G.** period 3s	36 **11**	W. 11 R. 8 G. 8	Red metal column; 14.	G. 017°-022°, W.-032°, R.-037°.
112 *A 0086*	- -N. pier, head.	0° 00.0′ 0° 00.0′	**2 F.R.** (vert.)	12 **4**	8	Red column; 8.	
118 *A 0090*	-Spy House Point.	50° 19.8′ N 4° 30.6′ W	**Iso.W.R.** period 6s	98 **30**	7	White concrete pillar; 10.	W. 288°-060°, R.-288°.
	POLPERRO:						
120 *A 0092*	-Tidal basin, W. pier, head.	50° 19.8′ N 4° 30.9′ W	**F.W.**	14 **4**	4	Post; 10.	Shows F.R. when harbor is closed.
124 *A 0093*	-Looe Harbor entrance.	50° 20.5′ N 4° 27.0′ W	**Q.(3)W.** period 10s		2	E. CARDINAL BYB.	
128 *A 0094*	**-Looe.**	50° 21.0′ N 4° 27.0′ W	**Oc.W.R.** period 3s lt. 2s, ec. 1s	26 **8**	W. **15** R. 12	Red metal column; 20.	R. 207°-267°, W.-313°, R.-332°, obsc.-013°.
132 *A 0098*	**-Eddystone.**	50° 10.8′ N 4° 15.9′ W	**Fl.(2)W.** period 10s fl. 0.1s, ec. 2.4s fl. 0.1s, ec. 7.4s	135 **41**	**17**	Gray granite tower, red lantern and gallery; 168. Helicopter platform.	Distress signals. Emergency light 19M. Shown in hours of darkness and reduced visibility. **Horn:** 1 bl. ev. 30s.
			Iso.R. period 10s	93 **28**	8	Window in same tower.	Visible 110°30′-130°30′ over Hand Deeps.
	-RACON		**T(–)** period 30s		10		Frequency coverage 9320-9500 MHz.
137 *A 0110.8*	-Wembury Point.	50° 19.0′ N 4° 06.6′ W	**Oc.Y.** period 10s lt. 7s, ec. 3s	148 **45**			Occasional.
140 *A 0111.2*	-Whidbey.	50° 19.5′ N 4° 07.2′ W	**Oc.(2)W.R.G.** period 10s	95 **29**	W. 8 R. 6 G. 6	Orange and white metal column.	G. 000°-137°30′, W.-139°30′, R.-159°. Auxiliary light Q.Y. Shown 24 hours.
144 *A 0112*	-Maker Point.	50° 20.5′ N 4° 10.8′ W	**Fl.(2)W.R.G.** period 10s fl. 0.5s, ec. 3s fl. 0.5s, ec. 6s	52 **16**	W. 11 R. 6 G. 6	White concrete tower, red stripe; 15.	G. 270°-330°, W.-004°, R.-050°. Auxiliary light Q.Y.
148 *A 0114*	-Plymouth, breakwater, W. head.	50° 20.0′ N 4° 09.5′ W	**Fl.W.R.** period 10s fl. 1s, ec. 9s	63 **19**	W. 12 R. 9	White round granite tower; 76.	W. 262°-208°, R.-262°. F.R. and traffic signals on framework tower on fort 700 meters E. **Horn:** 1 bl. ev. 15s.
			Iso.W. period 4s	39 **12**	10	Window of same tower.	Visible 033°-037°.
150 *A 0114.5*	- -E. head.	50° 20.0′ N 4° 08.2′ W	**L.Fl.W.R.** period 10s fl. 3s, ec. 7s	30 **9**	W. 8 R. 6		R. 001°-018°, W.-190°, R.-353°, W.-001°.
153 *A 0115.5*	-Staddon Point.	50° 20.1′ N 4° 07.4′ W	**Oc.W.R.G.** period 10s	49 **15**	W. 8 R. 5 G. 5	White concrete structure, red bands; 19.	G. 348°-038°, W.-050°, R.-090°. Shown 24 hours.

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
			ENGLAND-SOUTH COAST				
156 *A 0116*	-Bovisand pier.	50° 20.2′ N 4° 07.6′ W	**2 F.G.** (vert.)	56 **17**	3	White metal column.	2 meters apart. Shown 24 hours. Auxiliary light Q.Y. Diving signals.
160 *A 0117*	-Withyhedge.	50° 20.7′ N 4° 07.4′ W	**Dir.W.R.G.**	43 **13**	W. 13 R. 5 G. 5	Column, white triangular daymark point down, orange stripe.	F.G. 060°-065°, Al.W.G.-069°, (W. phase increasing with bearing), F.W.-071°, Al.W.R.-075° (R. phase increasing with bearing), F.R.-080°. Shown 24 hours.
			Fl.(2)Bu. period 5s fl. 0.5s, ec. 1s fl. 0.5s, ec. 3s		10		Visible 120°-160°. Auxiliary light Q.Y.
164 *A 0119*	-Hoe Range, front.	50° 21.6′ N 4° 08.3′ W	**Q.W.R.G.**	16 **5**	W. 10 R. 3 G. 3	White column, orange bands, triangular daymark, point up.	G. 233°-043°, R.-067°, G.-087°, W.-099°, leading sector R. 099°-108°. Fl.W. 5s shown in fog, visible 232°-110°. Auxiliary light Q.Y.
168 *A 0119.1*	--Rear, 396 meters 349° from front.	50° 21.8′ N 4° 08.3′ W	**Oc.G.** period 1.3s lt. 1s, ec. 0.3s	36 **11**	3	Column, orange stripe, white triangular daymark, point down.	Visible 310°-040°. Auxiliary light Q.Y.
172 *A 0122*	-Royal Western Yacht Club.	50° 21.8′ N 4° 08.8′ W	**Dir.W.R.G.**	29 **9**	W. 13 R. 5 G. 5	Orange triangular daymark, point down.	F.G. 309°-311°, Al.W.G.-314°, F.W.-317°, Al.W.R.-320°, F.R.-329°. F.W. shown in fog, visible 315°30′-316°30′. Auxiliary light Q.Y.
176 *A 0124*	-Mount Batten, breakwater, W. head.	50° 21.6′ N 4° 08.1′ W	**2 F.G.** (vert.)	23 **7**	4	Metal column.	F.R. on radio mast on Drake's Island 0.74 mile WSW. 2 F.R. on Civic Center 0.7 mile NNW.
	-Cattewater:						
180 *A 0134*	--Fisher's Nose.	50° 21.8′ N 4° 08.0′ W	**Fl.(3)R.** period 10s	21 **6**	4	Metal column; 12.	
182 *A 0131*	--Queen Anne's Battery Range, front.	50° 21.8′ N 4° 07.8′ W	**F.R.**			Orange and white beacon.	
184 *A 0132*	---Rear, 140 meters 048°30′ from front.	50° 21.9′ N 4° 07.7′ W	**Dir.Oc.W.R.G.** period 7.5s	46 **14**	3	White tower on red-roofed building.	G. 038°-047°12′, W.-049°42′, R.-060°30′.
188 *A 0137*	--Victoria pier, head.	50° 21.8′ N 4° 07.5′ W	**2 F.R.** (vert.)	25 **8**	4	Red metal column; 16.	
192 *A 0136*	--Approach, 102°.	50° 21.7′ N 4° 07.2′ W	**Dir.F.W.R.G.**	90 **27**	8	Red and white column.	G. 090°42′-100°42′, W.-103°12′, R.-113°12′.
196 *A 0138*	--Turnchapel, 128°30′.	50° 21.4′ N 4° 06.9′ W	**Dir.F.W.R.G.**	161 **49**	8	Red and white tower.	G. 117°48′-127°48′, W.-129°12′, R.-139°12′.
200 *A 0140*	--Sparrows quay.	50° 21.7′ N 4° 07.3′ W	**2 F.R.** (vert.)	25 **8**	6	Column.	
201 *A 0141*	--Clovelly Bay Range, front.	50° 21.4′ N 4° 07.4′ W	**F.R.**			Beacon.	
202 *A 0141.1*	---Rear, 198° from front.	50° 21.4′ N 4° 07.4′ W	**F.R.**			Beacon.	
202.5 *A 0126*	--Pontoon.	50° 21.6′ N 4° 07.6′ W	**2 F.G.** (vert.)				At either end of pontoon.
204 *A 0146*	--Baltic wharf.	50° 21.8′ N 4° 08.0′ W	**Fl.R.** period 2s	25 **8**	5		
208 *A 0147*	--Phoenix wharf.	50° 21.8′ N 4° 08.0′ W	**2 F.R.** (vert.)	19 **6**		Green metal column; 10.	

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
			ENGLAND-SOUTH COAST				
209 *A 0148*	--Queen Anne's, breakwater, knuckle.	50° 21.8′ N 4° 07.9′ W	**Oc.G.** period 8s lt. 6s, ec. 2s	16 **5**	2	Silver metal column; 10.	
210 *A 0148.5*	---Head.	50° 21.9′ N 4° 07.9′ W	**Fl.(2)G.** period 5s	16 **5**	2	Silver metal column; 10.	
	-Sutton Harbor:						
216 *A 0152*	--Bayly wharf.	50° 22.0′ N 4° 07.8′ W	**2 F.G.** (vert.)	13 **4**		Concrete building.	
220 *A 0154*	--Whitehouse pier.	50° 22.0′ N 4° 08.0′ W	**2 F.R.** (vert.)	13 **4**	1	Metal column; 10.	2 F.R. (vert.) at both N. and S. ends.
224 *A 0156*	--Sutton wharf, head.	50° 22.1′ N 4° 08.0′ W	**2 F.R.** (vert.)	16 **5**	1	Mast; 10.	
240 *A 0164*	--Root of Mill Bay pier, 048° 30′.	50° 21.7′ N 4° 09.0′ W	**Dir.Q.W.R.G.**	40 **12**	W. 13 R. 8 G. 8	White mast, orange bands, white triangular daymark, point up.	G. 038°30′-045°30′, W.-051°30′, R.-058°30′, G. 315°30′-321°30′, W.-329°30′, R.-335°30′. Auxiliary light Q.Y.
244 *A 0166*	--E. pier, head.	50° 21.7′ N 4° 09.1′ W	**Q.G.**	33 **10**	2	Concrete column; 25.	
245 *A 0166.2*	---N. side.	50° 21.7′ N 4° 09.1′ W	**Oc.G.** period 4s				
246 *A 0166.4*	--Marina, wavescreen, S. head.	50° 21.7′ N 4° 09.1′ W	**Oc.R.** period 4s				
248 *A 0167*	--W. pier, head.	50° 21.7′ N 4° 09.3′ W	**Q.R.**	18 **5**	2	Gray metal column; 18.	
252 *A 0168*	--Trinity pier, head.	50° 21.8′ N 4° 09.2′ W	**2 F.G.** (vert.)	26 **8** 19 **6**	2	Concrete column; 26.	
	-Drake Channel:						
254 *A 0161*	--Eastern King.	50° 21.6′ N 4° 09.3′ W	**Fl.W.** period 5s			On roof of degaussing station.	Shown in fog, visible 259°-062°. Auxiliary light Q.Y.
255 *A 0162*	--Western King, 271°.	50° 21.6′ N 4° 09.7′ W	**Dir.W.R.G.**	46 **14**	W. 13 R. 5 G. 5	Column, white triangular daymark, point down, orange stripe.	F.G. 264°-266°, Al.W.G.-270°, F.W.-272°, Al.W.R.-276°, F.R.-284°. Shown 24 hours. Auxiliary light Q.Y.
	-The Narrows:						
256 *A 0170*	--Ravenness, 225°.	50° 21.1′ N 4° 10.0′ W	**Dir.W.R.G.**	35 **11**	W. 13 R. 5 G. 5	Column, white triangular daymark, point down, orange stripe.	F.G. 217°-221°, Al.W.G.-224°, F.W.-226°, Al.W.R.-229°, F.R.-237°. Shown 24 hours. Fl.(2)W. 15s shown in fog, visible 160°-305°. Auxiliary light Q.Y.
260 *A 0172*	---343°.	50° 21.9′ N 4° 10.3′ W	**Dir.W.R.G.**	24 **7**	W. 13 R. 5 G. 5	White hut, white triangular daymark, point down, orange stripe.	F.G. 331°-338°, Al.W.G.- 342° (white phase increasing with bearing), F.W.-344°, Al.W.R.-348° (red phase increasing with bearing), F.R.-351°. Shown 24 hours. F.W. shown in fog, visible 341°30′-344°30′. Auxiliary light Q.Y.
264 *A 0173*	--The Bridge.	50° 21.0′ N 4° 09.8′ W	**Fl.(2)Bu.** period 5s fl. 0.5s, ec. 1s fl. 0.5s, ec. 3s	16 **5**	3	Column, white triangular daymark, point down, orange stripe.	Visible 140°-210°. Auxiliary light Q.Y.
268 *A 0174*	--Devils Point.	50° 21.6′ N 4° 10.0′ W	**Q.G.**	16 **5**	3	Orange and white column.	Fl.W. 5s shown in fog. Auxiliary light Q.Y.

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
	ENGLAND-SOUTH COAST						
	-Hamoaze:						
272 *A 0176*	--Cremyll Shoal.	50° 21.6′ N 4° 10.3′ W	**Fl.R.** period 4s	16 **5**		White beacon, red top.	Fl.(2)W. 15s shown in fog, visible 097°-338°. Auxiliary light Q.Y.
274 *A 0178*	--Ocean Court, 085°.	50° 21.8′ N 4° 10.0′ W	**Dir.Q.W.R.G.**	49 **15**	W. 11 R. 3 G. 3	White structure, orange triangular daymark, point down; 10.	G. 010°-080°, W.-090°, R.-100°. Fl.W. 5s shown in fog, visible 270°-100°. Auxiliary light Q.Y.
276 *A 0182*	--Mutton Cove, landing stage.	50° 21.9′ N 4° 10.5′ W	**2 F.G.** (vert.)	16 **5**	1	Metal column; 10.	
280 *A 0184*	--Millbrook.	50° 21.3′ N 4° 11.3′ W	**Q.W.G.**	36 **11**	W. 11 G. 3	Column, white triangle daymark, point up, orange stripe.	G. 165°-180°, W.-230°. Auxiliary light Q.Y.
282 *A 0185*	--Sango Point.	50° 21.7′ N 4° 12.3′ W	**Q.W.**	26 **8**	5	Beacon.	Visible 215°289°.
284 *A 0186*	--N. Corner, landing stage, S. head.	50° 22.3′ N 4° 11.0′ W	**2 F.G.** (vert.)	7 **2**	2	Metal column.	
286 *A 0186.2*	---N. head.	50° 22.3′ N 4° 11.0′ W	**2 F.G.** (vert.)				Traffic signals on mast 200 meters NNE.
292 *A 0192*	--Yonderberry Point, on oil jetty.	50° 22.9′ N 4° 11.6′ W	**2 F.R.** (vert.)				
294 *A 0193*	--NW. corner.	50° 23.4′ N 4° 11.5′ W	**Q.W.R.G.**	39 **12**	W. 11 R. 3 G. 3	Column.	W. 340°-355°, R.-025°, G.-055°, W.-110°, R.-140°, W.-230°. Fl.W. 5s shown in fog, visible 310°-220°. Auxiliary light Q.Y.
300 *A 0204*	--Saltash quay.	50° 24.4′ N 4° 12.3′ W	**Fl.R.** period 5s	10 **3**		Concrete column; 10.	Fl.R. 2.5s marks town quay close S.
	SALCOMBE:						
308 *A 0220*	-Sandhill Point, 000°.	50° 13.7′ N 3° 46.6′ W	**Dir.Fl.W.R.G.** period 2s fl. 0.5s, ec. 1.5s	89 **27**	W. 10 R. 7 G. 7	White mast, red and white diamond daymark; 39.	R. 002°30′-182°30′, G.-357°30′, W.-002°30′.
309 *A 0221*	-Blackstone Rock.	50° 13.5′ N 3° 46.4′ W	**Q.(2)G.** period 8s	13 **4**	2	Green and white beacon.	
312 *A 0222*	-Range, front.	50° 14.5′ N 3° 45.2′ W	**Q.W.**	16 **5**	8	Mast.	
316 *A 0222.1*	--Rear, 180 meters 042°30′ from front.	50° 14.6′ N 3° 45.2′ W	**Q.W.**	148 **45**	8	Stone column; 7.	
320 *A 0224*	-Landing stage.	50° 14.1′ N 3° 45.9′ W	**F.R.**	13 **4**	3	White metal column; 10.	
324 *A 0228*	**Start Point.**	50° 13.3′ N 3° 38.5′ W	**Fl.(3)W.** period 10s fl. 0.3s, ec. 1.3s fl. 0.3s, ec. 1.3s fl. 0.3s, ec. 6.5s	203 **62**	**25**	White round granite tower; 92.	Visible 184°-068°. **Nautophone:** 1 bl. ev. 60s.
			F.R.	180 **55**	12	Window in same tower.	Visible 210°-255°.
	DARTMOUTH:						
328 *A 0236*	-Kingswear.	50° 20.8′ N 3° 34.0′ W	**Iso.W.R.G.** period 3s	30 **9**	8	White round tower.	G. 318°-325°, W.-331°, R.-340°.
332 *A 0242*	-Marina, S. head.	50° 21.4′ N 3° 34.5′ W	**2 F.R.** (vert.)				
336 *A 0237*	-Kettle Point.	50° 20.6′ N 3° 33.7′ W	**F.W.**	18 **5**	9	Red lantern.	Visible 102°-107°.

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
			ENGLAND-SOUTH COAST				
340 *A 0238*	-Bayards Cove.	50° 20.8′ N 3° 34.6′ W	**Fl.W.R.G.** period 2s fl. 0.5s, ec. 1.5s	18 **5**	6	White stripe on rock.	G. 280°-289°, W.-297°, R.-shore.
344 *A 0244*	**Berry Head.**	50° 24.0′ N 3° 28.9′ W	**Fl.(2)W.** period 15s fl. 0.3s, ec. 2.5s fl. 0.3s, ec. 11.9s	191 **58**	14	White tower; 15.	Visible 100°-023°. Signal station.
	TORBAY:						
348 *A 0246*	-Brixham, breakwater, head.	50° 24.3′ N 3° 30.7′ W	**Oc.R.** period 15s lt. 12s, ec. 3s	30 **9**	6	White tower; 21.	
357 *A 0247.4*	--Prince William Marina, Wave Screen, SW. head.	50° 23.9′ N 3° 30.5′ W	**2 Fl.R.** (vert.) period 5s	13 **4**	2	Mast; 13.	2 meters apart.
358 *A 0247.6*	---E. head.	50° 24.0′ N 3° 30.5′ W	**2 Fl.G.** (vert.) period 5s	13 **4**	2	Mast; 13.	2 meters apart.
360 *A 0248*	--New Pier, head.	50° 23.8′ N 3° 30.6′ W	**Q.G.**	20 **6**	3	White metal structure; 3.	
362 *A 0248.5*	--Eastern Pier, head.	50° 23.9′ N 3° 30.6′ W	**Q.W.**				
364 *A 0249*	--Fish Market Pier, head, SW. corner.	50° 23.9′ N 3° 30.6′ W	**2 F.G.** (vert.)	16 **5**	1	On building.	2 meters apart.
368 *A 0249.2*	---NW. corner.	50° 23.9′ N 3° 30.6′ W	**2 F.G.** (vert.)	16 **5**	1	On building.	2 meters apart.
372 *A 0249.5*	--Slipway.	50° 23.9′ N 3° 30.7′ W	**2 F.G.** (vert.)				
376 *A 0250*	-Paignton Harbour, E. quay, head.	50° 25.9′ N 3° 33.3′ W	**Q.R.**	24 **7**	3	Red metal column; 18.	
	-Torquay:						
380 *A 0254*	--Haldon pier, head.	50° 27.4′ N 3° 31.7′ W	**Q.G.**	29 **9**	6	Metal column; 23.	
384 *A 0256*	--Inner harbor pier, head.	50° 27.5′ N 3° 31.5′ W	**2 F.G.** (vert.)	19 **6**	5	Metal column; 16.	
388 *A 0252*	--Princess Pier, head.	50° 27.4′ N 3° 31.7′ W	**Q.R.**	29 **9**	6	Metal column; 23.	
	TEIGNMOUTH:						
392 *A 0262*	-The Den.	50° 32.5′ N 3° 29.7′ W	**F.R.**	33 **10**	6	Gray round stone tower; 20.	Visible 225°-135°. F.Bu. range lights, 021°, are shown at New Quay to assist pilots.
396 *A 0262.1*	--Powderham Terrace.	50° 32.5′ N 3° 29.7′ W	**F.R.**	36 **11**	3	Black column; 20.	
400 *A 0263*	--Phillip Lucette Beacon.	50° 32.3′ N 3° 29.9′ W	**Oc.R.** period 6s	13 **4**	3	White stone column.	
402 *A 0263.5*	-Den Point, SW. head.	50° 32.4′ N 3° 30.0′ W	**Oc.G., F.G.** period 6s		3	Green beacon.	
	EXMOUTH:						
408 *A 0274*	-Custom House Range, front.	50° 36.9′ N 3° 25.3′ W	**Iso.W.** period 2s	21 **6**	7	White metal column; 8.	Difficult to distinguish by day.
412 *A 0274.1*	--Rear, 57 meters 305° from front.	50° 36.9′ N 3° 25.3′ W	**Q.W.**	39 **12**	7	Black mast; 33.	

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
			ENGLAND-SOUTH COAST				
416 *A 0270*	-Straight Point.	50° 36.5′ N 3° 21.7′ W	**Fl.R.** period 10s fl. 1s, ec. 9s	112 **34**	7	Metal mast; 24.	Visible 246°-071°. F.R. lights on radio mast 15.4 miles NE.
418 *A 0278*	Sidmouth.	50° 40.5′ N 3° 14.4′ W	**Fl.R.** period 5s	16 **5**	2		Visible 230°-100°.
420 *A 0280*	Beer, near church.	50° 42.0′ N 3° 05.0′ W	**F.W.**	86 **26**		Metal column; 18.	
424 *A 0284*	Lyme Regis Range, front.	50° 43.0′ N 2° 56.0′ W	**Oc.W.R.** period 8s lt. 6s, ec. 2s	20 **6**	W. 9 R. 7	Metal column; 18.	R. 296°-116°, W.-296°.
428 *A 0284.1*	-Rear, old customhouse, 240 meters 296° from front.	50° 43.2′ N 2° 56.3′ W	**F.G.**	26 **8**	9	On building.	
432 *A 0288*	Bridport, E. pier, head.	50° 42.5′ N 2° 45.7′ W	**F.G.**	10 **3**	2	On pier capping.	Occasional.
436 *A 0290*	-W. pier, head.	50° 42.5′ N 2° 45.8′ W	**F.R.**	10 **3**	2	On pier capping.	Occasional.
440 *A 0290.2*	-W. pier, root.	50° 42.6′ N 2° 45.8′ W	**Iso.R.** period 2s	29 **9**	5	Harbormaster's office.	
	PORTLAND:						
448 *A 0294*	**-Bill of Portland.**	50° 30.8′ N 2° 27.3′ W	**Fl.(4)W.** period 20s fl. 0.1s, ec. 1.4s fl. 0.1s, ec. 1.4s fl. 0.1s, ec. 1.4s fl. 0.1s, ec. 15.4s	141 **43**	**25**	White round tower, red band; 136.	Visible 221°-141°. Gradually changes from 1 flash to 4 flashes 221°-244°, 4 flashes-117°, gradually changes from 4 flashes to 1 flash-141°, obscured elsewhere. **Diaphone:** 1 bl. ev. 30s.
			F.R.	63 **19**	13	Window in same tower.	Visible 271°-291° over The Shambles.
	-Outer Breakwater:						
452 *A 0302*	--S. Ship Channel, breakwater, SW. head.	50° 34.1′ N 2° 25.1′ W	**Oc.R.** period 30s	39 **12**	5	Framework tower on concrete hut; 26.	F.R. on towers 2.8 miles NW. and 0.68 mile WSW.
456 *A 0310*	--E. Ship Channel, NW. part of fort.	50° 35.1′ N 2° 24.8′ W	**Q.R.**	46 **14**	5	Metal framework tower; 7.	Visible 013°-268°.
	-Portland (NE. Breakwater):						
464 *A 0314*	--″A", S. head.	50° 35.1′ N 2° 25.0′ W	**Fl.W.** period 10s fl. 0.4s, ec. 9.6s	71 **22**	**20**	White metal tower; 71.	
468 *A 0320*	--NW. end (″B" head) N. Channel.	50° 35.6′ N 2° 25.8′ W	**Oc.R.** period 15s	36 **11**	5	Gray metal column; 7.	
472 *A 0322*	--N. arm, ″C", SE. head.	50° 35.7′ N 2° 25.9′ W	**Oc.G.** period 10s	35 **11**	5	Gray metal column; 7.	
476 *A 0323*	--Torpedo pier, head.	50° 35.9′ N 2° 26.8′ W	**Fl.G.** period 5s	24 **7**	2	Pedestal.	Obscured when bearing less than 290°.
	--Portland (Q. Pier):						
480 *A 0334*	---Elbow.	50° 34.3′ N 2° 26.3′ W	**Fl.R.** period 2s	19 **6**	2	Metal framework structure; 10.	
484 *A 0332*	---S. corner, head.	50° 34.3′ N 2° 26.2′ W	**Fl.G.** period 5s fl. 1s, ec. 4s	16 **5**	5	Metal framework structure; 10.	
488 *A 0330*	---N. corner, head.	50° 34.3′ N 2° 26.2′ W	**Fl.R.** period 5s fl. 1s, ec. 4s	18 **5**	5	Metal framework structure; 10.	
492 *A 0327*	-Coaling pier, catwalk, head.	50° 34.3′ N 2° 25.8′ W	**V.Q.(3)W.** period 5s		2	Dolphin.	F.R. lights mark catwalk.

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
			ENGLAND-SOUTH COAST				
496 *A 0327.5*	-Deep water berth, E. head.	50° 34.3′ N 2° 25.9′ W	**2 F.R.** (vert.)	16 **5**	2	Metal column.	
500 *A 0327.6*	- -W. head.	50° 34.2′ N 2° 26.0′ W	**2 F.R.** (vert.)	16 **5**	2	Metal column.	
504 *A 0326*	-Camber pier, E. arm.	50° 34.1′ N 2° 25.9′ W	**2 F.R.** (vert.)	14 **4**	2	Metal column; 7.	
508 *A 0326.2*	-N. arm.	50° 34.1′ N 2° 25.9′ W	**2 F.R.** (vert.)	14 **4**	2	Metal column; 7.	
512 *A 0326.5*	-Loading jetty, N. head.	50° 34.1′ N 2° 26.0′ W	**Q.W.**	13 **4**	2	Metal column.	
515 *A 0326.7*	-Port, S. of Oiling jetty.	50° 34.0′ N 2° 25.9′ W	**Dir.Oc.W.R.G.** period 10s		5	Roof section of white building.	G. 203°-209°, W.-211°, R.-217°.
520 *A 0339*	-New Channel.	50° 34.9′ N 2° 27.6′ W	**L.Fl.W.** period 10s fl. 2s, ec. 8s	10 **3**	5	Metal pile, white square daymark.	
524 *A 0340*	-Wellworthy.	50° 35.2′ N 2° 27.7′ W	**Fl.(4)W.** period 10s fl. 0.5s, ec. 1s fl. 0.5s, ec. 1s fl. 0.5s, ec. 1s fl. 0.5s, ec. 5s	10 **3**	5	White square daymark, beacon.	
528 *A 0354*	-N. pier, head.	50° 36.5′ N 2° 26.6′ W	**2 F.G.** (vert.)	29 **9**	6	Green column.	**Bell:** occasional
532 *A 0348*	-Ballast Quay Range, front.	50° 36.4′ N 2° 26.8′ W	**F.R.**	16 **5**	4	White post, red diamond daymark; 10.	
536 *A 0348.1*	- -Rear, 17 meters 239°45′ from front.	50° 36.4′ N 2° 26.8′ W	**F.R.**	22 **7**	4	White post, red diamond daymark; 16.	
	WEYMOUTH HARBOUR:						
540 *A 0346*	-S. stone pier, head.	50° 36.5′ N 2° 26.4′ W	**Q.W.**	33 **10**	9	White mast on gray iron platform; 25.	Traffic signals shown 190 meters SW.
544 *A 0496*	**Anvil Point.**	50° 35.5′ N 1° 57.6′ W	**Fl.W.** period 10s fl. 0.2s, ec. 9.8s	149 **45**	**19**	White tower; 39.	Visible 237°-076°. Shown 24 hours.
548 *A 0498*	Swanage, pier, head.	50° 36.5′ N 1° 56.9′ W	**2 F.R.** (vert.)	20 **6**	3	Mast; 10.	
	POOLE:						
560 *A 500*	-Training Bank.	50° 39.8′ N 1° 55.8′ W	**2 F.R.** (vert.)			PORT (A) R, beacon, topmark.	
564 *A 0508*	-Bullpit.	50° 41.7′ N 1° 56.6′ W	**Q.(9)W.** period 15s	23 **7**	4	W. CARDINAL YBY, tower beacon, topmark.	
572 *A 0506*	-N. Haven Point.	50° 41.1′ N 1° 57.1′ W	**Q.(9)W.** period 15s	15 **5**		W. CARDINAL YBY, tower beacon, topmark.	2 F.G. (vert.) light shown on either side of ramp at Sandbanks ferry landing. 2 F.R. (vert.) light shown on either side of ramp at South Haven Point ferry landing.
573 *A 0520.6*	-Furzey Island. Slipway Range, front	50° 40.9′ N 1° 58.9′ W	**Fl.Y.** period 2s				Fl.G. 5s on 3 mooring dolphins 60 meters SE.
574 *A 0520.61*	- -Rear, 35 meters 305° from front	50° 40.9′ N 1° 58.9′ W	**Fl.Y.** period 2s				
576 *A 0521*	Bournemouth, pier, head.	50° 42.8′ N 1° 52.4′ W	**2 F.R.** (vert.)	28 **9** 22 **7**	1	White post; 13.	**Bell:** rung to assist berthing of vessels. **Horn:** 2 bl. in quick succession ev. 2 min. when a vessel is expected.

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
			ENGLAND-SOUTH COAST				
580 *A 0522*	Boscombe, pier, head.	50° 43.1′ N 1° 50.5′ W	**2 F.R.** (vert.)	24 **7**	1	Red post; 10.	
	NEEDLES CHANNEL:						
584 *A 0528*	**-Needles.**	50° 39.7′ N 1° 35.4′ W	**Oc.(2)W.R.G.** period 20s lt. 2s, ec. 2s lt. 14s, ec. 2s	80 **24**	W. **17** R. 14 G. 14	Round granite tower, red band, red lantern; 102. Helicopter platform.	R. shore-300°, W.-083°, R. (unintensified)-212°, W.-217°, G.-224°. **Horn:** 2 bl. ev. 30s.
585	*-Bridge Buoy.*	50° 39.6′ N 1° 36.8′ W	**V.Q.(9)W.** period 10s			W. CARDINAL YBY, pillar, topmark.	
	-RACON		**T(–)** period 30s		10		
588 *A 0534*	-Totland Bay, on pier.	50° 41.0′ N 1° 32.7′ W	**2 F.G.** (vert.)	20 **6**	2		
596 *A 0538.1*	-Hurst Point.	50° 42.4′ N 1° 33.1′ W	**Fl.(4)W.R.** period 15s	76 **23**	W. 13 R. 11	White round tower; 85.	W. 080°-104°, W. (intensified) 234°-244°, R.-250°, W. (intensified)-053°.
			Dir.Iso.W.R.G. period 4s	62 **19**	W. **21** R. **18** G. **17**		G. 038°36′-040°36′, W.-041°36′, R.-043°36′.
600 *A 0542*	-Lymington, outer edge of river wall Range, front.	50° 45.2′ N 1° 31.6′ W	**F.R.**	39 **12**	8	Metal structure; 36.	Visible 309°30′-329°30′.
604 *A 0542.1*	--Rear, 363 meters 319°30′ from front.	50° 45.3′ N 1° 31.8′ W	**F.R.**	56 **17**	8	Metal structure; 56.	Visible 309°30′-329°30′. Several lights mark banks of river.
606 *A 0541*	-Jack in the Basket.	50° 44.3′ N 1° 30.5′ W	**Fl.R.** period 2s fl. 0.4s, ec. 1.6s	30 **9**		Red ball and rectangle daymark on pile; 39.	
607 *A 0544*	-Lymington River Beacon No. ″1″.	50° 44.4′ N 1° 30.4′ W	**Fl.G.** period 2s fl. 0.4s, ec. 1.6s	7 **2**	3	STARBOARD (A) G, pile, topmark; 20.	
608 *A 0543*	--Cross Boom, Beacon No. ″2″.	50° 44.4′ N 1° 30.5′ W	**Fl.R.** period 2s fl. 0.4s, ec. 1.6s	13 **4**	3	PORT (A) R, pile, topmark; 26.	
612 *A 0552*	-Obstruction, S. head.	50° 45.4′ N 1° 27.0′ W	**Q.R.**			Dolphin.	
616 *A 0554*	-Beaulieu Spit, E. head.	50° 46.8′ N 1° 21.7′ W	**Fl.R.** period 5s		3	Red dolphin, white band.	Visible 277°-037°. Entrance channel beacons 5, 9, and 19 Fl.G. 4s, 12 and 20 Fl.R. 4s.
620 *A 0554.5*	-Beaulieu River, Bucklers Hard Marina.	50° 48.0′ N 1° 25.3′ W	**2 F.R.** (vert.)				2 F.R. (vert.) on head of pontoons "A", "C" & "E". Fl.G. 4s on beacon No. "21" 75 meters NE.
	-Isle of Wight:						
624 *A 0555*	--Victoria pier, head.	50° 42.4′ N 1° 31.3′ W	**2 F.G.** (vert.)		4	Column.	2 meters apart.
	--Yarmouth:						
628 *A 0562*	---Range, front.	50° 42.3′ N 1° 30.0′ W	**F.G.**	16 **5**	2	White metal post, white diamond daymark, black band.	
632 *A 0562.1*	----Rear, about 63 meters 187°34′ from front.	50° 42.3′ N 1° 30.0′ W	**F.G.**	30 **9**	2	White post, white diamond daymark, black band; 16.	
636 *A 0558*	---Pier, head.	50° 42.5′ N 1° 29.9′ W	**2 F.R.** (vert.)		2	Green metal column.	A high intensity F.W. light (occasional) also shown.
640 *A 0560*	---Jetty, head.	50° 42.4′ N 1° 29.9′ W	**2 F.R.**	13 **4**	2	White wooden post.	Second F.R. shows harbor full. F.Y. shown in fog.

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			ENGLAND-SOUTH COAST				
641 *A 0560.5*	---On dolphin.	50° 42.4′ N 1° 30.0′ W	**Q.G.**		3		Visible 175°-060°.
658	-*W. Bramble Lighted Buoy.*	50° 47.2′ N 1° 18.6′ W	**V.Q.(9)W.** period 10s			W. CARDINAL YBY, pillar, topmark.	**Bell:** 1 stroke ev. 15s.
	-RACON		**T(–)** period 45s		3		
660 *A 0576*	-*CALSHOT SPIT LIGHT FLOAT.*	50° 48.3′ N 1° 17.5′ W	**Fl.W.** period 5s fl. 1s, ec. 4s	40 **12**	11	Red hull, light tower amidships, name on sides.	**Horn:** 2 bl. ev. 60s.
	SOUTHAMPTON WATER:						
664 *A 0577*	-Outfall.	50° 48.2′ N 1° 18.7′ W	**Iso.R.** period 10s	21 **6**	5	Metal column on square concrete column.	**Horn:** 1 bl. ev. 20s. **Radar reflector.**
			4 F.R.	13 **4**	1		1 on each corner.
	-River Hamble:						
680 *A 0590.26*	--No. ″6″.	50° 50.6′ N 1° 18.7′ W	**Q.R.**	7 **2**	2		**Radar reflector.**
685 *A 590.110*	--Hamble Common, 352°.	50° 51.0′ N 1° 18.8′ W	**Dir.Oc.(2)W.R.G.** period 12s	16 **5**	4	Gray metal pole.	G. 349°-351°, W.-353°, R.-355°.
688 *A 0590.14*	--No. ″1″.	50° 50.3′ N 1° 18.6′ W	**Q.G.**	7 **2**	2	STARBOARD (A) G, beacon, topmark.	**Radar reflector.**
692 *A 0590.16*	--No. ″2″.	50° 50.4′ N 1° 18.7′ W	**Q.(3)W.** period 10s	7 **2**	2	E. CARDINAL BYB, beacon, topmark.	**Radar reflector.**
696 *A 0590.2*	--Warsash Shore.	50° 51.0′ N 1° 18.3′ W	**Q.G.**			Beacon.	Visible 010°-040°.
698 *A 0590.22*	--Sailing Club, 028°.	50° 51.1′ N 1° 18.3′ W	**Dir.Iso.W.R.G.** period 6s	16 **5**	4	Gray metal pole.	G. 025°-027°, W.-029°, R.-031°.
712 *A 0590.42*	--Warsash Pier, head, SW. corner.	50° 50.9′ N 1° 18.4′ W	**2 F.G.** (vert.)				1 meter apart. 2 F.G. (vert.) mark upstream end of pontoon.
728 *A 0594*	-BP Hamble Jetty.	50° 50.8′ N 1° 19.4′ W	**2 F.G.** (vert.)	16 **5**	2	Gray posts on dolphins; 4.	2 meters apart.
732 *A 0596*	-Prohibited Anchorage, 032° 49′.	50° 51.3′ N 1° 19.7′ W	**Dir.F.Y.**				Uses moire pattern to indicate center line.
740 *A 0586*	-Fawley Pier, SE. head, Esso Terminal.	50° 50.0′ N 1° 19.3′ W	**2 F.R.** (vert.)	30 **9**	10		2 meters apart. F.R. on chimneys 1.5 miles WSW.
740.5 *A 0587*	--Esso Marine Terminal, Range, front.	50° 50.3′ N 1° 19.8′ W	**F.G.**				Visible 305°-335°. Indicates centerline of dredged channel.
740.7 *A 0587.1*	---Rear, 490 meters 320° from front.	50° 50.5′ N 1° 20.0′ W	**F.G.**				Visible 305°-335°.
741 *A 0588*	--Off NW. head.	50° 50.6′ N 1° 20.1′ W	**2 F.R.** (vert.)			Dolphin.	
744 *A 0581.9*	-Inshore Range, front.	50° 51.3′ N 1° 20.2′ W	**Fl.W.** period 2s	45 **14**	3	Metal beacon, yellow triangular daymark, point up, red border.	
748 *A 0582*	--Common rear, about 981 meters 326°07′ from Inshore, front, 327°25′ from Offshore, front.	50° 51.7′ N 1° 20.7′ W	**L.Fl.Y.** period 6s fl. 2s, ec. 4s	55 **17**	5	Metal beacon, yellow diamond daymark, red border.	
752 *A 0582.1*	---Offshore Range, front.	50° 51.3′ N 1° 20.2′ W	**Fl.W.** period 2s	45 **14**	3	Metal beacon, yellow round daymark, red border.	

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			ENGLAND-SOUTH COAST				
756 *A 0599*	-Coastal Forces Base, Admiralty jetty, off head.	50° 52.2′ N 1° 23.1′ W	**2 F.R.** (vert.)			Dolphin.	2 F.R. (vert.) on dolphin 30 meters ENE.
760 *A 0601*	-Hythe, pier, head.	50° 52.5′ N 1° 23.5′ W	**2 F.R.** (vert.)	39 **12**	5	Mast; 30.	2 meters apart. Tide gauge.
	SOUTHAMPTON:						
	-River Itchen:						
768 *A 0602*	--Queen Elizabeth II Terminal, S. head.	50° 53.0′ N 1° 23.6′ W	**4 F.G.** (vert.)	53 **16**	3	Framework mast; 53.	2 meters apart.
772 *A 0604*	--E. side No. ″1″.	50° 53.1′ N 1° 23.3′ W	**Q.G.**			STARBOARD (A) G, dolphin, topmark.	
776 *A 0605.5*	---No. ″3″.	50° 53.5′ N 1° 23.2′ W	**Fl.G.** period 7s			STARBOARD (A) G, dolphin, topmark.	
780 *A 0605*	--No. ″2″, about 251 meters 099° from N. head of Empress Dock.	50° 53.2′ N 1° 23.3′ W	**Fl.G.** period 5s		2	STARBOARD (A) G, beacon, topmark.	
784 *A 0612*	--Empress Dock entrance, N. side.	50° 53.3′ N 1° 23.5′ W	**2 F.G.** (vert.)	26 **8**	3	Gray metal structure, yellow triangular daymark, point up; 20.	Visible 246°-000°.
788 *A 0612.2*	-RoRo Terminal S.	50° 53.4′ N 1° 23.4′ W	**2 F.R.** (vert.)				2 meters apart.
792 *A 0612.4*	--N.	50° 53.5′ N 1° 23.4′ W	**2 F.R.** (vert.)				2 meters apart.
800 *A 0614*	--Beacon No. ″4″, E. side of river.	50° 53.6′ N 1° 23.1′ W	**Q.G.**	13 **4**	2	White pile, black base, green triangular daymark, point up.	**Radar reflector.**
804 *A 0618*	--Bridge center.	50° 53.9′ N 1° 23.0′ W	**F.W.**			On bridge span.	Visible up and down river to mark main channel.
808 *A 0618.2*	--W. pier.	50° 53.9′ N 1° 23.1′ W	**2 F.R.** (vert.)		2		2 meters apart on N. and S. sides of bridge.
812 *A 0618.4*	--E. pier.	50° 53.9′ N 1° 22.9′ W	**2 F.G.** (vert.)		2		2 meters apart on N. and S. sides of bridge.
816 *A 0620.5*	--Crosshouse beacon.	50° 54.0′ N 1° 23.1′ W	**Oc.R.** period 5s	16 **5**	2	PORT (A) R, pile, topmark.	Marks power cable. Private light.
820 *A 0620.7*	--Chapel beacon.	50° 54.1′ N 1° 23.1′ W	**Fl.G.** period 3s	16 **5**	3	STARBOARD (A) G, topmark.	2 F.R. (vert.) on beacons “A” and “C” 80 meters W.
828 *A 0621*	--Northam, oil jetty, head.	50° 54.5′ N 1° 22.6′ W	**2 F.R.** (vert.)	13 **4** 7 **2**		Metal column.	
832 *A 0621.2*	--Millstone Point, jetty, head.	50° 54.6′ N 1° 22.5′ W	**2 F.R.** (vert.)	23 **7** 16 **5**			2 F.R. (vert.) also mark N. end. F.R. marks tower on head of jetty.
844 *A 0626*	--Town Quay Range, front.	50° 53.5′ N 1° 24.2′ W	**F.Y.**	40 **12**	3	White framework beacon, white triangular daymark, point up, green border.	Neon triangle.
			2 F.G. (vert.)				
848	---Royal Pier, rear, 410 meters 329° from front.	50° 53.7′ N 1° 24.4′ W	**F.Y.**	72 **22**	2	Metal framework beacon, white diamond daymark, red border; 75.	Neon diamond shown when required.
852 *A 0628*	--Royal Pier, E. pier, head.	50° 53.6′ N 1° 24.4′ W	**2 F.G.** (vert.)	26 **8**	2	Metal column; 26.	
854 *A 0628.6*	--Ferry Terminal, outer pontoon, head.	50° 53.7′ N 1° 24.3′ W	**2 F.G.** (vert.)				

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
			ENGLAND-SOUTH COAST				
856 *A 0629*	--Middle Swinging Ground Range, front.	50° 54.0′ N 1° 24.9′ W	**Oc.G.** period 6s lt. 4s, ec. 2s	85 **26**		Red mast, black and yellow bands, black triangular topmark, point up, with white band, on roof of shed.	
860 *A 0629.1*	---Rear, 195 meters 336° from front.	50° 54.1′ N 1° 25.0′ W	**Oc.G.** period 6s lt. 4s, ec. 2s	85 **26**		Yellow cross on roof of mill, black square daymark.	
864 *A 0630*	--Pumping station Range, front.	50° 53.9′ N 1° 24.6′ W	**Fl.G.** period 1.5s	79 **24**		Red mast, yellow and black bands, triangular topmark point up, white bands.	
868 *A 0630.1*	---Rear, 110 meters 069°30′ from front.	50° 53.9′ N 1° 24.5′ W	**Fl.G.** period 1.5s	82 **25**		Red mast, yellow and black bands, black ″X"" daymark, white band.	
872 *A 0632*	--Marchwood Military Port, jetty, head.	50° 53.8′ N 1° 25.2′ W	**2 F.R.** (vert.)				
873 *A 0632.2*	---Jetty, head.	50° 53.6′ N 1° 25.1′ W	**2 F.R.** (vert.)				
874 *A 0632.3*	---Jetty, head.	50° 53.5′ N 1° 25.1′ W	**2 F.R.** (vert.)				
884 *A 0633*	--Husband′s jetty.	50° 53.8′ N 1° 25.5′ W	**2 F.R.** (vert.)	31 **9**	2	Dolphin.	2 meters apart.
888 *A 0637*	--Upper Swinging Ground Range, front.	50° 54.5′ N 1° 26.2′ W	**F.G.**	72 **22**		Yellow mast, black and red bands, black triangular daymark, point down, white bands.	
892 *A 0637.1*	---Rear, 70 meters 011° from front.	50° 54.5′ N 1° 26.2′ W	**F.G.**	75 **23**		Yellow mast, black and red bands, black ″X"" daymark, white stripes.	
896 *A 0640*	--Container berths, SE. corner.	50° 54.2′ N 1° 26.7′ W	**4 F.G.** (vert.)				
900 *A 0642*	--Bury ground Range, front, ″A".	50° 54.5′ N 1° 28.3′ W	**Q.W.**	56 **17**		Gray framework tower, orange triangular daymark, point up.	Visible 277°-297°. Occasional.
904 *A 0642.1*	---Rear, B, 329 meters 287°07′ from front.	50° 54.5′ N 1° 28.5′ W	**Q.W.**	66 **20**		Gray framework tower, orange diamond.	Visible 277°-297°. Occasional.
908 *A 0644*	--Bury Swinging Ground ″D".	50° 54.1′ N 1° 27.7′ W	**F.R.G.**	92 **28**		Framework tower, green, white, red banded rectangular daymark.	R. 147°-197°, G.-247°. Occasional.
			Q.W.	82 **25**			Visible 191°-203°.
912 *A 0645*	--Transit beacon ″A".	50° 54.5′ N 1° 27.7′ W	**F.R.**			Framework tower, red triangular daymark, point up; 33.	
916 *A 0646*	--Transit beacon ″B".	50° 54.5′ N 1° 27.7′ W	**F.R.**			Framework tower, red diamond daymark; 39.	
	THE SOLENT:						
920 *A 0680*	-Fort Gilkicker.	50° 46.4′ N 1° 08.4′ W	**Oc.G.** period 10s lt. 7s, ec. 3s		7	Signal mast.	Storm and traffic signals. Signal station.
	-Isle of Wight:						
924 *A 0654*	--Cowes, breakwater, head.	50° 45.8′ N 1° 17.4′ W	**Fl.R.** period 3s		3		
928 *A 0658*	---Trinity Wharf, N. arm.	50° 45.5′ N 1° 17.4′ W	**2 F.R.** (vert.)	7 **2**		Metal post on dolphin.	
932 *A 0658.5*	---Jetty, NE. corner.	50° 45.4′ N 1° 17.4′ W	**2 F.G.** (vert.)	19 **6**			2 meters apart. 2 F.G. (vert.) on pontoon close N.

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
			ENGLAND-SOUTH COAST				
936 *A 0652*	--Leading Range, front.	50° 45.9′ N 1° 17.8′ W	**Iso.W.** period 2s	10 **3**	6	Post.	
940 *A 0652.1*	---Rear, 290 meters 164° from front.	50° 45.7′ N 1° 17.7′ W	**Iso.R.** period 2s	16 **5**	3	Dolphin.	Visible 120°-240°.
942 *A 0664*	--Wootton.	50° 44.5′ N 1° 12.0′ W	**Q.W.**		1	N. CARDINAL BY, beacon, topmark.	Channel marked by lights.
942.1 *A 0665.8*	---	50° 44.0′ N 1° 12.8′ W	**Oc.W.R.G.** period 10s lt. 8s, ec. 2s				G. 220°48′-224°18′, W.-225°48′, R.-230°48′.
943 *A 0762*	--Bembridge Harbor.	50° 42.4′ N 1° 04.9′ W	**Fl.Y.** period 2s		1	SPECIAL Y, pile, topmark.	Tide gauge.
944 *A 0760*	--St. Helen's Fort.	50° 42.3′ N 1° 05.0′ W	**Fl.(3)W.** period 10s fl. 0.5s, ec. 1s fl. 0.5s, ec. 1s fl. 0.5s, ec. 6.5s	53 **16**	8	Large round stone structure.	
	PORTSMOUTH:						
948 *A 0688*	-Spit Sand Fort, N. side.	50° 46.2′ N 1° 05.8′ W	**Fl.R.** period 5s fl. 0.7s, ec. 4.3s	59 **18**	7	Large round stone structure.	
952 *A 0686*	-South Parade pier.	50° 46.6′ N 1° 04.5′ W	**2 F.G.** (vert.)	16 **5**	1	Posts; 10.	One at each corner of pierhead.
956 *A 0691*	--Southsea Castle, N. corner.	50° 46.7′ N 1° 05.3′ W	**Iso.W.** period 2s	52 **16**	11	White stone tower, black bands; 33.	Visible 337°-071°.
	---001°30′.		**Dir.W.R.G.**	36 **11**	W. 13 R. 5 G. 5	Same structure.	F.G. 351°30′-357°30′, Al.W.G.-000°, W. phase increases with bearing, F.W.-003°, Al.W.R.-005°30′, R. phase increases with with bearing, F.R.-011°30′. Shown 24 hours.
960 *A 0692.5*	-Fort Blockhouse, Dir. Lt. 320°.	50° 47.3′ N 1° 06.6′ W	**Dir.W.R.G.**	19 **6**	W. 13 R. 5 G. 5	Base of mast.	Oc.G. 310°-316°, Al.W.G.-318°30′, W. phase increasing with bearing, Oc.W.-321°30′, Al.W.R.-324°, R. phase increasing with bearing, Oc.R.-330°. Shown 24 hours. 2 F.R. (vert.) 20 meters E.
964 *A 0696*	--Victoria, pier, head.	50° 47.3′ N 1° 06.3′ W	**2 F.G.** (vert.)	16 **5**		Metal columns.	Traffic signal one at each corner. Four F.R. lights near Clarence Monument.
968 *A 0698*	--Off Victoria pile.	50° 47.3′ N 1° 06.4′ W	**Oc.G.** period 15s		1	Green pile.	
972 *A 0700*	--The Point.	50° 47.5′ N 1° 06.5′ W	**Q.G.**		2	Pile; 16.	
974 *A 0701*	---Car Ferry Terminal.	50° 47.5′ N 1° 06.4′ W	**2 F.R.** (vert.)				
980 *A 0704*	--Railway Landing, Stage, S. head.	50° 47.7′ N 1° 06.5′ W	**2 F.G.** (vert.)	16 **5**	3	Post; 7.	
984 *A 0705*	--Common Hard, outer head.	50° 47.8′ N 1° 06.5′ W	**Fl.G.** period 5s	3 **1**		Wooden tripod.	
988 *A 0707.4*	--Fountain Lake jetty, W. head.	50° 48.6′ N 1° 06.1′ W	**2 F.G.** (vert.)				
992 *A 0720*	--Priddy′s Hard, Powder jetty, head.	50° 48.6′ N 1° 07.4′ W	**2 F.R.** (vert.)				

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			ENGLAND-SOUTH COAST				
996 *A 0722.2*	---Shell pier, head.	50° 48.4′ N 1° 07.2′ W	**2 F.R.** (vert.)	40 **12** 36 **11**		Radar mast; 30.	
998 *A 0692.8*	--Harbor Entance.	50° 47.8′ N 1° 06.9′ W	**Dir.W.R.G.**	7 **2**	1	Concrete dolphin; 13.	Iso.G. 322°30′-330°, Al.W.G.-332°30′, Iso.W.-335°, Al.W.R.-337°30′, Iso.R.-345°.
1000 *A 0726*	--Royal Clarence Yard Fort.	50° 48.0′ N 1° 07.2′ W	**2 F.R.** (vert.)				
1004 *A 0730*	---Fuel jetty, off NE. side.	50° 48.0′ N 1° 06.9′ W	**2 F.R.** (vert.)	26 **8** 20 **6**		Dolphin.	
1008 *A 0731*	---S. of head.	50° 47.8′ N 1° 06.9′ W	**2 F.R.** (vert.)	26 **8** 20 **6**		Dolphin.	
1012 *A 0719*	--Vosper′s jetty, head.	50° 48.7′ N 1° 07.6′ W	**2 F.R.** (vert.)				
1016 *A 0719.2*	---Elbow.	50° 48.7′ N 1° 07.7′ W	**2 F.R.** (vert.)				
1020 *A 0734*	--Gosport Landing stage, at each end.	50° 47.6′ N 1° 06.9′ W	**2 F.R.** (vert.)	20 **6** 14 **4**	2	Post; 16.	F.R. lights are shown from No. 1 and No. 2 jetties, Haslar Creek.
	-Submerged Barrier Passage:						
1024 *A 0684*	--S. side.	50° 46.0′ N 1° 04.0′ W	**Q.R.**	21 **6**	2	Dolphin; 21.	**Radar reflector.**
1028 *A 0750*	Horse Sand Fort.	50° 45.0′ N 1° 04.3′ W	**Iso.G.** period 2s	69 **21**	8	Round stone structure.	
1032 *A 0752*	No Mans Land Fort.	50° 44.4′ N 1° 05.6′ W	**Iso.R.** period 2s	69 **21**	8	Round stone structure.	
1036 *A 0782*	Eastney Point, Langstone Harbor.	50° 47.2′ N 1° 01.6′ W	**Q.R.**	6 **2**	2	Pile beacon.	F.R. on masts 610 meters and 670 meters WSW. Fl.(2)W. 5s on Roway Wreck Pile 1.2 miles SSW. F.R., Oc.(2)Y. 10s and F.Y. lights shown from tower 650 meters W. during firing exercises.
1037 *A 0782.08*	-Outfall jetty, head.	50° 47.3′ N 1° 01.6′ W	**F.R.** (vert.)	16 **5**	5		2 meters apart.
1040 *A 0784*	Eastoke Point, Chichester Harbour.	50° 46.7′ N 0° 56.1′ W	**Q.R.**	6 **2**		PORT (A) R, pile, topmark.	
1044 *A 0783.4*	Chichester Bar.	50° 45.9′ N 0° 56.4′ W	**Fl.(2)R.** period 10s	46 **14**	2	Red beacon.	Tide gauge.
1046 *A 0783.5*	-West Pole Beacon.	50° 45.7′ N 0° 56.4′ W	**Fl.W.R.** period 5s	10 **3**	W. 7 R. 5	Black pile, square daymark.	W. 321°-081°, R.-321°.
1048 *A 0780*	**Nab.**	50° 40.1′ N 0° 57.1′ W	**Fl.W.** period 10s fl. 0.3s, ec. 9.7s	89 **27**	**16**	Red lantern on concrete and metal tower. Helicopter platform.	Visible 300°-120°. **Horn:** 2 bl. ev. 30s.
	RACON		**T(–)** period 30s		10		
	ISLE OF WIGHT:						
1052 *A 0768*	-Sandown, pier, head.	50° 39.0′ N 1° 09.0′ W	**2 F.R.** (vert.)	23 **7** 16 **5**	2		

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
			ENGLAND-SOUTH COAST				
1056 *A 0770*	-Shanklin.	50° 38.0′ N 1° 10.0′ W	**Fl.R.** period 5s fl. 0.3s, ec. 4.7s	10 **3**	3	PORT (A) R, topmark.	
1064 *A 0774*	**-St. Catherine's Point.**	50° 34.5′ N 1° 17.8′ W	**Fl.W.** period 5s fl. 0.2s, ec. 4.8s	135 **41**	**26**	White octagonal tower; 85.	Visible 257°-117°. Various experimental light transmissions may be made from this location. **DGPS Station.**
			F.R.	115 **35**	13		Shown 24 hours. Visible 099°-116°.
1066 *A 0790*	The Mixon.	50° 42.4′ N 0° 46.3′ W	**Fl.R.** period 5s			PORT (A) R, topmark.	
1068 *A 0797*	*Owers Lightbuoy.*	50° 38.6′ N 0° 41.2′ W	**Q.(6)+L.Fl.W.** period 15s			S. CARDINAL YB, pillar, topmark.	**Whistle.**
	RACON		**O(– – –)**		10		
1072 *A 0794*	Bognor Regis, pier, head.	50° 46.7′ N 0° 40.4′ W	**2 F.R.** (vert.)				
	LITTLEHAMPTON:						
1076 *A 0800*	-W. pier, head.	50° 47.8′ N 0° 32.4′ W	**2 F.R.** (vert.)	23 **7**	6	PORT (A) R, beacon, topmark.	
1078 *A 0800.5*	-Training Wall, head.	50° 47.8′ N 0° 32.3′ W	**Q.G.**	33 **10**	2	STARBOARD (A) Beacon, topmark.	
1080 *A 0801*	-E. pier Range, front.	50° 48.1′ N 0° 32.4′ W	**F.G.**	19 **6**	7	Black metal column.	
1084 *A 0801.1*	- -Rear, 64 meters 346° from front.	50° 48.1′ N 0° 32.4′ W	**Oc.W.Y.** period 7.5s lt. 6s, ec. 1.5s	30 **9**	10	White concrete tower.	W. 290°-356°, Y.-042°.
1088 *A 0804*	-Fisherman′s quay.	50° 48.4′ N 0° 32.6′ W	**Fl.G.** period 3s fl. 1s, ec. 2s	13 **4**	5	Black metal column; 10.	Visible 320°-032°.
1092 *A 0808*	-Swing bridge, SW. fenders.	50° 48.6′ N 0° 32.9′ W	**2 F.R.** (vert.)	10 **3** 7 **2**	2	Metal framework.	Marks upstream and downstream ends. Traffic signals 14m Fl.R. closed to shipping, Fl.G. open to shipping.
1096 *A 0808.2*	- -NE. fenders.	50° 48.6′ N 0° 32.9′ W	**2 F.G.** (vert.)	10 **3** 7 **2**	2		Marks upstream and downstream ends.
1098 *A 0809*	-Littlehampton.	50° 46.2′ N 0° 29.4′ W	**Fl.(5)Y.** period 20s	30 **9**	5	Pile.	
1100 *A 0810*	Worthing, on pier.	50° 48.4′ N 0° 22.0′ W	**2 F.R.** (vert.)	20 **6**	1	Post; 13.	
	SHOREHAM:						
1104 *A 0813*	-E. breakwater, head.	50° 49.5′ N 0° 14.7′ W	**Fl.G.** period 5s	23 **7**	8	Concrete column; 10.	**Siren:** 1 bl. ev. 2 min.
1108 *A 0812*	-W. breakwater, head.	50° 49.4′ N 0° 14.8′ W	**Fl.R.** period 5s	23 **7**	7	Concrete column; 10.	
1112 *A 0814*	-On apex of middle pier Range, front.	50° 49.7′ N 0° 14.8′ W	**Oc.W.** period 5s lt. 3s, ec. 2s	26 **8**	10	White watch house lower half red; 20.	Tidal light. Traffic signals. **Horn:** 1 bl. ev. 20s.
1116 *A 0814.1*	- -Rear, within upper entrance, 192 meters 355° from front.	50° 49.8′ N 0° 14.8′ W	**Fl.W.** period 10s fl. 1s, ec. 9s	43 **13**	**15**	Gray round tower; 39.	Visible 283°-103°. R. lights on radio mast 160 meters N. Traffic signals 640 meters, 800 meters E.

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
			ENGLAND-SOUTH COAST				
1118 *A 0820*	-W. pier.	50° 49.1′ N 0° 09.0′ W	**Fl.R.** period 10s	42 **13**	2	Mast.	**Bell:** (when vessels expected).
1120 *A 0822*	Brighton, head of Marine Palace pier (E. pier).	50° 48.8′ N 0° 08.1′ W	**2 F.R.** (vert.)	33 **10**	2	Mast; 23.	
1121 *A 0826*	Brighton Marina, W. breakwater, head.	50° 48.5′ N 0° 06.3′ W	**Q.R.**	33 **10**	7	White round structure, red bands.	2 F.R. on mast of HMS Cavalier 100 meters NNE. **Horn:** 2 bl. ev. 30s. **Radiobeacon** 600 meters NE.
1122 *A 0825*	-E. breakwater, head.	50° 48.6′ N 0° 06.3′ W	**Fl.(4)W.R.** period 20s	52 **16**	W. 10 R. 8	White pillar, green bands.	R. 260°-295°, W.-100°. White lights shown inside of breakwater walls.
1123 *A 0825.2*	-Breakwater, head.	50° 48.6′ N 0° 06.3′ W	**Q.G.**	26 **8**	7		
1124	*"CS1" Buoy.*	50° 34.0′ N 0° 04.0′ W	**Fl.Y.** period 2.5s			SPECIAL Y, pillar, topmark.	**Whistle.**
1128 *A 0839*	*GREENWICH LIGHTSHIP.*	50° 24.5′ N 0° 00.0′	**Fl.W.** period 5s fl. 0.5s, ec. 4.5s	39 **12**	**15**	Red hull, name on sides in white.	Shown 24 hours. F.W. riding light. **Nautophone:** 1 bl. ev. 30s. **Radar reflector.**
	RACON		**M(– –)** period 20s		10		
	NEWHAVEN:						
1132 *A 0832*	-E. Pier, head.	50° 46.8′ N 0° 03.7′ E	**Iso.G.** period 5s	41 **12**	6	White metal framework tower; 38.	
1136 *A 0830*	-Breakwater, head.	50° 46.5′ N 0° 03.6′ E	**Oc.(2)W.** period 10s lt. 7s, ec. 1s lt. 1s, ec. 1s	56 **17**	12	Concrete tower, 46.	**Diaphone:** 1 bl. ev. 30s.
1140 *A 0840*	**Beachy Head.**	50° 44.0′ N 0° 14.6′ E	**Fl.(2)W.** period 20s fl. 0.8s, ec. 3.2s fl. 0.8s, ec. 15.2s	102 **31**	**20**	White round tower, red band, lantern; 141.	Visible 248°-101°. Shown by night and in reduced visibility. **Horn:** 1 bl. ev. 30s.
1144 *A 0843*	Royal Sovereign.	50° 43.4′ N 0° 26.1′ E	**Fl.W.** period 20s fl. 1s, ec. 19s	93 **28**	12	White tower, red band. Helicopter platform.	Shown by day when fog signal is operating. Distress signals. **Nautophone:** 2 bl. ev. 30s.
1148 *A 0846*	Eastbourne, pier, head.	50° 45.9′ N 0° 17.8′ E	**2 F.R.** (vert.)	26 **8**	2	Metal column; 10.	
1150 *A 0848*	Sovereign Harbor Marina.	50° 47.1′ N 0° 19.9′ E	**Fl.(3)W.** period 15s	39 **12**	7	Concrete tower.	
1152 *A 0848.5*	-258°.	50° 47.2′ N 0° 19.7′ E	**Dir.Fl.W.R.G.** period 3s fl. 0.3s, ec. 2.7s	13 **4**	1		G. 252°30′-256°30′, W.-259°30′, R.-262°30′.
1153 *A 0848.1*	-S. breakwater, head.	50° 47.3′ N 0° 20.1′ E	**Fl.(4)R.** period 12s	10 **3**	6		
1154 *A 0848.2*	-N. breakwater, head.	50° 47.3′ N 0° 20.1′ E	**Fl.G.** period 5s	10 **3**	6		
1160	*"CS2" Buoy.*	50° 39.0′ N 0° 32.7′ E	**Fl.Y.** period 5s			SPECIAL Y, pillar, topmark.	**Whistle.**
	HASTINGS:						
1164 *A 0858*	-Beach Range, front.	50° 51.3′ N 0° 35.5′ E	**F.R.**	46 **14**	4	White metal column; 25.	
1168 *A 0858.1*	- -Rear, side of West Hill, above town, 357 meters 356°18′ from front.	50° 51.5′ N 0° 35.5′ E	**F.R.**	180 **55**	4	White 5-sided tower; 20.	

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
			ENGLAND-SOUTH COAST				
1172 *A 0856*	-W. breakwater, head.	50° 51.2′ N 0° 35.7′ E	**Fl.R.** period 2.5s	16 **5**	4	Mast; 13.	
1176 *A 0854*	-Hastings Pier, head	50° 51.0′ N 0° 34.5′ E	**2 F.R.** (vert.)	25 **8**	5	White hut; 10.	
1188	*-Fairway Buoy.*	50° 54.0′ N 0° 48.0′ E	**L.Fl.W.** period 10s fl. 2s, ec. 8s			SAFE WATER RW, spherical.	**Radar reflector.**
1192 *A 0866*	-E. bank No. ″3".	50° 55.9′ N 0° 46.3′ E	**Q.G.**	10 **3**	2	STARBOARD (A) G, tripod, topmark.	
1196 *A 0867*	--W. bank No. ″6".	50° 55.7′ N 0° 46.5′ E	**Q.R.**	10 **3**	2	Red wooden pile.	Lights shown upstream.
1200 *A 0866.3*	--No. ″7".	50° 56.0′ N 0° 46.3′ E	**Q.G.**	10 **3**	2	Wooden piles, green triangular daymark, point up.	
1204 *A 0866.5*	--No. ″9".	50° 56.1′ N 0° 46.2′ E	**Q.G.**	10 **3**	2	Wooden piles, green triangular daymark, point up.	
1208 *A 0866.7*	--No. ″11".	50° 56.2′ N 0° 46.0′ E	**Oc.W.G.** period 4s lt. 3s, ec. 1s	10 **3**	W. 7 G. 6	Wooden structure, green triangular daymark; 10.	W. 326°-331°, G.-326°. Tidal and traffic signals.
1212 *A 0864.5*	-E. pier No. ″1", head.	50° 55.7′ N 0° 46.6′ E	**Q.(9)W.** period 15s	23 **7**	5	Metal structure, green triangular daymark, point up.	**Horn:** 1 bl. ev. 7s.
1216 *A 0864*	-West Groyne, head.	50° 55.6′ N 0° 46.7′ E	**Fl.R.** period 5s	23 **7**	6	Wooden tripod; 30.	**Radar reflector.**
	DOVER STRAIT:						
1220 *A 0876*	**-Dungeness.**	50° 54.8′ N 0° 58.7′ E	**Fl.W.** period 10s fl. 0.1s, ec. 9.9s	131 **40**	**21**	Black round tower, white bands, lantern; 141. Floodlit.	Partially obscured 078°-shore. Shown 24 hours. **Horn:** 3 bl. ev. 60s.
			F.R.G.	122 **37**	10		R. 057°-073°, G.-078°, R. 196°-216°.
1224 *A 0970*	*-VARNE LIGHTSHIP.*	51° 01.2′ N 1° 24.0′ E	**Fl.R.** period 20s fl. 0.3s, ec. 19.7s	39 **12**	**19**	Red hull, light tower amidships.	**Nautophone:** 1 bl. ev. 30s (bl. 3s, si. 27s).
	-RACON		**T(–)** period 60s fl. 20s, ec. 40s		10		
	-Folkestone:						
1228 *A 0892*	--Breakwater, head.	51° 04.5′ N 1° 11.8′ E	**Fl.(2)W.** period 10s fl. 0.5s, ec. 2s fl. 0.5s, ec. 7s	46 **14**	**22**	Tower; 43.	Five F.R. lights about 2.9 miles NE. Berthing signals. **Diaphone:** (close SW.) 4 bl. ev. 60s.
			Fl.W. period 2s				Shown in fog. Visible 246°-306°. Intensified 271°30′-280°30′.
1229 *A 0894*	--No. ″3" berth Range, front.	51° 04.6′ N 1° 11.5′ E	**F.R.**			Post, yellow triangular daymark, point down.	Occasional.
1229.1 *A 0894.1*	---Rear, 100 meters 295° from front.	51° 04.7′ N 1° 11.4′ E	**F.G.**			Post, yellow triangular daymark, point up.	Occasional.
1232 *A 0896*	--E. pier (Outer harbor).	51° 04.7′ N 1° 11.5′ E	**Q.G.**			Steel column; 7.	
1234 *A 0898*	-Shakespeare Cliff, E. head.	51° 06.3′ N 1° 17.0′ E	**Fl.R.** period 5s fl. 0.3s, ec. 4.7s				
1234.1 *A 0898.2*	-W. head.	51° 06.1′ N 1° 16.2′ E	**Fl.R.** period 5s fl. 0.3s, ec. 4.7s				

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
			ENGLAND-SOUTH COAST				
	-Dover:						
1236 *A 0900*	**--Admiralty pier.**	51° 06.6′ N 1° 19.8′ E	**Fl.W.** period 7.5s fl. 1s, ec. 6.5s	69 **21**	**20**	White tower; 72.	Visible 096°-090°, obscured in the Downs by South Foreland inshore of 226°. Traffic signals. **Horn:** 1 bl. ev. 10s.
1248 *A 0912*	--S. pier, near head of N. side.	51° 06.9′ N 1° 19.0′ E	**2 F.R.** (vert.)	16 **5** 10 **3**		Beacon; 8.	
1252 *A 0914*	--N. pier, near head.	51° 06.9′ N 1° 19.0′ E	**3 F.G.** (vert.)	16 **5**	3	Beacon; 7.	
1256 *A 0906*	--Train Ferry dock, jetty, head.	51° 06.9′ N 1° 19.1′ E	**Q.R.**	23 **7**		Post; 10.	
1260 *A 0915*	--N. pier, spur.	51° 07.0′ N 1° 18.9′ E	**Oc.G.**	10 **3**	2	Post; 7.	
1264 *A 0916*	--Tidal Harbor, dolphin, jetty, head.	51° 07.0′ N 1° 18.8′ E	**Q.G.**	10 **3**	2		
1268 *A 0902*	--Prince of Wales pier, head.	51° 06.8′ N 1° 19.5′ E	**V.Q.G.**	46 **14**	4	White tower; 46.	Fl.Y. (occas.).
1272 *A 0924*	--S. breakwater, W. head.	51° 06.8′ N 1° 19.9′ E	**Oc.R.** period 30s lt. 27s, ec. 3s	69 **21**	**18**	White tower; 70.	
1276 *A 0926*	--Knuckle of detached mole.	51° 07.0′ N 1° 20.6′ E	**Fl.(4)W.R.** period 10s fl. 0.8s, ec. 1.2s fl. 0.8s, ec. 1.2s fl. 0.8s, ec. 1.2s fl. 0.8s, ec. 3.2s	49 **15**	W. **15** R. 13	White tower; 52.	R. 059°-239°, W.-059°.
1284 *A 0935*	--The Camber, Pier ″A", W. jetty, head.	51° 07.5′ N 1° 20.5′ E	**Q.R.**	20 **6**		Mast.	Intensified in fog. **Siren:** 2 bl. ev. 10s Occasional.
1288 *A 0936*	--Pier ″B", head.	51° 07.4′ N 1° 20.3′ E	**Fl.(2)R.** period 5s	20 **6**			Intensified in fog. **Siren:** 1 bl. ev. 5s Occasional.
	--Dover (E. entrance):						
1304 *A 0928*	---Detached mole, N. head.	51° 07.2′ N 1° 20.7′ E	**Fl.R.** period 2.5s	36 **11**	5		F.R. on radio masts 1.25 miles and 0.75 mile N.
1305 *A 0929*	---Eastern Arm, head.	51° 07.3′ N 1° 20.7′ E	**Fl.G.** period 5s	39 **12**	5		Traffic signals. **Horn:** 2 bl. ev. 30s. **Radar reflector.**
1312 *A 0950*	-Deal pier, head.	51° 13.4′ N 1° 24.6′ E	**2 F.R.** (vert.)	23 **7**	5	Structure on top of building.	
1316	*-″CS4" Buoy.*	51° 08.5′ N 1° 34.0′ E	**Fl.(4)Y.** period 15s			SPECIAL Y, pillar, topmark.	Marks “Area to be Avoided”. **Whistle.**

Section 2

East Coast of England
Including Thames River and River Humber

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
			ENGLAND-EAST COAST				
	DOVER STRAIT:						
	-Goodwin Sands:						
1320 *A 0980*	*--SOUTH GOODWIN LIGHTFLOAT.*	51° 07.9′ N 1° 28.6′ E	**Fl.(2)W.** period 20s fl. 0.3s, ec. 4.7s fl. 0.3s, ec. 14.7s	39 **12**	**15**	Red hull, light tower amidships, name in white on sides.	Shown by day when fog signal is operating. **Nautophone:** 2 bl. ev. 60s.
1324 *A 0984*	*--EAST GOODWIN LIGHTFLOAT,* E. of Goodwin Sands.	51° 13.0′ N 1° 36.3′ E	**Fl.W.** period 15s fl. 0.3s, ec. 14.7s	39 **12**	**21**	Red hull, light tower amidships.	Shown by day when fog signal is operating. **Horn:** 1 bl. ev. 30s (bl. 3s, si. 27s).
	--RACON		**T(–)**		10		
1326 *A 0984.2*	--MPC buoy.	51° 06.1′ N 1° 38.2′ E	**Fl.Y.** period 2.5s			SPECIAL Y, pillar, topmark.	
	--RACON		**O(– – –)** period 30s		10		
1329	*--NE. Goodwin Buoy.*	51° 20.3′ N 1° 34.3′ E	**Q.(3)W.** period 10s			E. CARDINAL BYB, pillar, topmark.	**Whistle.**
	--RACON		**M(– –)** period 30s		10		
1330	*--Outer Tongue Buoy.*	51° 30.7′ N 1° 26.5′ E	**L.Fl.W.** period 10s			SAFE WATER RW, pillar, topmark.	**Whistle.**
	--RACON		**T(–)**		10		
	FALLS BANK:						
1332	*-Inter Bank Buoy.*	51° 16.5′ N 1° 52.3′ E	**Fl.Y.** period 5s			SPECIAL Y, pillar, topmark.	
	-RACON		**M(– –)** period 30s		10		
1336 *A 0992*	*-FOXTROT 3 LIGHTSHIP.*	51° 23.8′ N 2° 00.6′ E	**Fl.W.** period 10s fl. 0.2s, ec. 9.8s	39 **12**	**15**	Red hull, light tower amidships.	Midchannel. **Horn:** 1 bl. ev. 10s.
	-RACON		**T(–)** period 60s		10		
	RAMSGATE:						
1340 *A 0957.1*	-W. pier head, rear, 91 meters 291°34′ from E. pier head, front.	51° 19.6′ N 1° 25.4′ E	**F.R.**	39 **12**	7	Round granite tower; 36.	Visible 256°-251°.
1348 *A 0957*	-E. pier head Range, front.	51° 19.6′ N 1° 25.5′ E	**Oc.W.** period 10s lt. 7s, ec. 3s	26 **8**	4	Red and white metal column; 13.	Visible 250°-195°. Traffic signals. **Horn:** 1 bl. ev. 60s.
1349 *A 0959*	-N. breakwater, head.	51° 19.5′ N 1° 25.6′ E	**Q.G.**	33 **10**	5	White pillar, green bands, platform, wind generator.	
1350 *A 0959.5*	-S. breakwater, head.	51° 19.4′ N 1° 25.5′ E	**V.Q.R.**	33 **10**	5	White pillar, red bands, platform, wind generator.	
1351 *A 0959.8*	-SW. corner.	51° 19.4′ N 1° 24.8′ E	**Q.R.**			PORT (A) R, beacon, topmark.	

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
			ENGLAND-EAST COAST				
1352 *A 0958*	-W. ferry terminal Range, front.	51° 19.5′ N 1° 24.9′ E	**Dir.Oc.W.R.G.** period 10s lt. 8s, ec. 2s	33 **10**	5	White mast, black triangular daymark, point up, orange stripe.	G. 259°-269°, W.-271°, R.-281°.
1356 *A 0958.1*	- -Rear, 493 meters 270° from front.	51° 19.5′ N 1° 24.5′ E	**Oc.W.** period 5s lt. 3s, ec. 2s	56 **17**	5	White mast, black triangular daymark, point down, orange stripe.	Visible 263°-278°. V.Q.G. and Q.R. beacons mark channel to SW.
1360 *A 0964*	Broadstairs pier, SE. head.	51° 21.4′ N 1° 26.9′ E	**2 F.R.** (vert.)	23 **7**	4	Metal column; 16.	
1364 *A 0966*	**North Foreland.**	51° 22.5′ N 1° 26.8′ E	**Fl.(5)W.R.** period 20s fl. 0.6s, ec. 1s fl. 0.6s, ec. 1s fl. 0.6s, ec. 1s fl. 0.6s, ec. 1s fl. 0.6s, ec. 13s	187 **57**	W. **19** R. **15**	White octagonal tower, dwellings; 85.	W. shore-150°, R.-200°, W.-011°. **DGPS Station.**
1368 *A 1971*	Tide gauge.	51° 23.7′ N 1° 22.7′ E	**Q.W.**		3	N. CARDINAL BY, beacon, topmark.	
1372 *A 1972*	-Stone pier, head.	51° 23.4′ N 1° 22.9′ E	**F.R.**	59 **18**	4	Stone tower; 66.	
1376 *A 1976*	Herne Bay.	51° 22.9′ N 1° 06.9′ E	**Q.W.**	59 **18**	4	Metal mast on concrete landing stage; 49.	Pier head isolated from shore.
1378 *A 1977*	Kentish Flats.	51° 26.8′ N 1° 04.7′ E	**Fl.Y.** period 5s	43 **13**	5	Yellow framework mast; 253.	One on each side. **Horn:** Mo(U) 30s. **Radar reflector.**
			F.R.	154 **47**			
			F.R.	253 **77**			
			ENGLAND-THAMES RIVER APPROACHES				
1380 *A 1978*	Whitstable.	51° 21.8′ N 1° 01.7′ E	**F.W.** or **F.R.**	49 **15** 33 **10**	W. 8 R. 5	White mast.	R. when entry or departure is prohibited.
1384 *A 1979*	-W. quay.	51° 21.8′ N 1° 01.5′ E	**Fl.W.R.G.** period 5s fl. 0.5s, ec. 4.5s	7 **2**	W. 5 R. 3 G. 3	Dolphin.	W. 118°-156°, G.-178°, R.-201°.
1388 *A 2050.5*	Blacktail, W.	51° 31.4′ N 0° 55.3′ E	**Iso.G.** period 10s	33 **10**	6	Green frame tower.	
1392 *A 2050.4*	-E.	51° 31.8′ N 0° 56.6′ E	**Iso.G.** period 5s	33 **10**	6	Green frame tower.	
1400 *A 2009.7*	Isle of Grain.	51° 26.6′ N 0° 43.5′ E	**Q.W.R.G.**	66 **20**	W. 13 R. 7 G. 8	Red metal framework tower, red and white diamond daymark; 65.	R. 220°-234°, G.-241°, W.-013°. **Radar reflector.**
1404 *A 1996*	Sheerness, Garrison Point, RoRo berth No. ″10″.	51° 26.9′ N 0° 44.9′ E	**2 F.R.** (vert.)			Dolphin.	Reserve fog signal 310 meters SW. R. light on radio mast 340 meters SSW. **Horn:** 3 bl. ev. 30s (bl. 2s, si. 3s, bl. 2s, si. 3s, bl. 2s, si. 18s).
1413	*Sea Reach Buoy ″1″.*	51° 29.4′ N 0° 52.7′ E	**Fl.Y.** period 2.5s			SPECIAL Y, pillar, topmark.	
	RACON		**T(–)** period 90s		10		
1417	*Sea Reach Buoy ″7″.*	51° 30.1′ N 0° 37.2′ E	**Fl.Y.** period 2.5s			SPECIAL Y, pillar, topmark.	
	RACON		**T(–)** period 90s		10		

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
	ENGLAND-THAMES RIVER APPROACHES FROM NORTHEASTWARD						
1420 *A 2170*	*SUNK LIGHTFLOAT.*	51° 51.0′ N 1° 35.0′ E	**Fl.(2)W.** period 20s fl. 0.3s, ec. 4.8s fl. 0.3s, ec. 14.6s	39 **12**	**16**	Red hull, light tower amidships, name on sides in white.	Shown by day when fog signal is operating. **Horn:** 2 bl. ev. 60s.
	RACON		**T(–)** period 60s		10		
1422	*Buoy Barrow No. ″3″.*	51° 42.0′ N 1° 20.3′ E	**Q.(3)W.** period 10s			E. CARDINAL BYB, pillar, topmark.	**Bell.**
	RACON		**M(– –)** period 30s		10		
	ENGLAND-EAST COAST						
1432 *A 2184*	Brightlingsea Range, front.	51° 48.4′ N 1° 01.3′ E	**F.R.**	23 **7**	4	Post, white square daymark, red stripe.	Visible 020°-080°.
1436 *A 2184.1*	-Rear, 50 meters 041° from front.	51° 48.4′ N 1° 01.3′ E	**F.R.**	33 **10**	4	Post, white square daymark, red stripe.	
1440 *A 2187*	Bateman tower.	51° 48.3′ N 1° 00.8′ E	**F.Y.**	39 **12**			
1444 *A 2192*	Clacton-on-Sea, elbow of berthing arm.	51° 47.0′ N 1° 09.6′ E	**2 F.G.** (vert.)	16 **5**	4	Mast.	Shown at E. and W. ends, and center of berthing arm. **Reed:** 2 bl. ev. 120s. When vessels are berthing.
1448 *A 2194*	Walton on the Naze pier, head.	51° 50.6′ N 1° 16.9′ E	**2 F.G.** (vert.)	17 **5**	2	White post; 7.	
1451 *A 2196*	Cork Sand.	51° 55.2′ N 1° 25.3′ E	**Q.W.**			N. CARDINAL BY, beacon, topmark.	
	HARWICH HARBOR:						
	-Felixstowe:						
1456 *A 2201*	--Dock entrance, S. pier, head.	51° 56.9′ N 1° 19.0′ E	**F.G.**	10 **3**		Green post; 3.	Private. Traffic signals.
1460 *A 2202*	--N. pier, head.	51° 56.9′ N 1° 19.1′ E	**F.R.**	10 **3**	10		
1464 *A 2203*	--Oil Terminal jetty, S. head.	51° 57.0′ N 1° 18.9′ E	**2 F.G.** (vert.)				2 meters apart.
1468 *A 2203.2*	---N. head.	51° 57.0′ N 1° 18.8′ E	**2 F.G.** (vert.)				2 meters apart.
1470 *A 2217.4*	--RoRo berth No. ″4″.	51° 56.9′ N 1° 14.8′ E	**2 F.R.** (vert.)	16 **5** 13 **4**	2	Post.	
1471 *A 2217.42*	---W.	51° 56.9′ N 1° 14.8′ E	**2 F.R.** (vert.)	16 **5** 13 **4**	2	Post.	
1472 *A 2203.4*	---RoRo No. ″3″, head.	51° 57.1′ N 1° 19.0′ E	**2 F.G.** (vert.)				
1476 *A 2203.6*	---RoRo No. ″4″.	51° 57.1′ N 1° 18.9′ E	**2 F.G.** (vert.)				
1484 *A 2204*	--Navyard wharf, SE. corner.	51° 56.9′ N 1° 17.6′ E	**2 F.R.** (vert.)	36 **11** 30 **9**			2 F.R. (vert.) mark Groyne head 65 meters SSE.
1488 *A 2204.15*	---NE. corner.	51° 56.9′ N 1° 17.6′ E	**2 F.R.** (vert.)				

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
			ENGLAND-EAST COAST				
1492 *A 2204.2*	---N. corner.	51° 56.9′ N 1° 17.5′ E	**2 F.R.** (vert.)	36 **11** 30 **9**			
1500 *A 2204.62*	----N. side pontoon, W. head.	51° 56.9′ N 1° 17.4′ E	**2 F.R.** (vert.)	16 **5**			
1504 *A 2206*	--Town pier.	51° 56.9′ N 1° 17.3′ E	**2 F.R.** (vert.)	20 **6**		Tripod.	
1508 *A 2208*	--Trinity House pier.	51° 56.9′ N 1° 17.2′ E	**2 F.R.** (vert.)	20 **6** 14 **4**	1	Post; 23.	
1512.5 *A 2213.3*	--Shotley Marina Entrance, E. side.	51° 57.2′ N 1° 16.8′ E	**Fl.(4)G.** period 15s			STARBOARD (A) G, pile, topmark, 10.	
1512.6 *A 2213.35*	--W. side.	51° 57.2′ N 1° 16.8′ E	**V.Q.(3)W.** period 5s			E. CARDINAL Pile, topmark, 10.	
1513 *A 2213.5*	--Shotley Marina Lock, E. side.	51° 57.4′ N 1° 16.7′ E	**Dir.**	10 **3**	1	Orange structure; 3.	Directional 339°30′. Uses moire pattern to indicate dredged channel.
1516 *A 2222*	--Ganges pier.	51° 57.2′ N 1° 16.3′ E	**2 F.G.** (vert.)	13 **4**	1	Green wooden post; 7.	
1520 *A 2222.5*	--Erwarton Ness.	51° 57.1′ N 1° 13.4′ E	**Q.(6)+L.Fl.W.** period 15s		4	S. CARDINAL YB, beacon, topmark.	
1524 *A 2222.6*	-No. ″2″.	51° 57.0′ N 1° 10.3′ E	**Q.W.**			N. CARDINAL BY, beacon, topmark.	
1532 *A 2223*	--Smith Shoal, No. ″6″.	51° 56.9′ N 1° 08.0′ E	**Fl.R.** period 4s			Metal post, red square daymark.	Tide gauge.
1536 *A 2214*	--Parkeston, quay, E.	51° 56.8′ N 1° 15.8′ E	**2 F.R.** (vert.)	7 **2**	2	Black dolphin; 13.	
1540 *A 2250*	Woodbridge Haven, entrance Range, front.	51° 59.0′ N 1° 23.4′ E	**Fl.W.**			Red rectangular post, white triangular daymark, point up.	Private. May be changed to Fl.Y. Moved to meet changes in channel.
1544 *A 2250.1*	-Rear.	51° 59.0′ N 1° 23.4′ E	**Fl.W.**			Post, red rectangular daymark	
1546	*Harwich Channel Buoy No. ″1″.*	51° 55.9′ N 1° 26.8′ E	**Fl.Y.** period 2.5s			SPECIAL Y, conical.	
	RACON		**T(–)**		10		
1554	*S. Galloper Buoy.*	51° 43.9′ N 1° 56.5′ E	**Q.(6)+L.Fl.W.** period 15s			S. CARDINAL YB, pillar, topmark.	**Whistle.**
	RACON		**T(–)**		10		
1556	*N. Shipwash Buoy.*	52° 01.7′ N 1° 38.4′ E	**Q.W.**			N. CARDINAL BY, pillar, topmark; 18.	**Bell.**
	RACON		**M(– –)**		10		
1560 *A 2248*	*Outer Gabbard Buoy.*	51° 57.8′ N 2° 04.3′ E	**Q.(3)W.** period 10s			E. CARDINAL BYB, pillar, topmark.	**Whistle.**
	RACON		**O(– – –)** period 30s		10		

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
			ENGLAND-EAST COAST				
1564 *A 2258*	**Orford Ness.**	52° 05.0′ N 1° 34.6′ E	**Fl.W.** period 5s fl. 0.1s, ec. 4.9s	92 **28**	**20**	White round tower, red bands; 98.	
			F.W.R.G.	46 **14**	W. **17** R. 13 G. **15**		R. shore-210°. W. 038°-047°, G.-shore.
			F.R.	43 **13**	12		Visible 026°-038°.
	RACON		**T(–)** period 30s		**18**		
	SIZEWELL:						
1568 *A 2265*	-S. Pipeline, head.	52° 12.5′ N 1° 37.7′ E	**Fl.R.** period 10s fl. 1s, ec. 9s	41 **12**	3	Column on metal platform; 16.	
1572 *A 2265.2*	-N. Pipeline, head.	52° 12.7′ N 1° 37.9′ E	**Fl.(2)R.** period 7.5s fl. 0.3s, ec. 0.7s fl. 0.3s, ec. 6.2s	41 **12**	3	Column on metal platform; 16.	
1573 *A 2265.3*	-Cooling water intake.	52° 12.9′ N 1° 38.2′ E	**Fl.R.** period 5s				
1573.1 *A 2265.35*	---Outfall.	52° 12.9′ N 1° 37.7′ E	**Fl.R.** period 5s				
1574 *A 2265.4*	-Dir. Lt.	52° 13.0′ N 1° 37.5′ E	**Dir.F.W.R.G.**				G. 267°-269°, W.-271°, R.-273°. Shown when vessels are berthing.
1574.1 *A 2265.6*	-Dolphin No. ″2″.	52° 13.0′ N 1° 37.5′ E	**2 F.R.** (vert.)	13 **4**	3	Metal post on dolphin.	2 meters apart.
	SOUTHWOLD:						
1576 *A 2273*	-Harbor, N. pier, head.	52° 18.8′ N 1° 40.6′ E	**Fl.G.** period 1.5s	13 **4**	4	Metal column; 10.	Shows 3 F.R. (vert.) when harbor is closed.
1580 *A 2273.3*	--Knuckle.	52° 18.8′ N 1° 40.5′ E	**2 F.G.** (vert.)				2 meters apart.
1584 *A 2274*	--S. pier, head.	52° 18.7′ N 1° 40.6′ E	**Q.R.**	13 **4**	2		
1588 *A 2272*	**-Southwold.**	52° 19.6′ N 1° 40.9′ E	**Fl.(4)W.R.** period 20s fl. 0.5s, ec. 1s fl. 0.5s, ec. 1s fl. 0.5s, ec. 1s fl. 0.5s, ec. 15s	122 **37**	W. **16** R. 12	White round tower; 102.	R. 204°-215°, W.-001°, R.-032°30′.
	LOWESTOFT:						
1596 *A 2282*	-Claremont, pier, head.	52° 27.9′ N 1° 45.0′ E	**2 F.R.** (vert.)	16 **5** 13 **4**	4	White metal column; 7.	3 F.R. lights mark center and N. and S. limits of firing range 1.5 miles SSW.
1600 *A 2286*	-Outer harbor, N. pier, head.	52° 28.3′ N 1° 45.5′ E	**Oc.G.** period 5s lt. 4s, ec. 1s	39 **12**	8	White tower on pavilion; 30.	
1604 *A 2284*	---S. pier, head.	52° 28.2′ N 1° 45.5′ E	**Oc.R.** period 5s lt. 4s, ec. 1s	40 **12**	6	White tower on pavilion; 30.	Traffic signals. **Horn:** 4 bl. ev. 60s. Pilot station.
1608 *A 2290*	-Inner harbor, N. pier, head.	52° 28.3′ N 1° 45.3′ E	**2 F.Y.** (vert.)	20 **6**	1	Metal column; 13.	

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
			ENGLAND-EAST COAST				
1612 *A 2288*	---S. pier, head.	52° 28.3′ N 1° 45.3′ E	**2 F.R.** (vert.)	26 **8**	1	Metal column; 13.	Traffic signals on E. arm of Yacht Basin: 3 FR (vert.), vessels may not proceed; 3 FGWG (vert.), vessels may proceed with instructions. Signals only visible from inside Yacht Basin.
1614 *A 2290.8*	-Lake Lothing.	52° 28.4′ N 1° 43.3′ E	**2 F.R.** (vert.)				
1616 *A 2292*	-Sladdens Pier, new jetty, head.	52° 28.3′ N 1° 45.3′ E	**2 F.G.** (vert.)				
1620 *A 2280*	**-Lowestoft.**	52° 29.2′ N 1° 45.5′ E	**Fl.W.** period 15s fl. 0.4s, ec. 14.6s	121 **37**	**23**	White tower; 52.	Partially obscured 347°-shore.
	GREAT YARMOUTH:						
	-Gorleston:						
1624 *A 2304*	--S. pier, head.	52° 34.3′ N 1° 44.4′ E	**Fl.R.** period 3s fl. 1s, ec. 2s	36 **11**	11	Red brick tower.	Visible 235°-340°. Tidal and traffic signals. **Horn:** 3 bl. ev. 60s.
1628 *A 2308*	--N. pier, near head.	52° 34.4′ N 1° 44.5′ E	**Q.G.**	26 **8**	6	Red metal framework mast; 23.	Visible 176°-078°.
1632 *A 2306*	--Range, front.	52° 34.3′ N 1° 44.1′ E	**Oc.W.** period 3s lt. 2s, ec. 1s	20 **6**	10	Column.	
1636 *A 2306.1*	---Rear, 35 meters 264° from front.	52° 34.3′ N 1° 44.1′ E	**Oc.W.** period 6s lt. 4s, ec. 2s	23 **7**	10	Red round brick tower; 69.	
			F.R.	66 **20**	6		Pilot's lookout.
1640 *A 2320*	-Wellington Pier, head.	52° 35.9′ N 1° 44.4′ E	**2 F.R.** (vert.)	26 **8**	3	Post; 13.	
1644 *A 2322*	-Jetty, head.	52° 36.1′ N 1° 44.5′ E	**2 F.R.** (vert.)	23 **7**	2	Metal column; 13.	
1648 *A 2324*	-Britannia Pier, head.	52° 36.5′ N 1° 44.6′ E	**2 F.R.** (vert.)	36 **11**	4	White metal column; 10.	
1650 *A 2325*	-North Scroby.	52° 40.1′ N 1° 47.3′ E	**Fl.(5)Y.** period 20s	33 **10**	5	Platform on mast; 164.	Fl.R. 3s marks top of mast.
1652 *A 2318*	-Marks outfall beacon.	52° 35.1′ N 1° 44.5′ E	**Q.R.**	16 **5**	2	Black and yellow triangular daymark, point up; 7.	
1654	Winterton Church Tower, RACON.	52° 42.9′ N 1° 41.2′ E	**T(–)**		10		
1656	*Cross Sand Buoy.*	52° 37.0′ N 1° 59.3′ E	**L.Fl.W.** period 10s		5	SAFE WATER RW, pillar, topmark.	
	RACON		**T(–)** period 30s		10		
1660 *A 2332*	*NEWARP LIGHTSHIP.*	52° 48.4′ N 1° 55.8′ E	**Fl.W.** period 10s fl. 0.2s, ec. 9.8s	39 **12**	**16**	Red hull with white letters ″Newarp″″, light tower amidships.	Shown 24 hours. **Nautophone:** 1 bl. ev. 20s
	RACON		**O(– – –)**		10		
1664	*Smiths Knoll Buoy.*	52° 43.5′ N 2° 18.0′ E	**Q.(6)+L.Fl.W.** period 15s			S. CARDINAL YB, pillar, topmark.	**Whistle.**
	RACON		**T(–)** period 30s		10		

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
			ENGLAND-EAST COAST				
1668 *A 2336*	Happisburgh.	52° 49.2′ N 1° 32.3′ E	**Fl.(3)W.** period 30s fl. 1s, ec. 1.5s fl. 1s, ec. 1.5s fl. 1s, ec. 24s	135 **41**	14	White tower, red bands; 85.	
1670	*North Haisbro Buoy.*	53° 00.2′ N 1° 32.4′ E	**Q.W.**			N. CARDINAL BY, pillar, topmark.	**Bell.**
	RACON		**T(–)**		10		
1676 *A 2342*	**Cromer.**	52° 55.5′ N 1° 19.1′ E	**Fl.W.** period 5s fl. 0.1s, ec. 4.9s	276 **84**	**21**	White octagonal tower; 59.	Visible 102°-307°. Shown 24 hours.
	RACON		**O(– – –)** period 60s fl. 20s, ec. 40s		**25**		
1680 *A 2344*	-Lifeboat house.	52° 56.0′ N 1° 18.2′ E	**2 F.R.** (vert.)	26 **8**	5	Gray and white wooden building; 39.	
1684 *A 2408*	*Dudgeon Buoy.*	53° 16.6′ N 1° 17.0′ E	**Q.(9)W.** period 9s			W. CARDINAL YBY, pillar, topmark.	**Whistle.**
	RACON		**O(– – –)** period 30s		10		
1688 *A 2346*	Sheringham.	52° 56.7′ N 1° 12.8′ E	**F.R.**	39 **12**	3	Red post; 7.	Fishing, shown until 2030.
1692	*North Well Buoy.*	53° 03.0′ N 0° 28.0′ E	**L.Fl.W.** period 10s			SAFE WATER RW, pillar, topmark.	**Whistle.**
	RACON		**T(–)** period 30s		10		
1700 *A 2362*	*ROARING MIDDLE LIGHTFLOAT.*	52° 58.5′ N 0° 21.0′ E	**L.Fl.W.** period 10s			SAFE WATER RW, hull with ``RM'''' on side, topmark.	
1720 *A 2379*	Kings Lynn Approach, Trial Bank Beacon.	52° 50.5′ N 0° 14.7′ E	**Fl.(2)W.** period 5s	43 **13**	3	Mast; 10.	
	HOLBEACH RANGE:						
1724 *A 2392*	-NW. head.	52° 53.0′ N 0° 06.7′ E	**Fl.R.** period 5s fl. 0.5s, ec. 4.5s			Flagstaff.	Occasional.
1728 *A 2394*	-SE. head.	52° 51.0′ N 0° 10.7′ E	**Fl.R.** period 5s fl. 0.5s, ec. 4.5s			Flagstaff.	Occasional.
1732 *A 2390*	-Old South Middle, No. ″4″.	52° 55.1′ N 0° 11.6′ E	**Fl.Y.** period 10s			Beacon.	
1736 *A 2391*	- -No. ″3″.	52° 54.9′ N 0° 09.9′ E	**Fl.Y.** period 5s			Beacon.	
	WITHAM RIVER ENTRANCE:						
1740 *A 2398*	-Tabs, head.	52° 56.0′ N 0° 05.0′ E	**Q.W.G.**	13 **4**	1	Red square on white mast; 33.	W. shore-251°, G.-shore. Tide gauge. **Radar reflector.**
1744 *A 2397*	-Beacon, N. side of entrance, Dollypeg.	52° 56.1′ N 0° 05.1′ E	**Q.G.**	13 **4**	1	Beacon, black triangular daymark, point up.	**Radar reflector.**
1748 *A 2400*	-New Cut Range, front.	52° 55.8′ N 0° 04.5′ E	**F.W.**	16 **5**	5	Mast; 7.	
1752 *A 2400.1*	- -Rear, 90 meters 240° from front.	52° 55.8′ N 0° 04.4′ E	**F.W.**	26 **8**	5	Mast; 7.	From Scalp Sand to Boston the river is marked by F.G. and F.R. range lights.

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
			ENGLAND-EAST COAST				
1756 *A 2410*	Boygrift Pumping Station.	53° 17.6′ N 0° 19.4′ E	**Fl.(2)W.** period 10s	39 **12**	5	ISOLATED DANGER BRB, tower, topmark; 33.	
1760 *A 2351*	*INNER DOWSING LIGHTSHIP.*	53° 19.5′ N 0° 34.0′ E	**Fl.W.** period 10s fl. 0.2s, ec. 9.8s	39 **12**	**15**	Red hull, light tower amidships.	**Horn:** 1 bl. ev. 60s (bl. 4s, si. 56s).
	RACON		**T(–)** period 60s		10		
1764 *A 2420*	**Dowsing Platform ″B1D".**	53° 33.7′ N 0° 52.7′ E	**Fl.(2)W.** period 10s fl. 1s, ec. 2s fl. 1s, ec. 6s	92 **28**	**22**		Mo.(U)R. 15s 3M shown from SE. and NW. corners. **Nautophone:** 2 bl. ev. 60s
	RACON		**T(–)** period 30s		10		
1766 *A 2421*	Ingoldmells Point.	53° 12.5′ N 0° 25.9′ E	**Fl.Y.** period 5s fl. 0.5s, ec. 4.5s	72 **22**	5	Lattice mast; 164.	**Horn:** Mo.(U) ev. 30s. **Radar reflector.**
1769 *A 7562.5*	Anglia Field Platform ″A 48/19-B", RACON.	53° 22.0′ N 1° 39.2′ E	**Q(– – • –)**		**15**		
1770 *A 7576.84*	**North Sea Range,** ″M1".	53° 44.8′ N 2° 33.5′ E	**Mo.(U)W.** period 15s		**15**	Radio tower.	F.R. obstruction light. **Horn:** Mo.(U) ev. 30s.
1770.1 *A 7576.86*	-″R1".	53° 56.0′ N 2° 24.0′ E	**Mo.(U)W.** period 15s		**15**	Radio tower.	F.R. obstruction light. **Horn:** Mo.(U) ev. 30s.
1770.2 *A 7576.88*	-″R2".	53° 55.8′ N 2° 51.0′ E	**Mo.(U)W.** period 15s		**15**	Radio tower.	F.R. obstruction light. **Horn:** Mo.(U) ev. 30s.
1770.3 *A 7576.9*	-″R3".	53° 38.5′ N 2° 56.8′ E	**Mo.(U)W.** period 15s		**15**	Radio tower.	F.R. obstruction light. **Horn:** Mo.(U) ev. 30s
1770.4 *A 7576.92*	-″R4".	53° 29.9′ N 2° 30.8′ E	**Mo.(U)W.** period 15s		**15**	Radio tower.	F.R. obstruction light. **Horn:** Mo.(U) ev. 30s
1770.5 *A 7576.94*	-″R5".	53° 42.0′ N 2° 08.5′ E	**Mo.(U)W.** period 15s		**15**	Radio tower.	F.R. obstruction light. **Horn:** Mo.(U) ev. 30s.
1771	Markham Field Platform ″J6-A", RACON.	53° 49.0′ N 2° 57.0′ E	**M(– –)**				Azimuth coverage 000°-180°.
1771.2	*Inger Nielson.*	54° 30.9′ N 2° 36.3′ E	**V.Q.(3)** period 5s			E. CARDINAL BYB, pillar, topmark.	
	-RACON		**D(– • •)** period 30s		10		
			ENGLAND-RIVER HUMBER APPROACHES				
1771.5	*Outer Sand Buoy.*	53° 36.4′ N 0° 29.6′ E	**Q.(3)W.** period 10s			E. CARDINAL BYB, topmark.	
	RACON		**O(– – –)** period 30s		10		(3 and 10 cm)
1771.7 *A 2421.45*	*HUMBER LIGHTFLOAT.*	53° 39.1′ N 0° 20.0′ E	**L.Fl.W.** period 10s		7	SAFE WATER RW, hull with ``HUMBER'''' on side, topmark.	**Horn:** 2 bl. ev. 30s.
	RACON		**T(—)**		7		
1772 *A 2422*	*SPURN LIGHTFLOAT.*	53° 33.5′ N 0° 14.3′ E	**Q.(3)W.** period 10s	33 **10**	8	E. CARDINAL BYB, topmark; 39.	F.W. riding light. **Horn:** 1 bl. ev. 20s.
	RACON		**M(– –)**		5		
1780 *A 2426*	-Spurn Point beacon.	53° 34.4′ N 0° 06.6′ E	**Fl.G.** period 3s fl. 0.5s, ec. 2.5s	36 **11**	5	Metal tripod, green triangular daymark, point up.	

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
			ENGLAND-RIVER HUMBER APPROACHES				
1784 *A 2427.2*	-Pilot jetty.	53° 34.6′ N 0° 06.6′ E	**2 F.G.** (vert.)				At each end.
1788 *A 2425*	*Tetney Buoy ″SBM″.*	53° 32.3′ N 0° 06.8′ E	**2 V.Q.Y.** (vert.)			Yellow.	Q.Y. on floating hose extending up to 290 meters from buoy. **Horn:** Mo.(A) ev. 60s.
1792 *A 2430*	*BULL LIGHTFLOAT.*	53° 33.6′ N 0° 04.7′ E	**V.Q.W.**	26 **8**	6	N. CARDINAL BY, hull with superstructure, topmark.	F.W. riding light. **Horn:** 2 bl. ev. 20s.
1796	*HAWKE LIGHTFLOAT.*	53° 34.5′ N 0° 05.6′ E	**V.Q.(3)W.** period 5s	16 **5**	5	E. CARDINAL BYB, hull with superstructure, topmark.	
1804 *A 2423*	*SOUTH EAST CHEQUER FLOAT.*	53° 33.4′ N 0° 12.6′ E	**V.Q.(6)+L.Fl.W.** period 10s	20 **6**	6	S. CARDINAL YB, topmark.	F.W. riding light. **Horn:** 1 bl. ev. 30s. **Radar reflector.**
1806	*CLEE NESS NO. ″4A″ LIGHTFLOAT.*	53° 35.0′ N 0° 01.8′ E	**Fl.(2)R.** period 10s			Red hull.	
1808 *A 2442*	Haile Sand Fort.	53° 32.1′ N 0° 02.1′ E	**Fl.R.** period 5s	69 **21**	3	Mast, on fort; 20.	
1816	*MIDDLE NO. ″7″ LIGHTFLOAT.*	53° 35.8′ N 0° 01.4′ W	**V.Q.(6)+L.Fl.W.** period 10s	16 **5**	5	S. CARDINAL YB, topmark.	**Horn:** 1 bl. ev. 20s.
1820	*LOWER BURCOM NO. ″6″ LIGHTFLOAT.*	53° 35.4′ N 0° 01.6′ W	**Fl.R.** period 4s	16 **5**	4	PORT (A) R, name in white on sides.	
	GRIMSBY:						
1824 *A 2450*	-Sewer outfall.	53° 34.8′ N 0° 03.1′ W	**2 F.R.** (vert.)	16 **5** 10 **3**	5	PORT (A) R, pile, topmark.	
1828 *A 2452*	-Fish dock, E. pier.	53° 35.0′ N 0° 03.7′ W	**Iso.R.** period 4s	33 **10**	1	Brown iron column; 23.	Sounded when vessels are entering docks. **Horn:** 1 bl. ev. 20s.
1832 *A 2454*	--Middle pier, head.	53° 34.9′ N 0° 03.8′ W	**Fl.Y.** period 2.5s	33 **10**	8	Brown wooden mast; 23.	Visible 048°-355°.
1836 *A 2456*	---W. pier.	53° 35.0′ N 0° 03.9′ W	**Iso.G.** period 4s	33 **10**	8	Brown wooden mast; 23.	Visible 034°-178°.
1840 *A 2460*	-Royal Dock, E. pier, head.	53° 35.1′ N 0° 03.9′ W	**Fl.(2)R.** period 6s fl. 1s, ec. 1s fl. 1s, ec. 3s	33 **10**	8	Dolphin; 23.	
1844 *A 2472*	--W. pier, head.	53° 35.1′ N 0° 04.0′ W	**Oc.G.** period 2s lt. 1.5s, ec. 0.5s	23 **7**	2	Brown metal column; 23.	**Bell:** 1 stroke ev. 10s.
1848 *A 2474*	---NW. elbow.	53° 35.1′ N 0° 04.1′ W	**Oc.G.** period 2s lt. 1.5s, ec. 0.5s	39 **12**	2	Brown metal column; 23.	F.R. lights on chimney 1.2 miles W.
1856 *A 2479*	Outfall pipe.	53° 36.0′ N 0° 07.4′ W	**2 F.R.** (vert.)	13 **4** 6 **2**		Red dolphin, square daymark.	
1864 *A 2481*	Stallingborough, jetty.	53° 37.1′ N 0° 09.4′ W	**2 F.R.** (vert.)	23 **7** 16 **5**		Master post; 16.	

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
			ENGLAND-RIVER HUMBER				
1868 *A 2483*	Outfall pipe.	53° 37.4′ N 0° 09.8′ W	**2 F.R.** (vert.)	13 **4** 7 **2**		Red beacon, square daymark.	
1870	*NO. ″10A″ LIGHTFLOAT.*	53° 37.5′ N 0° 08.6′ W	**Fl.(2)R.** period 6s	16 **5**	4	Red hull.	
	IMMINGHAM:						
1872 *A 2484*	-Humber oil terminal, SE., head.	53° 37.7′ N 0° 09.3′ W	**2 Q.R.** (vert.)	26 **8** 20 **6**	5	Dolphin.	Synchronized traffic signals on tower "B" 400 meters WNW. **Horn:** Mo.(N) ev. 30s.
1876 *A 2484.2*	- -Berth No. ″2", SE., head.	53° 37.8′ N 0° 09.7′ W	**2 F.R.** (vert.)	16 **5**	2		
1880 *A 2484.4*	- -Berth No. ″1", NW., head.	53° 37.9′ N 0° 10.1′ W	**2 F.R.** (vert.)	16 **5**	2		
1882 *A 2484.6*	- -″A1", NW., head.	53° 37.9′ N 0° 10.2′ W	**2 Q.R.** (vert.)	26 **8** 19 **6**	5	Dolphin.	**Horn:** Mo.(A) ev. 30s.
1888 *A 2487*	-E. jetty, head.	53° 37.8′ N 0° 10.7′ W	**2 F.R.** (vert.)	30 **9** 23 **7**	3	Red metal framework tower; 20.	**Horn:** 2 bl. ev. 120s.
1892 *A 2489*	-W. jetty, elbow.	53° 37.9′ N 0° 11.2′ W	**2 F.R.** (vert.)	26 **8** 20 **6**	3	Column; 30.	
1896 *A 2489.4*	- -No. ″1", W., head.	53° 38.1′ N 0° 11.5′ W	**2 F.R.** (vert.)		3	Dolphin.	**Horn:** 1 bl. ev. 25s.
1900 *A 2491*	-Bulk Terminal, SE. head.	53° 38.1′ N 0° 11.6′ W	**Iso. R.** period 2s			Dolphin.	
1904 *A 2491.6*	- -NW., head.	53° 38.4′ N 0° 11.9′ W	**2 F.R.** (vert.)				2 meters apart.
1908	*CLAY HUTS LIGHTFLOAT.*	53° 38.5′ N 0° 11.3′ W	**Iso.W.** period 2s	16 **5**	9	SAFE WATER RW, topmark.	
	SOUTH KILLINGHOLME:						
1909 *A 2496*	-LPG jetty, SE. head.	53° 38.7′ N 0° 12.2′ W	**2 Oc.R.** (vert.) period 5s	16 **5**			2 meters apart.
1909.5 *A 2496.4*	- -NE. head.	53° 38.7′ N 0° 12.3′ W	**2 Oc.R.** (vert.) period 5s	16 **5**			2 meters apart.
1910 *A 2496.6*	- -S. dolphin.	53° 38.6′ N 0° 12.2′ W	**2 F.R.** (vert.)	13 **4**		Dolphin.	2 meters apart. **Horn:** Mo.(G) 60s
1910.5 *A 2496.8*	- -N. dolphin.	53° 38.8′ N 0° 12.4′ W	**2 F.R.** (vert.)	13 **4**		Dolphin.	2 meters apart.
	KILLINGHOLME:						
1912 *A 2440*	-Range, front.	53° 38.8′ N 0° 12.9′ W	**Iso.R.** period 2s	33 **10**	14	White tower; 46.	Shown 24 hours. 2 F.R. (vert.) marks outfall 380 meters E.
1916 *A 2440.1*	- -Rear, 189 meters 292° from front.	53° 38.8′ N 0° 13.0′ W	**Oc.R.** period 4s	69 **21**	14	Red tower; 79.	Shown 24 hours.
1920 *A 2498*	-Oil jetty, head.	53° 38.9′ N 0° 12.4′ W	**2 Q.R.** (vert.)	23 **7** 16 **5**			2 at each end.

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
	ENGLAND-RIVER HUMBER						
1922 *A 2499.5*	--Sector.	53° 39.8′ N 0° 14.1′ W	**Oc.W.R.G.** period 6s	23 **7**			G. 201°-231°, W.-240°, R.-260°.
1924 *A 2501*	North Killingholme oil jetty, off S. head.	53° 39.9′ N 0° 13.8′ W	**2 F.R.** (vert.)	49 **15**	2	Dolphin.	**Horn:** 2 bl. ev. 30s.
1928 *A 2506*	Thorngumbald Clough Range, front.	53° 42.5′ N 0° 13.5′ W	**Oc.W.** period 2s lt. 1.5s, ec. 0.5s	26 **8**	9	White tower; 33.	Visible 130°-140°.
1932 *A 2508*	-Rear, 113 meters 135° from front.	53° 42.5′ N 0° 13.4′ W	**Oc.W.** period 2s	43 **13**	9	Red tower on metal framework structure; 49.	Visible 130°-140°. Synchronized with front.
1936	*NORTH HOLME LIGHTFLOAT NO. ″17″.*	53° 40.9′ N 0° 13.1′ W	**V.Q.(9)W.** period 10s			W. CARDINAL YBY, topmark.	
1940	*SAND END LIGHTFLOAT NO. ″16″.*	53° 42.5′ N 0° 14.4′ W	**Fl.R.** period 4s	16 **5**	3	PORT (A) R, name in white on sides.	
	SALT END:						
1944 *A 2516*	-Jetty No. ″1″, SE. head.	53° 43.6′ N 0° 14.8′ W	**2 F.G.** (vert.)	23 **7** 16 **5**	2	Metal post; 26.	
1946 *A 2515*	--Range, front.	53° 43.6′ N 0° 14.8′ W	**Oc.Y.** period 6s lt. 4.5s, ec. 1.5s	30 **9**		Beacon, yellow topmark.	Marks upstream limit of dredged approach. Occasional.
1946.1 *A 2515.1*	---Rear 18 meters 107° from front.	53° 43.6′ N 0° 14.8′ W	**Oc.Y.** period 6s lt. 4.5s, ec. 1.5s	39 **12**		Beacon, yellow daymark.	Synchronized with front.
1952 *A 2518*	--Jetty No. ″3″, branch, SE. head.	53° 43.5′ N 0° 14.6′ W	**2 F.G.** (vert.)	23 **7** 16 **5**	2	Metal mast; 26.	
1953 *A 2518.5*	---Dolphin.	53° 43.5′ N 0° 14.6′ W	**2 F.G.** (vert.)	19 **6**			2 meters apart.
1954 *A 2520*	---Range, front.	53° 43.5′ N 0° 14.6′ W	**Oc.Y.** period 4s lt. 3s, ec. 1s	30 **9**		Beacon, yellow topmark.	Marks downstream limit of dredged approach. Occasional.
1954.1 *A 2520.1*	----Rear 23 meters 000° from front.	53° 43.5′ N 0° 14.6′ W	**Oc.Y.** period 4s lt. 3s, ec. 1s	49 **15**		Beacon, yellow topmark.	Synchronized with front.
1957 *A 2530.2*	King George Dock Entrance, E. side.	53° 44.4′ N 0° 16.4′ W	**V.Q.Y.**			Yellow post.	**Bell:** 3 strokes ev. 10s. In line with Docking Signals 130 meters N. Marks E. side of dredged channel.
	ENGLAND-EAST COAST						
1960 *A 2580*	Bridlington, N. pier, head.	54° 04.8′ N 0° 11.2′ W	**Fl.W.** period 2s	39 **12**	9	Column; 30.	**Horn:** 1 bl. ev. 60s.
1964 *A 2582*	**Flamborough Head.**	54° 07.0′ N 0° 04.8′ W	**Fl.(4)W.** period 15s fl. 0.1s, ec. 2.2s fl. 0.1s, ec. 2.2s fl. 0.1s, ec. 2.2s fl. 0.1s, ec. 8s	213 **65**	**24**	White round tower; 89.	Storm signals. **Nautophone:** 2 bl. ev. 90s. **DGPS Station.**
1968 *A 2586*	Filey.	54° 12.6′ N 0° 17.0′ W	**F.R.**	102 **31**	1	Green metal column; 13.	Visible 272°-308°. Occasional (fishing). Storm signals.

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
			ENGLAND-EAST COAST				
	SCARBOROUGH:						
1972 *A 2590*	-W. pier, head.	54° 16.9′ N 0° 23.3′ W	**2 F.R.** (vert.)	16 **5**	4	Watch hut; 10.	
1976 *A 2592*	-Lighthouse Pier.	54° 16.9′ N 0° 23.3′ W	**Iso.W.** period 5s	56 **17**	9	White round tower; 49.	Visible 219°-039°. Shown during more than 12 ft. on bar. Tidal signals. Storm signals. **Diaphone:** 1 bl. ev. 60s. Occasional.
			F.Y.	26 **8**			Visible 233°-030°. Shown when there is from 6 to 12 ft. of water on the bar.
1980 *A 2588*	-E. pier, head.	54° 16.9′ N 0° 23.2′ W	**Q.G.**	26 **8**	3	Mast; 13.	
	WHITBY:						
1984 *A 2599*	-W. pier, head.	54° 29.6′ N 0° 36.7′ W	**F.G.**	46 **14**		Green wooden tower; 23.	**Horn:** 1 bl. ev. 30s. Sounded when vessels are expected. Occasional.
1988 *A 2598*	-E. pier, head.	54° 29.6′ N 0° 36.6′ W	**F.R.**	46 **14**	3	Red wooden tower; 23.	
1992 *A 2596*	**-Whitby High.**	54° 28.6′ N 0° 34.0′ W	**Iso.W.R.** period 10s	240 **73**	W. **18** R. **16**	White octagonal tower; 43.	R. 128°-143°, W.-319°.
	REDCAR:						
2000 *A 2616*	-Luff way on esplanade Range, front.	54° 37.1′ N 1° 03.6′ W	**F.R.**	26 **8**	7	Metal column; 16.	Visible 182°-212°.
2004 *A 2616.1*	- -Rear, 115 meters 197° from front.	54° 37.0′ N 1° 03.6′ W	**F.R.**	39 **12**	7	Metal column; 26.	Visible 182°-212°.
2008 *A 2620*	-Promenade Range, front.	54° 37.2′ N 1° 03.8′ W	**Oc.R.** period 2.5s lt. 1.5s, ec. 1s	30 **9**	7	Metal column; 16.	Visible 232°-262°.
2012 *A 2620.1*	- -Rear, 43 meters 247° from front.	54° 37.1′ N 1° 03.8′ W	**Oc.R.** period 2.5s lt. 1.5s, ec. 1s	36 **11**	7	Brick building; 26.	Visible 232°-262°.
	RIVER TEES:						
2016 *A 2626.5*	*-Fairway Buoy.*	54° 40.9′ N 1° 06.4′ W	**Iso.W.** period 4s			SAFE WATER RW, pillar, topmark.	**Horn:** 1 bl. ev. 5s.
	-RACON		**B(– • • •)** period 72s				
2020 *A 2626*	**-South Gare.**	54° 38.8′ N 1° 08.1′ W	**Fl.W.R.** period 12s fl. 1.5s, ec. 10.5s	53 **16**	W. **20** R. **17**	White round tower; 43.	W. 020°-274°, R.-357°, obsc.-020°. **Horn:** (73 meters from end of breakwater) 2 bl. ev. 30s. Signal station.
2024 *A 2627*	-Range, front.	54° 37.2′ N 1° 10.1′ W	**F.R.**	59 **18**	13	Red metal framework tower, white bands; 30.	
2028 *A 2627.1*	- -Rear, 560 meters 210°04′ from front.	54° 37.0′ N 1° 10.3′ W	**F.R.**	66 **20**	**16**	Metal framework tower.	
2029 *A 2634*	-No. ″13″.	54° 37.5′ N 1° 09.6′ W	**I.Q.G.**	23 **7**		Black and white checkered beacon.	**Bell:** 1 stroke ev. 15s.
2030 *A 2636*	-Jetty, N. head.	54° 36.6′ N 1° 09.1′ W	**2 F.R.** (vert.)				2 meters apart.

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
			ENGLAND-EAST COAST				
2031 *A 2636.2*	--S., head.	54° 36.6′ N 1° 09.2′ W	**2 F.R.** (vert.)				2 meters apart.
2032 *A 2644*	-Tees Dock, outer corner.	54° 36.3′ N 1° 09.4′ W	**2 F.R.** (vert.)	16 **5** 10 **3**			
2040 *A 2654*	-No. ″25″.	54° 35.3′ N 1° 11.3′ W	**Fl.G.** period 2s	13 **4**	3	Dolphin, white round daymark, black stripes; 7.	
2044 *A 2657*	-Ichaboe, jetty, head.	54° 34.9′ N 1° 12.2′ W	**2 F.G.** (vert.)	20 **6** 13 **4**			
	HARTLEPOOL:						
2052 *A 2664*	-Old, pier head.	54° 41.6′ N 1° 11.1′ W	**Fl.W.G.** period 3s	43 **13**	7	White wooden framework tower, red bands; 39.	W. 317°-325°, G.-317°.
2054 *A 2664.6*	--Middleton beacon.	54° 41.6′ N 1° 11.3′ W	**Fl.R.** period 3s	36 **11**	6	Metal tower.	
2055 *A 2664.85*	-Town Wall.	54° 41.8′ N 1° 11.3′ W	**2 F.G.** (vert.)				Traffic signals shown 40 meters SSE.
2056 *A 2663*	**-The Heugh.**	54° 41.8′ N 1° 10.5′ W	**Fl.(2)W.** period 10s fl. 0.2s, ec. 1.4s fl. 0.2s, ec. 8.2s	62 **19**	**19**	White metal tower; 43.	Shown 24 hours.
2057 *A 2666*	-324°53′.	54° 42.0′ N 1° 11.6′ W	**Dir.Iso.W.R.G.** period 3s	138 **42**		Metal tower.	G. 323°12′-324°24′, W.-325°24′, R.-326°36′.
2058 *A 2667*	-West Harbor, outer S. pier, head.	54° 41.3′ N 1° 11.6′ W	**Oc.R.** period 5s	39 **12**	2	Metal mast; 20.	
2059 *A 2667.2*	--Outer N. pier, head.	54° 41.3′ N 1° 11.5′ W	**Oc.G.** period 5s	39 **12**	2	White column; 20.	
2060 *A 2667.6*	--Inner N. pier, head.	54° 41.4′ N 1° 11.6′ W	**F.G.**	23 **7**	2	Metal mast; 13.	
2061 *A 2667.8*	--Middle pier, head.	54° 41.3′ N 1° 11.7′ W	**F.R.**	23 **7**	2	Metal mast; 13.	
2062 *A 2667.4*	--308°.	54° 41.4′ N 1° 11.8′ W	**Dir.Fl.W.R.G.** period 2s	20 **6**	3	On building.	G. 305°30′-307°, W.-309°, R.-310°30′.
2064 *A 2669*	-Pipe jetty, head.	54° 42.8′ N 1° 12.4′ W	**2 F.R.** (vert.)		1		**Bell:** 1 stroke ev. 15s.
	SEAHAM:						
2068 *A 2675*	-S. pier, head.	54° 50.2′ N 1° 19.2′ W	**2 F.R.** (vert.)	33 **10**	5	Red metal column; 23.	2 meters apart.
2072 *A 2674*	-N. breakwater, head.	54° 50.3′ N 1° 19.2′ W	**Fl.G.** period 10s fl. 1.2s, ec. 8.8s	39 **12**	5	White metal column, black bands; 33.	Frequently shows F.G. in bad weather. Sounded from 2½ hours before to 1½ hours after H.W. **Diaphone:** 1 bl. ev. 30s.
2076 *A 2676*	-Wave screen, head.	54° 50.2′ N 1° 19.4′ W	**3 F.R.**	16 **5**	2	Red metal column; 13.	In form of triangle. S. dock entrance, N. side F.G., S. side F.R. on white column (occas.).
	SUNDERLAND:						
2080 *A 2682*	-New S. pier, head.	54° 55.1′ N 1° 21.1′ W	**Fl.W.** period 10s fl. 0.5s, ec. 9.5s	46 **14**	10	White metal tower; 33.	

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
			ENGLAND-EAST COAST				
2084 *A 2681*	**-Roker Pier, head.**	54° 55.3′ N 1° 21.0′ W	**Fl.W.** period 5s fl. 0.2s, ec. 4.8s	82 **25**	**23**	White round tower, red bands, cupola; 75.	Visible 211°-357°. **Siren:** 1 bl. ev. 20s.
2092 *A 2686*	-Old N. pier, head.	54° 55.1′ N 1° 21.5′ W	**Q.G.**	39 **12**	8	Yellow metal tower; 26.	Traffic signals. **Horn:** 1 bl. ev. 10s.
2094 *A 2684*	-Old S. pier, head.	54° 55.0′ N 1° 21.6′ W	**Fl.R.** period 5s fl. 0.5s, ec. 4.5s	30 **9**	2	Red metal framework tower, red daymark.	
2095 *A 2690*	-N. dock basin.	54° 55.0′ N 1° 21.8′ W	**Fl.G.** period 5s			Beacon, green triangular daymark, point up.	
2096 *A 2692*	-N. Dock, E. pier, head.	54° 55.1′ N 1° 21.8′ W	**Fl.(2)G.** period 10s	16 **5**	2		
	RIVER TYNE:						
2104 *A 2700*	**-Tynemouth, head.**	55° 00.9′ N 1° 24.1′ W	**Fl.(3)W.** period 10s fl. 0.2s, ec. 2s fl. 0.2s, ec. 2s fl. 0.2s, ec. 5.4s	85 **26**	**26**	Gray round masonry tower, white lantern; 75.	**Horn:** 1 bl. ev. 10s.
2108 *A 2702*	-S. pier, head.	55° 00.7′ N 1° 24.0′ W	**Oc.W.R.G.** period 10s lt. 8s, ec. 2s	49 **15**	W. 13 R. 9 G. 8	Gray round stone tower, red and white lantern; 39.	W. 075°-161°, G.-179°, W.-255°, R.-075°. **Bell:** 1 stroke ev. 10s.
2112 *A 2702.5*	-Herd Groyne, 249°.	55° 00.5′ N 1° 25.3′ W	**Dir.Oc.R.G.** period 10s lt. 8s, ec. 2s	43 **13**	11	Red pile structure, red and white lantern; 49.	F.R. unintensified 080°-224°, G.-246°30′, R. 251°30′- 277°, obsc.-080°. **Bell:** 1 stroke ev. 5s.
			Dir.Oc.W. period 10s	46 **14**	**19**	Same structure.	W. 246°30′-251°30′. Synchronized. Range 5M by day.
	-North Shields:						
2116 *A 2708*	- -Beacon on No. ″1″ groyne.	55° 00.5′ N 1° 25.8′ W	**Fl.G.** period 5s	20 **6**	9	Green iron beacon; 14.	Signal station. **Radar reflector.**
2140 *A 2724*	-Bill Point, Naval Yard.	54° 57.8′ N 1° 32.2′ W	**Fl.(2)G.** period 10s	13 **4**	1	Beacon.	
2144 *A 2725*	-Bill Quay, St. Anthony Reach, S. bank.	54° 57.6′ N 1° 32.8′ W	**Fl.(2)R.** period 10s fl. 0.5s, ec. 1s fl. 0.5s, ec. 8s	20 **6**	3	Red metal framework tower; 16.	
2148 *A 2726*	-St. Anthony's Point, N. bank.	54° 57.6′ N 1° 33.1′ W	**Fl.G.** period 5s fl. 0.5s, ec. 4.5s	16 **5**	3	Green tower; 33.	
2152 *A 2727*	-Friars Goose, Felling Reach, S. bank.	54° 57.7′ N 1° 33.7′ W	**Fl.R.** period 5s fl. 0.5s, ec. 4.5s	18 **5**	1	Red pile structure with platform; 23.	Traffic signals 650 meters NW.
2156 *A 2728*	-St. Peters, N. bank.	54° 57.8′ N 1° 33.8′ W	**Fl.(3)G.** period 10s	20 **6**	3	Green pile structure with platform.	
2160 *A 2744*	Cullercoats Range, front.	55° 02.0′ N 1° 26.0′ W	**F.R.**	89 **27**	3	Post; 10.	
2164 *A 2744.1*	-Rear, 38 meters 256° from front.	55° 02.1′ N 1° 25.8′ W	**F.R.**	115 **35**	3	Column; 13.	
	BLYTH:						
2172 *A 2766*	-Range, front.	55° 07.4′ N 1° 29.8′ W	**F.Bu.**	35 **11**	10	Lattice tower, orange diamond daymark.	
2176 *A 2766.1*	- -Rear, 180 meters 324° from front.	55° 07.5′ N 1° 29.8′ W	**F.Bu.**	54 **16**	10	Lattice tower, orange diamond daymark.	

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
			ENGLAND-EAST COAST				
2180 *A 2754*	-E. pier, head.	55° 07.0′ N 1° 29.1′ W	**Fl.(4)W.** period 10s fl. 0.3s, ec. 1.3s fl. 0.3s, ec. 1.3s fl. 0.3s, ec. 1.3s fl. 0.3s, ec. 4.9s	62 **19**	**21**	White tower, gray lantern; 46.	**Horn:** 3 bl. ev. 30s.
			F.R.	44 **13**	13		Visible 152°-249°.
2184 *A 2760*	-W. pier, head.	55° 07.0′ N 1° 29.3′ W	**2 F.R.** (vert.)	23 **7**	8	White metal structure; 13.	
2188 *A 2762*	-Training wall, S. head.	55° 07.1′ N 1° 29.3′ W	**Fl.R.** period 6s fl. 1s, ec. 5s	20 **6**	1	Red steel structure on dolphin; 8.	
2192 *A 2763*	-W. side of channel within entrance.	55° 07.2′ N 1° 29.4′ W	**2 F.R.** (vert.)	17 **5** 11 **3**		Dolphin.	
2196 *A 2764*	-W. pier, N. head.	55° 07.3′ N 1° 29.6′ W	**2 Fl.(2)R.** (vert.) period 6s	16 **5**	5	White metal structure; 10.	
2200 *A 2770*	-Blyth Snook Range, front.	55° 07.7′ N 1° 29.8′ W	**F.Bu.**	15 **5**	5	White hexagonal tower; 12.	
2204 *A 2770.1*	- -Rear, 87 meters 338° from front.	55° 07.8′ N 1° 29.9′ W	**F.Bu.**	36 **11**	5	Mast, white triangular daymark, point up; 23.	
2208 *A 2775*	-Alcan Terminal, SE. head.	55° 07.8′ N 1° 30.0′ W	**2 F.G.** (vert.)	13 **4** 7 **2**	1 -		
2212 *A 2775.2*	- -NW. head.	55° 07.8′ N 1° 30.1′ W	**2 F.G.** (vert.)	13 **4** 7 **2**	1 -		
2216 *A 2775.5*	-Ro Ro pontoon, E. head.	55° 08.0′ N 1° 30.7′ W	**2 F.R.** (vert.)				
2224 *A 2776*	-W. coaling staiths, head.	55° 08.3′ N 1° 31.1′ W	**2 F.R.** (vert.)	26 **8**	5		
2226 *A 2778*	-Blyth Power Station Discharge.	55° 08.7′ N 1° 30.8′ W	**2 F.R.** (vert.)	10 **3**	2	Concrete platform on piles.	Visible 156°-336°.
2228 *A 2780*	**Coquet Island.**	55° 20.0′ N 1° 32.2′ W	**Fl.(3)W.R.** period 30s fl. 0.7s, ec. 1.8s fl. 0.7s, ec. 1.8s fl. 0.7s, ec. 24.3s	82 **25**	W. **23** R. **19**	White square tower, lower half gray, turreted; 72.	R. 330°-140°, W.-163°, R.-180°, W.-330°. **Horn:** 1 bl. ev. 30s.
2232 *A 2784*	Warkworth, S. breakwater, head.	55° 20.3′ N 1° 34.2′ W	**Fl.R.** period 5s	30 **9**	5	White round tower, red bands, white base; 28.	
2236 *A 2785*	-N. breakwater, head.	55° 20.4′ N 1° 34.1′ W	**Fl.G.** period 6s	39 **12**	6	Red and white metal framework tower; 26.	
	NORTH SUNDERLAND:						
2244 *A 2804*	-NW. pier, head.	55° 35.0′ N 1° 38.9′ W	**F.G.**	36 **11**	3	White tower; 26.	Visible 159°-294°. **Siren:** 1 bl. ev. 90s. Occasional.
2248 *A 2802*	-Breakwater, head.	55° 35.0′ N 1° 38.8′ W	**Fl.R.** period 2.5s fl. 0.2s, ec. 2.3s	19 **6**		Metal tripod.	
2252 *A 2810*	**Bamburgh.**	55° 37.0′ N 1° 43.5′ W	**Oc.(2)W.R.G.** period 8s lt. 1s, ec. 1s lt. 5s, ec. 1s	39 **12**	W. 14 R. 11 G. 11	White building; 29.	G. 122°-165°, W.-175°, R.-191°, W.-238°, R.-275°, W.-289°, G.-300°, obsc.-122°.

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
			ENGLAND-EAST COAST				
	FARNE ISLANDS:						
2256 *A 2812*	-Farne, near SW. point.	55° 36.9′ N 1° 39.2′ W	**Fl.(2)W.R.** period 15s fl. 1s, ec. 2s fl. 1s, ec. 11s	89 **27**	W. 10 R. 7	White round tower; 43.	R. 119°-280°, W.-119°.
2260 *A 2814*	**-Longstone.**	55° 38.6′ N 1° 36.5′ W	**Fl.W.** period 20s fl. 0.3s, ec. 19.7s	72 **22**	**24**	Red tower, white band; 85.	**Horn:** 2 bl. ev. 60s.
	HOLY ISLAND:						
2262 *A 2816*	-Holy Island Harbor, Old Law, E. beacon.	55° 39.5′ N 1° 47.5′ W	**Oc.W.R.G.** period 6s lt. 4s, ec. 2s	29 **9**	4	Stone obelisk; 69.	G. 182°-262°, W.-264°, R.-shore.
2263 *A 2816.5*	- -Heugh.	55° 40.1′ N 1° 47.9′ W	**Oc.W.R.G.** period 6s lt. 4s, ec. 2s	79 **24**	5	Framework tower, black triangular daymark, point up; 26.	G. 135°-308°, W.-311°, R.-shore.
2264 *A 2818*	Berwick Upon Tweed, breakwater, head.	55° 46.0′ N 1° 59.0′ W	**Fl.W.** period 5s fl. 0.5s, ec. 4.5s	49 **15**	10	White round stone tower, red cupola and base; 43.	Visible E. of Seal Carr ledges to shore. Visible from inside harbor.
			F.G.	26 **8**	1		
2268 *A 2819*	-Breakwater, root.	55° 46.0′ N 1° 59.4′ W	**2 F.G.** (vert.)	7 **2**			
2272 *A 2820*	-Near root.	55° 45.9′ N 1° 59.5′ W	**Q.G.**	13 **4**	1	White column; 10.	
2276 *A 2824*	-Tweed Dock, S. pier, head.	55° 45.9′ N 2° 00.2′ W	**2 F.R.** (vert.)	10 **3**			
2280 *A 2823*	-Carr Rock jetty.	55° 45.7′ N 2° 00.0′ W	**2 F.R.** (vert.)				
2284 *A 2822*	-Spittal Range, front.	55° 45.7′ N 1° 59.7′ W	**F.R.**	13 **4**		Orange mast, black bands, white triangular daymark, point up; 13.	
2288 *A 2822.1*	- -Rear, 55 meters 207° from front.	55° 45.7′ N 1° 59.4′ W	**F.R.**	30 **9**		Orange mast, black bands, white triangular daymark, point up; 39.	

Section 3

East and North Coasts of Scotland
Including Orkney and Shetland Islands

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
			SCOTLAND-EAST COAST				
2292 *A 2834*	Burnmouth Range, front.	55° 50.6′ N 2° 04.1′ W	**F.R.**	95 **29**	4	White post; 7.	
2296 *A 2836*	-Rear, 45 meters from front.	55° 50.6′ N 2° 04.1′ W	**F.R.**	115 **35**	4	White post; 7.	
2300 *A 2840*	Eyemouth Range, front.	55° 52.5′ N 2° 05.2′ W	**F.G.**	30 **9**	6	Orange column; 13.	Tide gauge.
2304 *A 2840.1*	-Rear, 55 meters 174° from front.	55° 52.5′ N 2° 05.2′ W	**F.G.**	33 **10**	6	Orange column; 20.	
2308 *A 2841*	-E. breakwater, head.	55° 52.5′ N 2° 05.2′ W	**Iso.R.** period 2s	26 **8**	8	White mast; 16.	
2312 *A 2846*	St. Abbs Range, front.	55° 53.9′ N 2° 07.6′ W	**F.R.**	13 **4**	1	Post; 7.	
2316 *A 2846.1*	-Rear.	55° 53.9′ N 2° 07.6′ W	**F.R.**	26 **8**	1	Mast; 16.	
2320 *A 2850*	**St. Abbs Head.**	55° 55.0′ N 2° 08.2′ W	**Fl.W.** period 10s fl. 0.3s, ec. 9.7s	223 **68**	**26**	White tower and building; 30.	
	RACON		**T(–)**		**18**		
2324 *A 2852*	Torness Power Station, breakwater, head.	55° 58.4′ N 2° 24.3′ W	**Fl.R.** period 5s fl. 0.5s, ec. 4.5s	33 **10**	5	Concrete column; 7.	
2328 *A 2854*	Barns Ness.	55° 59.2′ N 2° 26.6′ W	**Iso.W.** period 4s	118 **36**	10	White tower; 121.	
	DUNBAR:						
2332 *A 2860*	-Victoria Harbor, middle quay.	56° 00.3′ N 2° 31.0′ W	**Q.R.**	20 **6**	3	Column; 16.	
2336 *A 2856*	-Bayswell Hill Range, front.	56° 00.3′ N 2° 31.0′ W	**Oc.G.** period 6s lt. 5s, ec. 1s	49 **15**	3	Orange column, white triangular daymark, point up; 13.	Intensified 188°-208°.
2340 *A 2856.1*	- -Rear 198° from front.	56° 00.2′ N 2° 31.1′ W	**Oc.G.** period 6s	72 **22**	3	Orange column, white triangular daymark, point down; 13.	Synchronized with front. Intensified 188°-208°.
	FIRTH OF FORTH:						
2344 *A 2864*	-Bass Rock.	56° 04.6′ N 2° 38.3′ W	**Fl.(3)W.** period 20s fl. 0.5s, ec. 2s fl. 0.5s, ec. 2s fl. 0.5s, ec. 14.5s	151 **46**	10	White tower; 66.	Visible 241°-107°.
2348 *A 2866*	-North Berwick, N. pier, head.	56° 03.7′ N 2° 42.9′ W	**F.W.R.**	23 **7**	3	Post; 10.	R. seaward, W. over harbor. Extinguished when vessels cannot enter.
2352 *A 2868*	**-Fidra Island.**	56° 04.4′ N 2° 47.0′ W	**Fl.(4)W.** period 30s fl. 0.7s, ec. 2s fl. 0.7s, ec. 2s fl. 0.7s, ec. 2s fl. 0.7s, ec. 21.2s	112 **34**	**24**	White brick tower; 56.	Obscured by Bass Rock, Craig Leight and Lamb Island.

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
			SCOTLAND-EAST COAST				
2356 *A 2872*	-Port Seton, E. pier, head.	55° 58.4′ N 2° 57.1′ W	**Iso.W.R.** period 4s	34 **10**	W. 9 R. 6	White tower; 20.	R. shore-105°, W.-225°, R.-shore. **Bell:** sounded when vessels are expected
2360 *A 2874*	-Cockenzie, jetty, head.	55° 58.2′ N 2° 58.4′ W	**Q.R.**	20 **6**	1	Lantern.	
2364 *A 2878*	-Fisherrow, E. pier, head.	55° 56.8′ N 3° 04.0′ W	**Oc.W.** period 6s lt. 4s, ec. 2s	16 **5**	6	Metal structure; 10.	
	-Leith:						
2368 *A 2884*	- -E. breakwater, head.	55° 59.5′ N 3° 10.8′ W	**Iso.R.** period 4s	23 **7**	9	Red structure, concrete base; 13.	**Horn:** 3 bl. ev. 30s.
2372 *A 2885.5*	- -W. breakwater, head.	55° 59.3′ N 3° 11.0′ W	**L.Fl.G.** period 6s fl. 2s, ec. 4s			White lantern on breakwater handrail.	
2374 *A 2887*	- -Entrance jetty.	55° 59.5′ N 3° 10.9′ W	**L.Fl.R.** period 6s fl. 2s, ec. 4s			Dolphin.	
2376 *A 2888*	-West pier, head.	55° 59.0′ N 3° 10.5′ W	**Fl.R.** period 2s fl. 0.3s, ec. 1.7s	10 **3**		On pier deck.	Q.R. and Q.G. lights on dolphins 300 meters N mark basin entrance.
	-Granton:						
2380 *A 2904*	- -E. breakwater, head.	55° 59.3′ N 3° 13.2′ W	**Fl.R.** period 2s	18 **5**	6	White square brick building.	
2388 *A 2912*	**-Inchkeith.**	56° 02.0′ N 3° 08.1′ W	**Fl.W.** period 15s fl. 0.4s, ec. 14.6s	220 **67**	**22**	Stone tower; 62.	**Horn:** (Stell Point) 1 bl. ev. 15s.
2390 *A 2915*	-Hawkcraig Point Range, front.	56° 03.0′ N 3° 17.0′ W	**Iso.W.** period 5s	39 **12**	14	White tower, red band; 13.	Visible 282°-302°.
2390.1 *A 2915.1*	-Rear, 96 meters 292° from front.	56° 03.0′ N 3° 17.1′ W	**Iso.W.** period 5s	52 **16**	14	White tower; 26.	Visible 282°-302°.
2392 *A 2916*	-Oxcars, on rock.	56° 01.4′ N 3° 16.7′ W	**Fl.(2)W.R.** period 7s fl. 0.5s, ec. 1s fl. 0.5s, ec. 5s	52 **16**	W. 13 R. 12	White tower, red band; 72.	W. 072°-087°, R.-196°, W.-313°, R.-072°. **Radar reflector.**
2393 *A 2915.4*	**-Braefoot Bay Terminal Range, front.**	56° 02.2′ N 3° 18.6′ W	**Fl.W.** period 3s	20 **6**	**15**	White post, on dolphin, triangular daymark, point up; 7.	Visible 237°12′-257°12′. 2 F.G. (vert.) mark 4 berthing and 4 mooring dolphins.
2394 *A 2915.41*	-Rear, 88 meters 247°15′ from front.	56° 02.1′ N 3° 18.7′ W	**Fl.W.** period 3s	40 **12**	**15**	White post, on gangway, triangular daymark, point down; 7.	Visible 237°12′-257°12′. Synchronized with front.
2395 *A 2915.5*	-Range, front.	56° 02.1′ N 3° 18.8′ W	**Fl.W.** period 2s **2 F.G.** (vert.)			Pole, on dolphin, triangular daymark, point up.	Shown for vessels using terminal.
2395.1 *A 2915.51*	- -Rear, 200 meters 017°35′ from front.	56° 02.2′ N 3° 18.7′ W	**Oc.W.** period 5s lt. 3s, ec. 2s			Post, triangular daymark, point down.	Shown for vessels using terminal. Q.Y. (occas.) 50 meters WSW. shown for tanker movements.
	-Inverkeithing:						
2396 *A 3018*	- -St. David's Beacon, 098°.	56° 01.4′ N 3° 22.2′ W	**Dir.Fl.G.** period 5s fl. 0.2s, ec. 4.8s	10 **3**	7	Pile, orange square daymark.	
2408 *A 2916.5*	-Inchcolm E. point.	56° 01.7′ N 3° 17.7′ W	**Fl.(3)W.** period 15s	66 **20**	10	Gray metal framework tower 33.	Partially obscured by shore 075°-145°30′. **Horn:** 3 bl. ev. 45s.
2409 *A 2917.1*	-N. front.	56° 01.8′ N 3° 18.2′ W	**Q.W.**	23 **7**	7	White tower; 7.	Visible 062°30′-082°30′ Synchronized with S. front.

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
			SCOTLAND-EAST COAST				
2409.1 *A 2916.9*	-S. front.	56° 01.8′ N 3° 18.2′ W	**Q.W.**	23 **7**	7	White tower; 7.	Visible 062°30′-082°30′.
2409.2 *A 2917*	--Inchcolm W., common rear, 80 meters 076°45′ from N. front, 84 meters 066° from S. front.	56° 01.8′ N 3° 18.1′ W	**Iso.W.** period 5s	36 **11**	7	White tower; 7.	Visible 062°30′-082°30′.
2412 *A 2920*	-Inch Garvie.	56° 00.1′ N 3° 23.3′ W	**L.Fl.W.** period 5s fl. 2s, ec. 3s	30 **9**	11	Black round beacon, white lantern; 33.	
2416 *A 2922*	-Forth Railway Bridge.	56° 00.0′ N 3° 23.0′ W	**4 F.W., 8 F.R.**	157 **48**	5	Floodlit.	F.W. lights mark centers of spans on each side of bridge; F.R. lights near ends of cantilevers indicate N. and S. navigable channels.
2420 *A 2934*	-Port Edgar, W. breakwater, head, 244°.	55° 59.9′ N 3° 24.7′ W	**Dir.Fl.R.** period 4s fl. 1.3s, ec. 2.7s	13 **4**	8	White tower; 13.	Q.Y. lights mark breakwater, two 2 F.R. (vert.) lights mark N. ends of marina pontoons inside harbor.
2424 *A 2938*	-Beamer rock.	56° 00.3′ N 3° 24.7′ W	**Fl.W.** period 3s fl. 0.3s, ec. 2.7s	20 **6**	9	White tower, red top.	
2428 *A 2942*	-Rosyth, jetty, S. arm.	56° 01.1′ N 3° 26.5′ W	**L.Fl.(2)W.R.** period 12s fl. 2s, ec. 2s fl. 2s, ec. 6s	16 **5**	W. 9 R. 6	Brick hut; 13.	R. 280°-010°, W.-280°. 3 Q.Y. shown along south arm jetty when dock in use. 4 F.R. lights on tower 230 meters WNW.
2432 *A 2940*	-Rosyth Dockyard Main Channel, Beacon ″A", 323°30′.	56° 01.2′ N 3° 25.5′ W	**Dir.Oc.W.R.G.** period 9s lt. 6s, ec. 3s	23 **7**	4	White, red and black beacon, red square daymark.	G. 318°-321°, W.-326°, R.-328°. Shown 24 hours.
2436 *A 2941*	--Beacon ″C", 115°.	56° 00.6′ N 3° 24.2′ W	**Dir.Oc.W.R.G.** period 6s lt. 4s, ec. 2s	23 **7**	4	White beacon, red bands, white triangular beacon, point down.	R. 110°-113°, W.-116°30′, G.-120°. Shown 24 hours.
2440 *A 2941.5*	---Beacon ″E", 295°.	56° 01.3′ N 3° 26.8′ W	**Dir.Oc.W.** period 6s lt. 4s, ec. 2s	36 **11**	4	Floodlighting mast.	Visible 293°30′-296°30′.
2444 *A 2945*	-Middle jetty, head.	56° 01.3′ N 3° 26.6′ W	**F.G.R.G.** (vert.)	23 **7**		Foot of framework tower. Floodlit.	2.5 meters apart.
2448 *A 2947*	-"P" jetty, S. head.	56° 01.4′ N 3° 26.5′ W	**F.G.R.G.** (vert.)	23 **7**		Foot of framework tower. Floodlit.	
2452 *A 2949*	-Charlestown Range, front.	56° 02.2′ N 3° 30.6′ W	**F.G.**	13 **4**	10	Yellow pile, yellow triangular daymark, point up; 20.	Visible 017°-037°.
2456 *A 2949.1*	--Rear.	56° 02.3′ N 3° 30.6′ W	**F.G.**	19 **6**	10	Yellow pile, yellow triangular daymark, point down; 16.	Visible 017°-037°.
2460 *A 2951*	-Crombie Jetty, downstream dolphin.	56° 01.9′ N 3° 31.7′ W	**2 F.G.** (vert.)	26 **8**	4	Column; 17.	2 meters apart.
2464 *A 2951.5*	--Upstream dolphin.	56° 02.0′ N 3° 32.0′ W	**2 F.G.** (vert.)	26 **8**	4	Column; 17.	2 meters apart. **Horn:** (80 meters ESE.) 2 bl. ev. 60s.
2466 *A 2954*	-Bo'ness, Carriden Outfall.	56° 01.3′ N 3° 33.6′ W	**Fl.Y.** period 5s			Yellow pile beacon, yellow rectangular daymark.	
2468 *A 2956*	-Torry.	56° 02.5′ N 3° 35.2′ W	**Fl.G.** period 10s fl. 0.8s, ec. 9.2s	16 **5**	7	Green round structure.	
2472 *A 2960*	-Grangemouth No. ″1".	56° 02.2′ N 3° 37.9′ W	**Fl.(3)R.** period 20s fl. 0.8s, ec. 1.2s fl. 0.8s, ec. 1.2s fl. 0.8s, ec. 15.2s	13 **4**	6	Pile, red daymark.	
2480 *A 2962*	--No. ″3".	56° 02.3′ N 3° 39.1′ W	**Fl.R.** period 5s fl. 0.9s, ec. 4.1s	13 **4**	6	Pile, red daymark.	

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			SCOTLAND-EAST COAST				
2488 *A 2964*	--No. ″5".	56° 02.3′ N 3° 39.8′ W	**Fl.R.** period 2s fl. 0.5s, ec. 1.5s	13 **4**	5	Pile, red daymark.	
2489 *A 2968*	--Dock entrance, E. jetty.	56° 02.2′ N 3° 40.7′ W					Docking signals shown from lock entrance. **Horn:** 1 bl. ev. 30s.
2490	-*No. ″7″ Buoy,* RACON.	56° 02.8′ N 3° 10.8′ W	**T(–)** period 60s				Frequency coverage 9300-9500 MHz.
2492 *A 2978*	-Longannet Point.	56° 02.8′ N 3° 40.9′ W	**L.Fl.G.** period 10s fl. 4s, ec. 6s	16 **5**	6		
	-Burntisland:						
2496 *A 3028*	--Outer E. pier, head.	56° 03.2′ N 3° 14.1′ W	**Fl.(2)G.** period 6s	23 **7**	5	Mast; 16.	
2500 *A 3032*	--Inner E. pier, head.	56° 03.3′ N 3° 14.2′ W	**2 F.G.** (vert.)	20 **6** 16 **5**	5	White tower; 23.	
2504 *A 3030*	--W. pier, inner head.	56° 03.3′ N 3° 14.2′ W	**2 F.R.** (vert.)	13 **4**	5	White post.	
2508 *A 3026*	--W. pier, outer head.	56° 03.2′ N 3° 14.2′ W	**Fl.(2)R.** period 6s	23 **7**		White tower; 20.	
	-Kirkcaldy:						
2512 *A 3036*	--E. pier, head.	56° 06.8′ N 3° 08.8′ W	**Fl.W.G.** period 10s fl. 0.5s, ec. 9.5s	39 **12**	8	Column; 23.	W. 336°-156°, G.-336°.
	-Methil:						
2532 *A 3050*	--Outer pier, head.	56° 10.8′ N 3° 00.4′ W	**Oc.G.** period 6s lt. 4s, ec. 2s	26 **8**	5	White tower; 26.	Visible 280°-100°.
2536 *A 3052*	--Entrance to No. ″2″ Dock, W. side.	56° 10.9′ N 3° 00.4′ W	**2 F.R.** (vert.)	20 **6** 13 **4**		Mast; 13.	
2540 *A 3054*	---E. side.	56° 10.9′ N 3° 00.4′ W	**2 F.G.** (vert.)	20 **6** 13 **4**		Mast; 13.	
2544 *A 3049*	--Water intake tower.	56° 11.2′ N 2° 59.6′ W	**Q.G.**	23 **7**	3		
2548 *A 3048*	--Beacon, sewer outfall.	56° 11.2′ N 2° 59.6′ W	**Fl.W.** period 3s	22 **7**		Yellow beacon, lower part black, triangular daymark, point up.	
2552 *A 3060*	**-Elie Ness.**	56° 11.0′ N 2° 48.6′ W	**Fl.W.** period 6s fl. 0.2s, ec. 5.8s	49 **15**	**18**	White tower; 36.	
	-St. Monance:						
2556 *A 3064*	--Breakwater, head.	56° 12.2′ N 2° 45.9′ W	**Oc.W.R.G.** period 6s lt. 4.5s, ec. 1.5s	16 **5**	W. 7 R. 4 G. 4		G. 282°-355°, W.-026°, R.-038°.
2560 *A 3066*	--E. pier, head.	56° 12.2′ N 2° 45.8′ W	**2 F.G.** (vert.)	20 **6**	4	Orange tripod; 10.	**Bell:** Sounded when local fishing vessels are expected to return.
2564 *A 3068*	--W. pier.	56° 12.2′ N 2° 45.9′ W	**2 F.R.** (vert.)	20 **6**	4	Post on parapet; 13.	

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
			SCOTLAND-EAST COAST				
	-Pitteweem:						
2568 *A 3070*	--Middle pier Range, front.	56° 12.7′ N 2° 43.5′ W	**F.R.**	13 **4**	5	White column, orange stripe; 10.	
2572 *A 3070.1*	--Inner end, rear, 037° from front.	56° 12.7′ N 2° 43.5′ W	**F.R.**	26 **8**	5	White column, orange stripe; 33.	
2576 *A 3073*	--E. breakwater.	56° 12.6′ N 2° 43.7′ W	**Fl.(2)R.G.** period 5s	30 **9**	R. 9 G. 6	Metal column on masonry base; 23.	R. 265°-345°, G.-055°.
2580 *A 3073.2*	-Beacon Rock.	56° 12.7′ N 2° 43.6′ W	**Q.R.**	10 **3**	2	Mast.	**Horn:** (on pier elbow) 1 bl. ev. 90s.
	-Anstruther:						
2584 *A 3080*	--E. pier No. ″2″.	56° 13.3′ N 2° 41.5′ W	**Fl.G.** period 3s	20 **6**	4	Red column; 20.	
2588 *A 3078*	--W. pier No. ″1″.	56° 13.2′ N 2° 41.7′ W	**2 F.R.** (vert.)	16 **5**	4	Gray metal post; 30.	Sounded when fishing boats are expected. **Horn:** 3 bl. ev. 60s. Sounded when fishing boats are expected. Occasional.
2592 *A 3082*	--Inner end of E. pier range, front.	56° 13.3′ N 2° 41.7′ W	**F.G.**	23 **7**	4	White mast; 20.	
2596 *A 3084*	---Rear, 38 meters from front.	56° 13.3′ N 2° 41.5′ W	**F.G.**	36 **11**	4	White mast; 26.	
2600 *A 3090*	**-Isle of May.**	56° 11.2′ N 2° 33.3′ W	**Fl.(2)W.** period 15s fl. 0.3s, ec. 1.6s fl. 0.3s, ec. 12.8s	240 **73**	**22**	Square tower with stone building; 78.	
2604 *A 3100*	-Crail Range, front.	56° 15.5′ N 2° 37.7′ W	**F.R.**	79 **24**	6	Stone beacon; 16.	Not shown when harbor is closed.
2608 *A 3100.1*	--Rear, 30 meters 295° from front.	56° 15.5′ N 2° 37.7′ W	**F.R.**	98 **30**	6	Stone beacon; 16.	
2612 *A 3102*	**-Fife Ness.**	56° 16.7′ N 2° 35.1′ W	**Iso.W.R.** period 10s	39 **12**	W. **21** R. **20**	White building; 16.	W. 143°-197°, R.-217°, W.-023°.
2616 *A 3108*	**-Bell Rock.**	56° 26.1′ N 2° 23.1′ W	**Fl.W.** period 5s	92 **28**	**18**	White tower; 118.	
	-RACON		**M(– –)** period 72s		**18**		
2620 *A 3142*	**Tayport High.**	56° 27.2′ N 2° 53.9′ W	**Dir.Iso.W.R.G.** period 3s	79 **24**	W. **22** R. **17** G. **16**	White tower; 75.	G. 267°-268°, W.-270°, R.-271°. Dir. Lt. 269°.
2624 *A 3129*	Tentsmuir Point.	56° 26.6′ N 2° 49.5′ W	**Fl.Y.** period 5s fl. 1s, ec. 4s			Yellow beacon, diamond daymark.	Visible 198°-208°.
2626 *A 3126*	*Abertay Buoy.*	56° 27.4′ N 2° 40.6′ W	**Q.(3)W.** period 10s			E. CARDINAL BYB, pillar.	
	RACON		**T(–)**		8		
2628 *A 3129.5*	Barry Sands, Monifieth.	56° 28.9′ N 2° 47.8′ W	**Fl.Y.** period 5s fl. 1s, ec. 4s			Yellow beacon, diamond daymark.	Visible 018°-028°. Marks gas pipeline.
2632 *A 3216*	Arbroath, E. pier, S. elbow.	56° 33.2′ N 2° 34.9′ W	**Fl.G.** period 3s	26 **8**	5	White tower; 30.	F.R. exhibited when harbor is closed. Fishing. **Siren:** 3 bl. ev. 60s.
2633 *A 3212*	-Range, front.	56° 33.3′ N 2° 35.1′ W	**F.R.**	23 **7**	5	White column; 13.	
2634 *A 3212.1*	--Rear, 50 meters 299°15′ from front.	56° 33.3′ N 2° 35.1′ W	**F.R.**	42 **13**	5	White column; 30.	

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
			SCOTLAND-EAST COAST				
2636 *A 3220*	**Scurdie Ness.**	56° 42.1′ N 2° 26.1′ W	**Fl.(3)W.** period 20s fl. 0.5s, ec. 2s fl. 0.5s, ec. 2s fl. 0.5s, ec. 14.5s	125 **38**	**23**	White tower; 128.	
	RACON		**T(–)**		**15**		
2640 *A 3222*	Montrose Range, front.	56° 42.2′ N 2° 27.3′ W	**F.R.**	36 **11**	5	White twin pillars, red bands; 33.	
2644 *A 3222.1*	-Rear, N. side of entrance, 272 meters 271°31′ from front.	56° 42.2′ N 2° 27.6′ W	**F.R.**	59 **18**	5	White tower, red cupola; 62.	
2648 *A 3223*	Montrose inner Range, front.	56° 42.1′ N 2° 28.1′ W	**F.G.**	69 **21**	5	Metal tower, orange triangular daymark, point up; 66.	
2652 *A 3223.1*	-Rear, 180 meters 264°58′ from front.	56° 42.1′ N 2° 28.3′ W	**F.G.**	108 **33**	5	Metal tower, orange triangular daymark, point down; 105.	
2656 *A 3226*	Johnshaven Range, front.	56° 47.6′ N 2° 19.9′ W	**F.R.**	16 **5**		Red structure; 7.	
2660 *A 3226.1*	-Rear, 85 meters 316° from front.	56° 47.6′ N 2° 19.9′ W	**F.G.**	66 **20**		Green structure; 10.	Shows R. when unsafe to enter harbor.
2664 *A 3228*	Gourdon Range, front.	56° 49.6′ N 2° 17.1′ W	**F.R.**	16 **5**	5	White tower; 16.	Shows G. when unsafe to enter harbor. Storm signals. Fishing. **Siren:** 2 bl. ev. 60s.
2668 *A 3228.1*	-Rear, 120 meters 358° from front.	56° 49.8′ N 2° 17.1′ W	**F.R.**	100 **30**	5	White tower; 20.	
2672 *A 3229*	-W. pier No. ″1″.	56° 49.6′ N 2° 17.2′ W	**Fl.W.R.G.** period 3s fl. 1s, ec. 2s	16 **5**	W. 9 R. 7 G. 7	Metal column; 3.	G. 180°-344°, W.-354°, R.-180°.
2676 *A 3230*	-E. pier, head.	56° 49.6′ N 2° 17.1′ W	**Q.W.**	10 **3**	7	Metal column; 3.	
2680 *A 3234*	**Tod Head Point.**	56° 53.0′ N 2° 12.8′ W	**Fl.(4)W.** period 30s fl. 0.2s, ec. 2.3s fl. 0.2s, ec. 2.3s fl. 0.2s, ec. 2.3s fl. 0.2s, ec. 22.3s	135 **41**	**18**	White tower.	
	STONEHAVEN:						
2684 *A 3238*	-Outer breakwater, head.	56° 57.6′ N 2° 11.9′ W	**Iso.W.R.G.** period 4s	23 **7**	W. 11 R. 7 G. 8	Post; 7.	G. 214°-246°, W.-268°, R.-280°.
2688 *A 3240*	-Inner side of harbor Range, front.	56° 57.6′ N 2° 12.2′ W	**F.W.**	20 **6**	5	Mast; 16.	For use inside harbor only.
2692 *A 3240.1*	- -Rear, 10 meters 273° from front.	56° 57.6′ N 2° 12.2′ W	**F.R.**	25 **8**	5	Lantern on building; 23.	
2696 *A 3246*	**Girdle Ness.**	57° 08.3′ N 2° 02.8′ W	**Fl.(2)W.** period 20s fl. 0.5s, ec. 2s fl. 0.5s, ec. 17s	184 **56**	**22**	White tower; 121.	Obscured by Greg Ness when bearing more than about 020°. **DGPS Station.**
	RACON		**G(– – •)**		**25**		
	ABERDEEN:						
2700 *A 3252*	-N. pier, head.	57° 08.8′ N 2° 03.6′ W	**Oc.W.R.** period 6s lt. 4s, ec. 2s	36 **11**	9	White tower; 30.	W. 145°-055°, R.-145°. **Bell:** 3 strokes ev. 12s.
			F.Y.	33 **10**		Same tower.	Visible 136°-336°. Shown in fog.

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
			SCOTLAND-EAST COAST				
2704 *A 3250*	-S. breakwater, head.	57° 08.7′ N 2° 03.2′ W	**Fl.(3)R.** period 8s	72 **22**	7	White tower.	
2708 *A 3253*	-Old S. breakwater.	57° 08.6′ N 2° 03.6′ W	**Q.R.**	10 **3**	2	Truncated concrete pillar.	
2710	*Aberdeen Fairway Buoy,* RACON.	57° 09.3′ N 2° 01.9′ W	**T(–)** period 70s		7		
2712 *A 3254*	-Abercromby jetty, head.	57° 08.6′ N 2° 04.1′ W	**Oc.G.** period 4s lt. 3s, ec. 1s	17 **5**	4	STARBOARD (A) G, column, topmark.	Visible 230°-080°.
2716 *A 3256*	-S. jetty, head.	57° 08.5′ N 2° 04.0′ W	**Q.R.**	17 **5**	4	PORT (A) R, column, topmark.	Visible 063°-243°.
2720 *A 3258*	-Torry Range, front.	57° 08.4′ N 2° 04.4′ W	**F.R.** or **F.G.**	46 **14**	5	White tower; 43.	Visible 195°-279°. Shows R. when entrance is safe and G. when it is unsafe.
2724 *A 3258.1*	- -Rear, 205 meters 235°45′ from front.	57° 08.3′ N 2° 04.6′ W	**F.R.**	62 **19**	5	White tower; 47.	Visible 195°-279°.
2728 *A 3264*	-Lower jetty, head.	57° 08.5′ N 2° 04.2′ W	**Q.G.**	10 **3**	1	STARBOARD (A) G, column, topmark.	
2736 *A 3274*	Don River, S. entrance point.	57° 10.4′ N 2° 04.6′ W	**Fl.W.** period 3s fl. 0.5s, ec. 2.5s	52 **16**	5	White tower.	
2740 *A 3280*	**Buchan Ness.**	57° 28.2′ N 1° 46.3′ W	**Fl.W.** period 5s fl. 0.3s, ec. 4.7s	131 **40**	**28**	White round tower, red band; 115.	
	RACON		**O(---)**		14		Azimuth coverage 155-045°.
	PETERHEAD:						
2744 *A 3284*	-S. breakwater, head.	57° 29.8′ N 1° 46.4′ W	**Fl.(2)R.** period 12s fl. 1s, ec. 1s fl. 1s, ec. 9s	78 **24**	7	White metal tower, black base; 56.	
2748 *A 3286*	-N. breakwater, head.	57° 29.9′ N 1° 46.3′ W	**Iso.R.G.** period 6s	62 **19**	11	White metal tripod; 33.	R. 171°-236°, G. elsewhere. **Horn:** 1 bl. ev. 30s.
2752 *A 3282*	-Kirktown Range, front.	57° 30.2′ N 1° 47.1′ W	**F.R.**	43 **13**	8	Orange mast, white triangular daymark, point up.	
2756 *A 3282.1*	- -Rear, 91 meters 314° from front.	57° 30.2′ N 1° 47.1′ W	**F.R.**	56 **17**	8	Orange mast, white triangular daymark, point down.	
2760 *A 3291*	- -W. pier, elbow.	57° 30.2′ N 1° 46.3′ W	**Q.R.**	23 **7**	2	Stone tower; 16.	Visible 000°-070°. Traffic signals.
2776 *A 3304*	**Rattray Head.**	57° 36.6′ N 1° 48.9′ W	**Fl.(3)W.** period 30s fl. 0.7s, ec. 2s fl. 0.7s, ec. 2s fl. 0.7s, ec. 23.9s	92 **28**	**24**	White tower, lower part granite, upper brick; 112.	R. lights on masts.
	RACON		**M(– –)**		**15**		
2784 *A 3308*	Cairnbulg Briggs.	57° 41.1′ N 1° 56.4′ W	**Fl.(2)W.** period 10s fl. 0.5s, ec. 1.5s fl. 0.5s, ec. 7.5s	30 **9**	6	Beacon; 26.	
	FRASERBURGH:						
2788 *A 3312*	-Balaclava, breakwater, head.	57° 41.5′ N 1° 59.6′ W	**Fl.(2)G.** period 8s fl. 0.7s, ec. 1.3s fl. 0.7s, ec. 5.3s	85 **26**	6	Green copper dome on stone tower; 69.	Visible 178°-326°. **Siren:** 1 bl. ev. 20s. When fishing vessels at sea.

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
			SCOTLAND-EAST COAST				
2792 *A 3312.2*	-Spur, head.	57° 41.5′ N 1° 59.7′ W	**Fl.G.** period 6s fl. 0.3s, ec. 5.7s	16 **5**	5	White metal post; 6.	
2796 *A 3314*	-S. breakwater, head.	57° 41.5′ N 1° 59.7′ W	**Fl.R.** period 6s fl. 0.3s, ec. 5.7s	13 **4**	5	Metal post; 10.	Docking signals 130 meters W. and 220 meters NW.
2800 *A 3316*	-Middle jetty Range, front.	57° 41.6′ N 2° 00.0′ W	**Q.R.**	40 **12**	5	White mast, red bands; 29.	
2804 *A 3316.1*	- -Rear, N. pier, root, 75 meters 291° from front.	57° 41.6′ N 2° 00.0′ W	**Oc.R.** period 6s lt. 4.5s, ec. 1.5s	56 **17**	5	Metal mast; 36.	
2808 *A 3332*	**Kinnairds Head.**	57° 41.9′ N 2° 00.1′ W	**Fl.W.** period 5s fl. 0.3s, ec. 4.7s	82 **25**	**22**	White tower; 33.	Visible 092°-297°.
	BANNFF BAY:						
2812 *A 3348*	-Macduff pier, head.	57° 40.3′ N 2° 29.9′ W	**Fl.(2)W.R.G.** period 6s fl. 1s, ec. 1s fl. 1s, ec. 3s	39 **12**	W. 9 R. 7	White tower; 36.	G. shore-115°, W.-174°, R.-210°. **Horn:** 2 bl. ev. 20s.
2816 *A 3350*	-Range, front.	57° 40.3′ N 2° 29.9′ W	**F.R.**	144 **44**	3	Orange triangular daymark on roof of building.	
2820 *A 3350.1*	- -Rear, 60 meters 127° from front.	57° 40.3′ N 2° 29.9′ W	**F.R.**	180 **55**	3	Mast, orange triangular daymark.	
2824 *A 3364*	Whitehills, pier, head.	57° 40.8′ N 2° 34.8′ W	**Fl.W.R.** period 3s	23 **7**	W. 9 R. 6	White tower; 10.	R. 132°-212°, W.-245°, obsc.-132°.
2828 *A 3368*	Portsoy Range, front.	57° 41.0′ N 2° 41.0′ W	**F.W.**	40 **12**	5	Tower; 10.	
2832 *A 3368.1*	-Rear, on hill, 160° from front.	57° 41.2′ N 2° 41.3′ W	**F.R.**	56 **17**	5	Mast; 13.	
	BUCKIE:						
2836 *A 3391*	-W. Muck.	57° 41.1′ N 2° 57.9′ W	**Q.R.**	16 **5**	7	Tripod; 16.	
2840 *A 3394*	-N. breakwater, 60 meters from head.	57° 40.9′ N 2° 57.5′ W	**Oc.R.** period 10s lt. 7s, ec. 3s	49 **15**	**15**	White tower; 50.	Reserve light F.W.
2844 *A 3394.1*	**- -Cliff Terrace.**	57° 40.7′ N 2° 57.3′ W	**Iso.W.G.** period 2s	66 **20**	W. **16** G. 12	White column; 33.	G. 090°-110°, W.-225°.
2848 *A 3392*	-N. breakwater, head.	57° 40.9′ N 2° 57.6′ W	**2 F.R.** (vert.)	23 **7**	11	Red column; 16.	3 F.R. (vert.) shown when harbor closed.
2856 *A 3408*	Lossiemouth, S. pier, head.	57° 43.4′ N 3° 16.7′ W	**Fl.R.** period 6s	36 **11**	5	Mast; 36.	4 F.R. (occas.) range lights shown from middle jetty. Entrance and storm signals. **Siren:** 1 bl. ev. 60s.
2860 *A 3414*	**Covesea Skerries.**	57° 43.5′ N 3° 20.2′ W	**Fl.W.R.** period 20s fl. 0.5s, ec. 19.5s	161 **49**	W. **24** R. **20**	White tower; 118.	W. 076°-267°, R.-282°.
	HOPEMAN:						
2864 *A 3416*	-S. pier, head.	57° 42.7′ N 3° 26.2′ W	**Oc.G.** period 4s	26 **8**	4	Mast; 21.	Shown from Aug. 1 to Apr. 30. F.R. lights are shown from 4 radio masts 1.5 miles eastward.
2868 *A 3418*	-Elbow of N. quay Range, front.	57° 42.7′ N 3° 26.1′ W	**F.R.**	10 **3**			Shown from Aug. 1 to Apr. 30.

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
			SCOTLAND-EAST COAST				
2872 *A 3418.1*	--Rear, 10 meters 081° from front.	57° 42.7′ N 3° 26.1′ W	**F.R.**	13 **4**		Post; 6.	Shown from Aug. 1 to April 30.
	BURGHEAD:						
2876 *A 3424*	-N. pier, head.	57° 42.1′ N 3° 30.0′ W	**Oc.W.** period 8s	23 **7**	5	Concrete tower; 19.	
2880 *A 3426*	-Timber spur, head.	57° 42.1′ N 3° 29.9′ W	**Q.R.**	10 **3**	5	Concrete structure; 10.	Visible from SW. only.
2884 *A 3428*	-S. pier, NW. corner.	57° 42.1′ N 3° 29.8′ W	**Q.G.**	10 **3**	5	Wooden structure; 10.	Visible from SW. only.
2892 *A 3436*	Nairn, E. pier, head.	57° 35.6′ N 3° 51.5′ W	**Oc.W.R.G.** period 4s lt. 3s, ec. 1s	20 **6**	5	Octagonal concrete structure; 17.	G. shore-100°, W.-207°, R.-shore.
2896 *A 3434*	-W. pier, head.	57° 35.6′ N 3° 51.5′ W	**Q.G.**	16 **5**	1	Gray post.	
	FIRTH OF INVERNESS:						
2900 *A 3440*	**-Chanonry.**	57° 34.5′ N 4° 05.4′ W	**Oc.W.** period 6s	40 **12**	**15**	White tower; 42.	Visible 148°-073°.
2908 *A 3442*	-Avoch, breakwater, head.	57° 34.0′ N 4° 09.8′ W	**2 F.R.** (vert.)	23 **7** 16 **5**	5	Concrete column.	Occasional.
2912 *A 3444*	-Inverness.	57° 30.0′ N 4° 13.2′ W	**Fl.W.R.** period 2s fl. 0.2s, ec. 1.8s	23 **7**	W. 5 R. 4	Red conical metal beacon; 16.	W. 078°-258°, R.-078°.
2916 *A 3446*	-Craigton Point.	57° 30.1′ N 4° 14.0′ W	**Fl.W.R.G.** period 4s fl. 0.7s, ec. 3.3s	19 **6**	W. 11 R. 7 G. 7	White beacon; 19.	W. 312°-048°, R.-064°, W.-085°, G.-shore.
	-RACON		**K(– • –)**		6		On beacon marking center of bridge 330 meters ESE.
	-Inverness:						
2920 *A 3448*	--On breakwater, W. side of river entrance.	57° 29.7′ N 4° 14.2′ W	**Fl.G.** period 2s fl. 0.5s, ec. 1.5s	27 **8**	4	Green frame tower; 13.	
2922 *A 3447.7*	--Inner Beacon.	57° 29.7′ N 4° 14.0′ W	**Q.R.**	10 **3**	4		
2924 *A 3449*	--Turning Beacon.	57° 29.6′ N 4° 14.1′ W	**Fl.R.** period 3s	23 **7**	6		
2928 *A 3454*	--Thornbush wharf, N. head.	57° 29.4′ N 4° 14.2′ W	**Q.G.**	19 **6**	4	Column.	
2932 *A 3457*	--New quay, N. head.	57° 29.3′ N 4° 13.8′ W	**Q.R.**	16 **5**	3	Column.	
2936 *A 3460*	--Training wall, head.	57° 29.2′ N 4° 13.7′ W	**Q.G.**	16 **5**	4	Black metal post, white bands; 29.	
2938	*Fairway Buoy.*	57° 40.0′ N 3° 54.1′ W	**L.Fl.W.** period 10s			SAFE WATER RW, spherical.	
	RACON		**M(– –)** period 75s		5		
2940 *A 3490*	**-Cromarty.**	57° 41.0′ N 4° 02.1′ W	**Oc.W.R.** period 10s lt. 8s, ec. 2s	59 **18**	W. **15** R. 11	White tower; 42.	R. 079°-088°, W.-275°, obsc.-079°. F.R. on mast 3.3 miles SSW.
2944 *A 3492*	-Nigg Ferry, jetty, SE. corner.	57° 41.5′ N 4° 01.2′ W	**2 F.G.** (vert.)	19 **6**	2	Metal structure; 13.	

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			SCOTLAND-EAST COAST				
2948 *A 3492.2*	- -SW. corner.	57° 41.5′ N 4° 01.2′ W	**2 F.G.** (vert.)	19 **6**	2	Metal structure; 13.	
2952 *A 3493*	-Nigg Oil terminal, jetty, head.	57° 41.6′ N 4° 02.5′ W	**Oc.G.** period 5s lt. 4s, ec. 1s	102 **31**	5	Gray tower; 89.	
2956 *A 3493.2*	- -E., head.	57° 41.6′ N 4° 02.3′ W	**2 F.G.** (vert.)	29 **9** 23 **7**	4	Gray post on dolphin; 16.	
2960 *A 3493.3*	- -W., head.	57° 41.6′ N 4° 02.7′ W	**2 F.G.** (vert.)	29 **9** 23 **7**	4	Gray post on dolphin; 16.	
2964 *A 3498*	-Central Dockyard pier.	57° 41.2′ N 4° 09.6′ W	**Fl.(3)G.** period 10s	50 **15**	4		
2968 *A 3498.2*	- -Off E. head.	57° 41.2′ N 4° 09.5′ W	**2 F.G.** (vert.)			Dolphin.	
2972 *A 3498.4*	- -Off W. head.	57° 41.2′ N 4° 09.7′ W	**2 F.G.** (vert.)			Dolphin.	
2976 *A 3499*	-BNOC Quay, SE. corner.	57° 41.1′ N 4° 10.0′ W	**Iso.G.** period 4s	29 **9**	6	Gray mast; 23.	
2980 *A 3499.2*	- -SW. Corner.	57° 41.1′ N 4° 10.4′ W	**Oc.G.** period 8s	30 **9**	6		
2982 *A 3503*	-Balintore Harbor.	57° 45.3′ N 3° 54.5′ W	**Fl.G.** period 5s fl. 0.5s, ec. 4.5s	16 **5**	5	Metal pole; 3.	End of jetty.
2984 *A 3506*	**Tarbat Ness.**	57° 51.9′ N 3° 46.5′ W	**Fl.(4)W.** period 30s fl. 0.7s, ec. 2.1s fl. 0.7s, ec. 2.1s fl. 0.7s, ec. 2.1s fl. 0.7s, ec. 20.9s	174 **53**	**24**	White tower, two red bands; 135.	
	RACON		**T(–)** period 70s		14		
2985 *A 3508*	-Portmahomack pier, head.	57° 50.2′ N 3° 49.7′ W	**2 F.R.** (vert.)	23 **7**	5	Gray column.	2 meters apart.
2988 *A 3522*	Lybster, S. pier, head.	58° 17.8′ N 3° 17.1′ W	**Oc.R.** period 6s	33 **10**	3	White tower.	Occasional.
2992 *A 3521*	Ben-a-chielt AVIATION LIGHT.	58° 19.8′ N 3° 22.8′ W	**5 F.R.** (vert.)	1470 **448** 443 **135** 357 **109** 311 **95** 265 **81**		Radio mast.	Obstruction light.
2996 *A 3524*	**Clythness.**	58° 18.7′ N 3° 12.6′ W	**Fl.(2)W.** period 30s fl. 0.4s, ec. 2.1s fl. 0.4s, ec. 27.1s	148 **45**	**16**	White tower, red band; 42.	
	WICK:						
3000 *A 3528*	-S. pier, head.	58° 26.4′ N 3° 04.6′ W	**Fl.W.R.G.** period 3s fl. 0.5s, ec. 2.5s	39 **12**	W. 12 R. 9 G. 9	White octagonal tower; 36.	G. 253°-270°, W.-286°, R.-329°. During fishing season. **Bell:** 2 quick strokes ev. 10s. During fishing season.
3002 *A 3527*	-288°30′.	58° 26.6′ N 3° 05.2′ W	**Dir.Iso.W.R.G.** period 4s	30 **9**	W. 10 R. 7 G. 7	Metal column on N. end of bridge; 23.	G. 283°30′-287°12′, W.-289°42′, R.-293°30′.

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
			SCOTLAND-EAST COAST				
3004 *A 3534*	-Near root of S. pier Range, front.	58° 26.3′ N 3° 04.9′ W	**F.R.**	16 **5**		Mast; 10.	
3008 *A 3534.1*	- -Rear, 20 meters 234° from front.	58° 26.3′ N 3° 04.9′ W	**F.R.**	26 **8**		Lantern on building; 19.	
3012 *A 3544*	**Noss Head.**	58° 28.8′ N 3° 03.0′ W	**Fl.W.R.** period 20s fl. 0.5s, ec. 19.5s	174 **53**	W. **25** R. **21**	White stone tower; 59.	R. shore-191°, W.-shore.
			SCOTLAND-NORTH COAST				
3016 *A 3558*	**Duncansby Head.**	58° 38.7′ N 3° 01.5′ W	**Fl.W.** period 12s fl. 0.3s, ec. 11.7s	220 **67**	**22**	White tower; 36.	
	RACON		**T(–)**		**16**		(3 & 10cm)
3020 *A 3562*	**Pentland Skerries.**	58° 41.4′ N 2° 55.4′ W	**Fl.(3)W.** period 30s fl. 0.4s, ec. 5.6s fl. 0.4s, ec. 5.6s fl. 0.4s, ec. 17.6s	171 **52**	**23**	White tower; 118.	**Fog detector light** U.Q.W. visible 165°. **Horn:** (30 meters S. at old lighthouse) 1 bl. ev. 45s (bl. 4.5s, si. 40.5s).
3024 *A 3564*	Lother Rock.	58° 43.8′ N 2° 58.6′ W	**Q.W.**	42 **13**	6	Framework structure; 39.	
	RACON		**M(– –)**		10		
3028 *A 3565*	South Ronaldsay, Burwick, breakwater, head.	58° 44.4′ N 2° 58.2′ W	**2 F.R.** (vert.)	27 **8**	5	Metal mast; 16.	2 meters apart.
3032 *A 3568*	**Swilkie Point.**	58° 41.8′ N 3° 07.0′ W	**Fl.(2)W.** period 20s fl. 0.3s, ec. 3.6s fl. 0.3s, ec. 15.8s	105 **32**	**26**	White tower; 75.	**Horn:** 2 bl. ev. 60s.
	STROMA:						
3036 *A 3570*	-Inner sound John O'Groats pier, head.	58° 38.8′ N 3° 04.1′ W	**Fl.R.** period 3s fl. 0.4s, ec. 2.6s	13 **4**	2	White post.	**Radar reflector.**
3040 *A 3574*	**Dunnet Head.**	58° 40.3′ N 3° 22.5′ W	**Fl.(4)W.** period 30s fl. 0.7s, ec. 2s fl. 0.7s, ec. 2s fl. 0.7s, ec. 2s fl. 0.7s, ec. 21.2s	344 **105**	**23**	White stone tower.	
3044 *A 3578*	**Holburn.**	58° 36.9′ N 3° 32.4′ W	**Fl.W.R.** period 10s fl. 1s, ec. 9s	75 **23**	W. **15** R. 11	White tower; 56.	W. 198°-358°, R.-shore.
3048 *A 3590*	**Strathy Point.**	58° 36.0′ N 4° 01.0′ W	**Fl.W.** period 20s fl. 0.3s, ec. 19.7s	148 **45**	**26**	White low tower on white dwelling; 46.	
3052 *A 3580*	Thurso.	58° 36.0′ N 3° 31.0′ W	**Q.G.**	16 **5**	4	Green post; 10.	Shown from Sept. 1 to Apr. 30.
3056 *A 3582*	-Range, front.	58° 35.9′ N 3° 30.7′ W	**F.G.**	16 **5**	4	Gray post; 10.	
3060 *A 3582.1*	- -Rear, 195° from front.	58° 35.9′ N 3° 30.7′ W	**F.G.**	19 **6**	4	Gray mast; 16.	
3064 *A 3584*	Scrabster Harbor, E. pier, head.	58° 36.7′ N 3° 32.7′ W	**2 F.G.** (vert.)	19 **6**	4	White post; 10.	Shown from Aug. 1 to May 31.
3066 *A 3583.5*	- -Layover Quay, head.	58° 36.6′ N 3° 32.7′ W	**Q.R.**	19 **6**	4	Metal post; 10.	
3068 *A 3583*	-Outer pier.	58° 36.6′ N 3° 32.5′ W	**Q.G.**	19 **6**	4	Post.	

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
			SCOTLAND-NORTH COAST				
3072 *A 3586*	-W. pier, head.	58° 36.7′ N 3° 32.7′ W	**2 F.R.** (vert.)	19 **6**	4	Gray mast; 10.	Shown from Aug. 1 to May 31.
			SCOTLAND-ORKNEY ISLANDS				
3074 *A 8235*	Foinhaven Oilfield, Storage Tanker ″204/04", RACON	60° 19.0′ N 4° 16.4′ W	**X(– • • –)**				
3076 *A 3566*	Swona.	58° 44.2′ N 3° 04.1′ W	**Fl.W.** period 8s fl. 0.4s, ec. 7.6s	56 **17**	9	White concrete column.	Obscured 210°-261°.
3080 *A 3566.4*	-N. head.	58° 45.1′ N 3° 03.0′ W	**Fl.(3)W.** period 10s fl. 0.5s, ec. 1s fl. 0.5s, ec. 1s fl. 0.5s, ec. 6.5s	52 **16**	10	Column; 6.	
3084 *A 3600*	Tor Ness.	58° 46.7′ N 3° 17.6′ W	**Fl.W.** period 3s fl. 0.3s, ec. 2.7s	69 **21**	10	White tower; 26.	
3088 *A 3602*	**Cantick Head.**	58° 47.2′ N 3° 07.8′ W	**Fl.W.** period 20s fl. 0.4s, ec. 19.6s	115 **35**	**18**	White tower; 72.	Storm signals.
	SCAPA FLOW AND APPROACHES:						
3092 *A 3604*	-Ruff Reef, end of reef, off Cantick Head.	58° 47.5′ N 3° 07.8′ W	**Fl.(2)W.** period 10s fl. 0.5s, ec. 1.5s fl. 0.5s, ec. 7.5s	33 **10**	6	Black beacon; 33.	
3096 *A 3606*	-Long Hope, South Ness pier, head.	58° 48.1′ N 3° 12.2′ W	**Fl.W.R.G.** period 3s fl. 0.7s, ec. 2.3s	19 **6**	W. 7 R. 5 G. 5	White building; 16.	G. 082°-242°, W.-252°, R.-082°.
3100 *A 3610*	-Hoxa Head.	58° 49.3′ N 3° 02.0′ W	**Fl.W.R.** period 3s fl. 0.3s, ec. 2.7s	49 **15**	W. 9 R. 6	White metal framework tower; 23.	W. 026°-163°, R.-201°, W.-215°.
3104 *A 3610.2*	-Stanger Head.	58° 49.0′ N 3° 04.6′ W	**Fl.R.** period 5s fl. 0.2s, ec. 4.8s	82 **25**	8	Column; 6.	
3108 *A 3610.4*	-Roan Head.	58° 50.8′ N 3° 03.8′ W	**Fl.(2)R.** period 6s fl. 0.5s, ec. 1s fl. 0.5s, ec. 4s	39 **12**	7	White pillar; 6.	
3112 *A 3610.6*	-Nevi Skerry.	58° 50.7′ N 3° 02.6′ W	**Fl.(2)W.** period 6s	23 **7**	6	ISOLATED DANGER BRB, beacon, topmark; 29.	
3116 *A 3610.8*	-Calf of Flotta.	58° 51.3′ N 3° 03.9′ W	**Q.R.**	26 **8**	4	Column.	
3120 *A 3610.9*	-Flotta Marine Terminal, jetty No. ″1", ″T", E. head.	58° 50.7′ N 3° 06.8′ W	**2 F.R.** (vert.)	33 **10** 26 **8**	3		
3124 *A 3610.92*	- -″T", W. head.	58° 50.7′ N 3° 06.9′ W	**2 F.R.** (vert.)	33 **10** 26 **8**	3		
3128 *A 3610.94*	- -E. dolphin.	58° 50.8′ N 3° 06.7′ W	**Q.R.**	26 **8**	3		
3132 *A 3610.96*	- -W. dolphin.	58° 50.7′ N 3° 07.1′ W	**Q.R.**	26 **8**	3		
3136 *A 3611*	-Single Point Mooring Tower No. ″1".	58° 52.2′ N 3° 07.3′ W	**Fl.Y.** period 5s	39 **12**	3		**Horn:** Mo.(A) ev. 60s.

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
			SCOTLAND-ORKNEY ISLANDS				
3140 *A 3611.2*	--No. ″2″.	58° 52.3′ N 3° 05.8′ W	**Fl.(4)Y.** period 15s	39 **12**	3		**Horn:** Mo.(N) ev. 60s.
3144 *A 3612*	-Gibraltar pier.	58° 50.3′ N 3° 07.8′ W	**2 F.G.** (vert.)	23 **7**	3	Metal post.	
3146 *A 3612.5*	-Sutherland pier.	58° 50.2′ N 3° 07.9′ W	**Q.G.**	26 **8**	3	Mast; 19.	
	-St. Margaret's Hope:						
3148 *A 3615*	--Pier, head.	58° 49.9′ N 2° 57.5′ W	**2 F.G.** (vert.)	19 **6** 13 **4**	2	Post; 16.	
3152 *A 3616*	--In village Range, front.	58° 49.6′ N 2° 57.5′ W	**F.R.**	23 **7**		Post.	
3156 *A 3616.1*	---Rear, 180 meters 196° from front.	58° 49.5′ N 2° 57.6′ W	**F.R.**	36 **11**		Post.	
3160 *A 3614*	--Needle Point.	58° 50.1′ N 2° 57.3′ W	**Fl.G.** period 3s fl. 0.3s, ec. 2.7s	19 **6**	3	Post, diamond daymark.	
3164 *A 3626*	-Rose Ness.	58° 52.4′ N 2° 49.9′ W	**Fl.W.** period 6s fl. 0.5s, ec. 5.5s	79 **24**	8	White beacon; 26.	
3168 *A 3632*	-Scapa.	58° 57.4′ N 2° 58.3′ W	**Fl.G.** period 3s fl. 0.5s, ec. 2.5s	19 **6**	8	White mast; 16.	
3172 *A 3635*	-Barrel of Butter.	58° 53.4′ N 3° 07.5′ W	**Fl.(2)W.** period 10s fl. 1s, ec. 2s fl. 1s, ec. 6s	19 **6**	7	Gray metal platform on round masonry tower.	
3176 *A 3636*	-Cava, on The Calf.	58° 53.2′ N 3° 10.6′ W	**Fl.W.R.** period 3s fl. 0.3s, ec. 2.7s	36 **11**	W. 10 R. 8	White round tower; 29.	W. 351°-143°, R.-196°, W.-251°, R.-271°, W.-298°, obsc.-351°.
3180 *A 3640*	-Houton Range, front.	58° 55.0′ N 3° 11.5′ W	**Fl.G.** period 3s fl. 1s, ec. 2s	26 **8**		White pole with black bands, red triangular daymark, point up; 19.	Visible 312°-320°.
3184 *A 3640.1*	--Rear, 200 meters 316°02′ from front.	58° 55.1′ N 3° 11.6′ W	**F.G.**	52 **16**		White pole, black bands, red triangular daymark, point up; 16.	Visible 312°-320°.
3188 *A 3641*	-Houton Bay pier.	58° 55.1′ N 3° 11.0′ W	**2 F.R.** (vert.)	16 **5** 10 **3**	4	Mast; 13.	
3192 *A 3642*	-RoRo Terminal.	58° 55.0′ N 3° 11.0′ W	**Iso.R.** period 4s	23 **7**	5	Metal mast; 16.	
	-Hoy Sound:						
3196 *A 3644*	**--Graemsay Island Range,** front.	58° 56.5′ N 3° 18.4′ W	**Iso.W.** period 3s	56 **17**	**15**	White tower; 39.	Visible 070°-255°. When within ½ mile of shore on range line, rear light disappears below foreground.
3200 *A 3644.1*	---Rear, NE. point of island 2.2 km. 104° from front.	58° 56.2′ N 3° 16.3′ W	**Oc.W.R.** period 8s lt. 6s, ec. 2s	115 **35**	W. **20** R. **16**	White tower; 108.	R. 097°-112°, W.-163°, R.-178°, W.-332°.
3204 *A 3650*	--Skerry of Ness.	58° 57.0′ N 3° 17.7′ W	**Fl.W.G.** period 4s fl. 1s, ec. 3s	23 **7**	W. 7 G. 4	Platform on white concrete column; 33.	W. shore-090°, G.-shore.
	-Stromness:						
3208 *A 3662*	--N. pier, head.	58° 57.8′ N 3° 17.6′ W	**Fl.R.** period 3s fl. 0.5s, ec. 2.5s	26 **8**	5	Metal mast; 16.	

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
			SCOTLAND-ORKNEY ISLANDS				
3212 *A 3656*	- -In the town Range, front.	58° 57.6′ N 3° 18.0′ W	**F.R.**	95 **29**	11	Metal post on white tower; 19.	Visible 307°-327°. Shown 24 hours.
3216 *A 3656.1*	- - -Rear, 55 meters 317° from front.	58° 57.7′ N 3° 18.1′ W	**F.R.**	128 **39**	11	Metal post on white tower; 13.	Visible 307°-327°. Shown 24 hours.
3220 *A 3654*	- -Pier extension, SE., head.	58° 57.6′ N 3° 17.8′ W	**Iso.R.** period 6s	49 **15**	5	Metal tower; 39.	Occasional.
3224 *A 3700*	**Brough head.**	59° 08.2′ N 3° 20.3′ W	**Fl.(3)W.** period 25s fl. 0.2s, ec. 4s fl. 0.2s, ec. 4s fl. 0.2s, ec. 16.4s	171 **52**	**18**	White castellated tower and dwelling; 36.	
3228 *A 3676*	**Copinsay.**	58° 53.8′ N 2° 40.2′ W	**Fl.(5)W.** period 30s fl. 0.7s, ec. 2.5s fl. 0.7s, ec. 2.5s fl. 0.7s, ec. 2.5s fl. 0.7s, ec. 2.5s fl. 0.7s, ec. 16.5s	259 **79**	**21**	White tower; 52.	
3232 *A 3680*	**Auskerry.**	59° 01.6′ N 2° 34.2′ W	**Fl.W.** period 20s fl. 0.5s, ec. 19.5s	112 **34**	**18**	White tower; 112.	
3236 *A 3684*	Helliar Holm.	59° 01.2′ N 2° 54.0′ W	**Fl.W.R.G.** period 10s fl. 1s, ec. 9s	59 **18**	W. 14 R. 10 G. 10	White tower; 42.	G. 256°-276°, W.-292°, R.-098°, W.-116°, G.-154°.
3240 *A 3685*	Balfour, pier.	59° 01.9′ N 2° 54.4′ W	**Q.W.R.G.**	16 **5**	W. 3 R. 2 G. 2	Gray building; 10.	G. 270°-010°, W.-020°, R.-090°.
	KIRKWALL:						
3244 *A 3688*	-Pier, head.	58° 59.3′ N 2° 57.6′ W	**Iso.W.R.G.** period 5s	42 **13**	W. **15** R. 13 G. 13	Concrete tower; 23.	G. 153°-183°, W.-192°, R.-210°.
3246 *A 3688.5*	- -E., head.	58° 59.3′ N 2° 57.5′ W	**2 F.G.** (vert.)	20 **6** 13 **4**	3	Metal mast.	
3248 *A 3693*	-Harbor entrance, N.	58° 59.2′ N 2° 57.5′ W	**2 F.R.** (vert.)	20 **6** 13 **4**	1	Post.	
3252 *A 3694*	-W. pier, head.	58° 59.2′ N 2° 57.5′ W	**2 F.G.** (vert.)	20 **6** 13 **4**	1	Metal post.	
3254 *A 3729*	Bay of Backaland.	59° 09.4′ N 2° 44.7′ W	**Fl.R.** period 3s fl. 0.5s, ec. 2.5s	16 **5**	4	Metal post; 10.	Visible 192°-250°.
3264 *A 3708*	-Whitehall Pier, N., head.	59° 08.6′ N 2° 35.8′ W	**2 F.G.** (vert.)	27 **8**	4	Metal mast.	2 meters apart.
3268 *A 3706*	Papa Stronsay, NE., head.	59° 09.3′ N 2° 34.8′ W	**Iso.W.** period 4s	27 **8**	9	White tower; 23.	
3270 *A 3715*	Loth, RoRo Terminal, W. head.	59° 11.5′ N 2° 41.8′ W	**2 F.G.** (vert.)	26 **8** 20 **6**	4	Metal mast; 20.	
3272 *A 3716*	Kettletoft, pier, head.	59° 13.9′ N 2° 35.8′ W	**Fl.W.R.G.** period 3s fl. 0.5s, ec. 2.5s	23 **7**	W. 7 R. 5 G. 5	White tower; 19.	W. 351°-011°, R.-180°, G.-351°.
3276 *A 3718*	**Start Point.**	59° 16.7′ N 2° 22.5′ W	**Fl.(2)W.** period 20s fl. 0.5s, ec. 3.5s fl. 0.5s, ec. 15.5s	79 **24**	**19**	White tower, black stripes; 75.	

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
	SCOTLAND-ORKNEY ISLANDS						
3280 *A 3722*	**North Ronaldsay.**	59° 23.4′ N 2° 22.8′ W	**Fl.W.** period 10s fl. 0.3s, ec. 9.7s	141 **43**	**24**	Red brick tower, two white bands; 138.	**Horn:** (115 meters NE.) 1 bl. ev. 60s.
	RACON		**T(–)**		14		(3 & 10 cm)
3284 *A 3724*	-Nouster, pier, head.	59° 21.4′ N 2° 26.3′ W	**Q.R.**	16 **5**		Post.	
3288 *A 3728*	Calf Sound.	59° 14.2′ N 2° 45.7′ W	**Fl.(3)W.R.G.** period 10s fl. 0.5s, ec. 1.5s fl. 0.5s, ec. 1.5s fl. 0.5s, ec. 5.5s	20 **6**	W. 8 R. 6 G. 6	White tower; 30.	R. shore-216°, W.-223°, G.-302°, W.-307°, obscured elsewhere.
3290 *A 3734*	Rapness, RoRo Terminal, E. end.	59° 14.9′ N 2° 51.4′ W	**2 F.R.** (vert.)	26 **8** 20 **6**	4	Metal mast; 20.	
3292 *A 3736*	**Noup Head.**	59° 19.9′ N 3° 04.0′ W	**Fl.W.** period 30s fl. 0.6s, ec. 29.4s	259 **79**	**22**	White tower; 79.	Visible 335°-242°, and 248°-282°. Partially obscured 240°-275°.
3296 *A 3737.2*	Pierowall, E. pier, head.	59° 19.4′ N 2° 58.4′ W	**Fl.W.R.G.** period 3s fl. 0.5s, ec. 2.5s	23 **7**	W. 11 R. 7 G. 7	Metal mast; 19.	G. 254°-276°, W.-291°, R.-308°, G.-215°.
3300 *A 3737.4*	-W. pier, head.	59° 19.4′ N 2° 58.5′ W	**2 F.R.** (vert.)	19 **6** 13 **4**	3	Metal mast; 16.	
3304 *A 3738*	Moclett Bay, pier, head.	59° 19.6′ N 2° 53.4′ W	**Fl.W.R.G.** period 5s fl. 1s, ec. 4s	23 **7**	W. 5 R. 3 G. 3	Gray building; 16.	G. 306°-341°, W.-040°, R.-074°.
3308 *A 3740*	Egilsay Pier, S. head.	59° 09.3′ N 2° 56.6′ W	**Fl.G.** period 3s fl. 0.3s, ec. 2.7s	13 **4**	4	White structure on concrete base; 10.	
	FAIR ISLE:						
3312 *A 3750*	**-Skadan.**	59° 30.9′ N 1° 39.0′ W	**Fl.(4)W.** period 30s fl. 0.7s, ec. 2s fl. 0.8s, ec. 2s fl. 0.7s, ec. 2s fl. 0.8s, ec. 21s	105 **32**	**24**	Balcony of white tower; 85.	Visible 260°-146°, but obscured close inshore 260°-282°. **Horn:** 2 bl. ev. 60s.
3314 *A 3753*	-N. Haven.	59° 32.3′ N 1° 36.3′ W	**Oc.W.R.G.** period 8s lt. 6s, ec. 2s	33 **10**	6	Metal column on concrete base; 10.	G. 203°36′-208°06′, W.-211°06′, R.-220°36′.
3316 *A 3756*	**-Skroo.**	59° 33.2′ N 1° 36.5′ W	**Fl.(2)W.** period 30s fl. 0.6s, ec. 2s fl. 0.6s, ec. 26.8s	262 **80**	**22**	White tower; 46.	Visible 086°42′-358°.
	SCOTLAND-SHETLAND ISLANDS						
3320 *A 3766*	**Sumburgh Head.**	59° 51.3′ N 1° 16.3′ W	**Fl.(3)W.** period 30s fl. 0.4s, ec. 2.1s fl. 0.4s, ec. 2.1s fl. 0.4s, ec. 24.6s	300 **91**	**23**	White tower; 56.	V.Q.R. (occas.) on masts about 0.75 mile N. and 4.5 miles NW. **DGPS Station.**
3322 *A 3767*	Pool of Virkie Marina, E. breakwater, head.	59° 53.1′ N 1° 17.0′ W	**2 F.G.** (vert.)	20 **6** 13 **4**	5	Metal pole; 7.	
3324 *A 3772*	Mousa, Perie Bard Islet.	59° 59.8′ N 1° 09.4′ W	**Fl.W.** period 3s fl. 0.3s, ec. 2.7s	65 **20**	10	White tower; 20.	

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
			SCOTLAND-SHETLAND ISLANDS				
3326 *A 3774*	-Aithsvoe.	60° 02.3′ N 1° 12.8′ W	**Fl.R.** period 3s fl. 0.3s, ec. 2.7s	10 **3**	2	White metal post; 6.	
3340 *A 3776*	**Kirkabister Ness.**	60° 07.2′ N 1° 07.2′ W	**Fl.(2)W.** period 20s fl. 0.5s, ec. 2s fl. 0.5s, ec. 17s	105 **32**	**23**	White tower; 52.	
3342 *A 3776.5*	Bressay, Cro of Ham.	60° 08.3′ N 1° 07.4′ W	**Fl.W.** period 3s fl. 0.3s, ec. 2.7s	39 **12**	3	White metal post; 3.	
	LERWICK:						
3344 *A 3778*	-Twageos Point.	60° 08.9′ N 1° 07.8′ W	**L.Fl.W.** period 6s fl. 2s, ec. 4s	26 **8**	6	White beacon.	
3348 *A 3779*	-Maryfield Ferry terminal, head.	60° 09.5′ N 1° 07.3′ W	**Oc.W.R.G.** period 6s lt. 4s, ec. 2s	16 **5**	5		W. 008°-013°, R.-111°, G.-008°.
3352 *A 3780*	-Breakwater, N. head.	60° 09.3′ N 1° 08.3′ W	**2 F.R.** (vert.)	16 **5**	4	Column.	
3356 *A 3782*	-Victoria pier, elbow.	60° 09.3′ N 1° 08.3′ W	**2 F.G.** (vert.)	16 **5**	4	Column; 16.	
3360 *A 3781*	- -Head.	60° 09.3′ N 1° 08.4′ W	**Fl.R.** period 3s	16 **5**	1		
3364 *A 3783*	-N. jetty.	60° 09.4′ N 1° 08.4′ W	**Q.R.**	16 **5**	1		
3368 *A 3783.4*	-Oil jetty head, SW. corner.	60° 09.5′ N 1° 08.5′ W	**Fl.W.** period 3s	16 **5**		Post; 6.	
3372 *A 3784*	-North Ness.	60° 09.6′ N 1° 08.7′ W	**Iso.W.G.** period 4s	13 **4**	5	Column; 10.	G. 158°-216°, W.-158°.
3376 *A 3786*	-Loofa Baa, N. of North Ness.	60° 09.8′ N 1° 08.7′ W	**Q.(6)+L.Fl.W.** period 15s	13 **4**	5	S. CARDINAL YB, beacon, topmark.	
3377 *A 3787*	-Shearers jetty.	60° 09.6′ N 1° 09.1′ W	**2 F.R.** (vert.)	13 **4**	1		
3378 *A 3787.1*	-Holmsgarth jetty, head.	60° 09.7′ N 1° 09.1′ W	**Q.G.**	13 **4**	5	White metal post; 10.	
3380 *A 3787.2*	-Holmsgarth Quay, Ro-Ro terminal, head.	60° 09.8′ N 1° 09.3′ W	**Fl.R.** period 3s	26 **8**	2		
3384 *A 3787.4*	-Shell jetty, head.	60° 10.0′ N 1° 09.4′ W	**Q.(2)R.** period 8s fl. 0.3s, ec. 0.7s fl. 0.3s, ec. 6.7s	19 **6**	2		
3388 *A 3787.7*	-North Harbor, pier, head.	60° 10.3′ N 1° 09.3′ W	**F.R.**	29 **9**	2		
			Fl.R. period 3s fl. 0.3s, ec. 2s	23 **7**			
3392 *A 3788*	-N. entrance.	60° 10.5′ N 1° 09.4′ W	**Dir.Oc.W.R.G.** period 6s lt. 5s, ec. 1s	89 **27**	8	Yellow triangular daymark, point up, orange stripe.	R. 211°-214°, W.-216°, G.-221°.
3394 *A 3789*	-Gremista Marina, S. breakwater, head.	60° 10.2′ N 1° 09.5′ W	**Iso.R.** period 4s	10 **3**	2	White post; 7.	
3396 *A 3790*	-Greenhead.	60° 10.9′ N 1° 09.0′ W	**Q.(4)R.** period 10s fl. 0.2s, ec. 0.8s fl. 0.2s, ec. 0.8s fl. 0.2s, ec. 0.8s fl. 0.2s, ec. 6.8s	13 **4**	3		

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
			SCOTLAND-SHETLAND ISLANDS				
3400 *A 3792*	-Bressay Sound, pier, head.	60° 10.3′ N 1° 08.5′ W	**2 F.G.** (vert.)				
3402 *A 3793*	-Heogan, new quay, head.	60° 10.3′ N 1° 08.5′ W	**Fl.G.** period 4s	16 **5**	3	White metal post.	
3403 *A 3793.5*	-Skibby Bass.	60° 11.1′ N 1° 08.8′ W	**Fl.(2)R.** period 5s fl. 0.5s, ec. 0.5s fl. 0.5s, ec. 3.5s		3		
3404 *A 3794*	Rova Head, E. point.	60° 11.5′ N 1° 08.5′ W	**Fl.(3)W.R.G.** period 18s fl. 0.5s, ec. 1.5s fl. 0.5s, ec. 1.5s fl. 0.5s, ec. 13.5s	39 **12**	W. 8 R. 7 G. 7	White metal framework tower; 23.	R. shore-182°, W.-191°, G.-213°, R.-241°, W.-261°30′ G.-009°, W.-shore.
3405 *A 3795*	Dales Voe.	60° 11.8′ N 1° 11.1′ W	**Fl.(2)W.R.G.** period 8s fl. 0.4s, ec. 1.4s fl. 0.4s, ec. 5.8s	16 **5**	W. 4 R. 3 G. 3	White metal post; 7.	G. 220°-227°, W.-233°, R.-240°.
3406 *A 3795.5*	-Quay.	60° 11.6′ N 1° 10.5′ W	**2 F.R.** (vert.)	29 **9**	3	Metal column.	2 meters apart.
3406.5 *A 3795.6*	Laxfirth, pier, head.	60° 12.8′ N 1° 12.0′ W	**2 F.G.** (vert.)	13 **4**	2	Pole.	1 meter apart.
3407 *A 3795.7*	Hoo Stack.	60° 15.0′ N 1° 05.2′ W	**Fl.(4)W.R.G.** period 12s fl. 0.3s, ec. 1.7s fl. 0.3s, ec. 1.7s fl. 0.3s, ec. 1.7s fl. 0.3s, ec. 5.7s	131 **40**	W. 7 R. 5 G. 5	White metal framework tower; 26.	R. 169°-180°, W.-184° G.-193°, W.-169°.
	182°.		**Fl.(4)W.R.G.** period 12s	108 **33**	W. 9 R. 6 G. 6	Same structure.	R. 177°-180°, W.-184°, G.-187°. Synchronized with upper light.
3408 *A 3796*	Moul of Eswick, 9.26 meters from N. extremity.	60° 15.8′ N 1° 05.8′ W	**Fl.W.R.G.** period 3s fl. 0.3s, ec. 2.7s	164 **50**	W. 9 R. 6 G. 6	White tower; 23.	R. shore-200°, W.-207°, G.-018°, W.-028°, R.-shore.
	WHALSAY:						
3412 *A 3802*	-Symbister Ness, 549 meters from SW. point.	60° 20.5′ N 1° 02.1′ W	**Fl.(2)W.G.** period 12s fl. 0.5s, ec. 1.5s fl. 0.5s, ec. 9.5s	36 **11**	W. 8 G. 6	White tower; 23.	W. shore-203°, G.-shore.
3413 *A 3803.8*	Marrister.	60° 21.4′ N 1° 01.3′ W	**Fl.G.** period 6s fl. 0.3s, ec. 5.7s	13 **4**	4	Green mast with platform; 13.	
3416 *A 3804*	-Suther Ness.	60° 22.2′ N 1° 00.0′ W	**Fl.W.R.G.** period 3s fl. 0.5s, ec. 2.5s	26 **8**	W. 10 R. 8 G. 7	White tower; 23.	W. shore-038°, R.-135°, W.-143°, G.-158°, R.-173°, W.-206°, G.-shore.
3418 *A 3805*	-Laxo Voe, Ferry Terminal.	60° 21.1′ N 1° 10.0′ W	**2 F.G.** (vert.)	13 **4**	2	Gray metal mast.	
3420 *A 3807*	**Out Skerries.**	60° 25.5′ N 0° 43.5′ W	**Fl.W.** period 20s fl. 0.5s, ec. 19.5s	144 **44**	**20**	White tower; 98.	
3424 *A 3810*	Muckle Skerry.	60° 26.4′ N 0° 51.7′ W	**Fl.(2)W.R.G.** period 10s fl. 0.3s, ec. 1s fl. 0.3s, ec. 8.4s	42 **13**	W. 7 R. 5 G. 5	White framework tower; 10.	W. 046°-192°, R.-272°, G.-348°, W.-353°, R.-046°.
3426 *A 3811*	-Lunna Holm, S. entrance	60° 27.4′ N 1° 02.4′ W	**Fl.(3)W.R.G.** period 15s	62 **19**	W. 10 R. 7 G. 7	White round tower; 26.	R. shore-090°, W.-094°, G.-209°, W.-275°, R.-shore.
3428 *A 3812*	**-Firths Voe.**	60° 27.2′ N 1° 10.6′ W	**Oc.W.R.G.** period 8s lt. 6s, ec. 2s	29 **9**	W. **15** R. 10 G. 10	White tower; 26.	W. 189°-194°, G.-257°, W.-261°, R.-339°, W.-066°.

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
			SCOTLAND-SHETLAND ISLANDS				
3429 *A 3812.5*	--Linga Island.	60° 26.8′ N 1° 09.0′ W	**Dir.Q.(4)W.R.G.** period 8s fl. 0.4s, ec. 0.6s fl. 0.4s, ec. 0.6s fl. 0.4s, ec. 0.6s fl. 0.4s, ec. 4.6s	33 **10**	9 - -	Concrete column; 6.	R. 145°-148°, W.-152°, G.-155°.
			Q.(4)W.R.G. period 8s	33 **10**	W. 7 R. 4 G. 4		R. 052°-146°, G. 154°-196°, W.-312°. Synchronized with Dir. light.
3429.5	Rumble Roch Beacon, RACON.	60° 28.3′ N 1° 07.2′ W	**Period 70s**		10		
3430 *A 3813*	-Ulsta Ferry Terminal.	60° 29.8′ N 1° 09.4′ W	**Oc.W.R.G.** period 4s lt. 3s, ec. 1s	16 **5**	W. 8 R. 5 G. 5	Metal post.	G. shore-008°, W.-036° R.-shore.
			Oc.R.G. period 4s lt. 3s, ec. 1s	23 **7**	5 -		G. shore-354°, obsc.-044°, R.-shore.
3431 *A 3813.5*	-Toft, Ferry Terminal.	60° 28.0′ N 1° 12.4′ W	**2 F.R.** (vert.)	16 **5**	2	Gray metal mast; 16.	2 meters apart.
3432 *A 3814*	-Ness of Sound, W. side.	60° 31.4′ N 1° 11.1′ W	**Fl.(3)W.R.G.** period 12s fl. 0.3s, ec. 1s fl. 0.3s, ec. 1s fl. 0.3s, ec. 9.1s	59 **18**	W. 9 R. 6 G. 6	White tower; 26.	G. shore-345°, W.-350°, R.-160°, W.-165°, G.-shore.
3436 *A 3815*	-Brother Island, 329°.	60° 31.0′ N 1° 13.9′ W	**Fl.(4)W.R.G.** period 8s	52 **16**	W. 10 R. 7 G. 7	Concrete column; 6.	G. 323°30′-328°, W.-330°, R.-333°30′.
3437 *A 3815.3*	--Mio Ness.	60° 29.7′ N 1° 13.5′ W	**Q.(2)W.R.** period 10s	39 **12**	W. 7 R. 4	White round tower; 16.	W. 282°-238°, R.-282°.
3438 *A 3815.6*	--Tinga Skerry.	60° 30.5′ N 1° 14.7′ W	**Q.(2)G.** period 10s	29 **9**	5	White round tower; 16.	
3440 *A 3816*	-Northern entrance, Bagi Stack.	60° 43.5′ N 1° 07.4′ W	**Fl.(4)W.** period 20s	148 **45**	10	White tower; 23.	
3444 *A 3817*	--Gruney Island.	60° 39.2′ N 1° 18.1′ W	**Fl.W.R.** period 5s fl. 0.5s, ec. 4.5s	174 **53**	W. 8 R. 6	White tower; 23.	R. 064°-180°, W.-012°.
	--RACON		**T(–)**		14		
3448 *A 3817.5*	**--Point of Fethaland.**	60° 38.1′ N 1° 18.6′ W	**Fl.(3)W.R.** period 15s	213 **65**	W. **24** R. **20**	White tower; 23.	R. 080°-103°, W.-160°, R.-206°, W.-340°.
3452 *A 3818*	--Muckle Holm.	60° 34.9′ N 1° 15.8′ W	**Fl.(4)W.** period 10s	105 **32**	10	White tower; 23.	
3456 *A 3819*	--Little Holm.	60° 33.5′ N 1° 15.7′ W	**Iso.W.** period 4s	39 **12**	6	White tower; 23.	
3460 *A 3820*	--Outer Skerry.	60° 33.1′ N 1° 18.2′ W	**Fl.W.** period 6s	39 **12**	8	Black column, white bands.	
3464 *A 3820.5*	--Quey Firth.	60° 31.5′ N 1° 19.5′ W	**Oc.W.R.G.** period 6s lt. 4s, ec. 2s	72 **22**	W. 12 R. 8 G. 8	White tower; 16.	W. shore-290°, G.-327°, W.-334°, R.-shore.
3468 *A 3821*	--Lamba S., head.	60° 30.8′ N 1° 17.8′ W	**Fl.W.R.G.** period 3s fl. 0.3s, ec. 2.7s	98 **30**	W. 8 R. 5 G. 5	White tower; 26.	G. shore-288°, W.-293°, R.-327°, W.-044°, R.-140°, W.-shore.
	---290°30′.		**Dir.Fl.W.R.G.** period 3s	79 **24**	W. 10 R. 7 G. 7	Concrete column; 6.	G. 285°30′-288°, W.-293°, R.-295°30′. Synchronized.
3472 *A 3822.5*	-Little Roe.	60° 30.0′ N 1° 16.3′ W	**Fl.(3)W.R.** period 10s	52 **16**	W. 5 R. 4	Orange and white structure; 16.	R. 036°-095°30′, W.-036°.
3476 *A 3822*	**-Gluss Isle Range,** front.	60° 29.8′ N 1° 19.3′ W	**F.W.**	128 **39**	**19**	Gray metal tower, square daymark; 105.	Shown 24 hours.

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
			SCOTLAND-SHETLAND ISLANDS				
3480 *A 3822.1*	- -Rear, 0.75 mile 194°44′ from front.	60° 29.1′ N 1° 19.7′ W	**F.W.**	226 **69**	**19**	Gray metal tower, square daymark; 72.	Shown 24 hours.
3484 *A 3822.3*	Fugla Ness, common front.	60° 27.5′ N 1° 19.4′ W	**Iso.W.** period 4s	89 **27**	14	Gray tower, orange daymark; 33.	Synchronized with rear lights.
3488 *A 3822.29*	- -Rear, about 400 meters 212°17′ from common front.	60° 27.3′ N 1° 19.7′ W	**Iso.W.** period 4s	148 **45**	14	Gray tower, black daymark; 52.	
3492 *A 3822.31*	- -Rear, about 410 meters 202°55′ from common front.	60° 27.3′ N 1° 19.6′ W	**Iso.W.** period 4s	148 **45**	14	Gray tower, black daymark; 39.	
3496 *A 3823.2*	Sella Ness, upper.	60° 26.9′ N 1° 16.5′ W	**Q.W.R.G.**	46 **14**	7	Gray tower; 36.	G. 084°30′-098°42′, W.-099°42′, W. 126°-128°30′, R.-174°30′. F.W.R.G. (occas.) by day.
	-Lower.		**Q.W.R.G.**	33 **10**	7		G. 084°30′-106°30′, W.-115°, R.-174°30′. F.W.R.G. (occas.) by day.
3497 *A 3823.3*	-Tug jetty, E. side, head.	60° 26.8′ N 1° 16.2′ W	**2 F.G.** (vert.)	26 **8** 20 **6**	3	Floodlighting column.	
3498 *A 3823.32*	-Finger pier, head.	60° 26.8′ N 1° 16.2′ W	**Iso.G.** period 4s	13 **4**	3	Metal column.	
3499 *A 3823.34*	-Garth Pier, N. arm, head.	60° 26.7′ N 1° 16.2′ W	**Fl.(2)G.** period 5s	13 **4**	3	Metal column.	
3501 *A 3823.64*	-Calback Ness, jetty.	60° 27.4′ N 1° 16.7′ W	**2 F.R.** (vert.)	30 **9** 23 **7**	3	Metal mast.	
3502 *A 3823.7*	-No. ′′1" jetty, E.	60° 27.3′ N 1° 17.0′ W	**2 F.R.** (vert.)	23 **7** 16 **5**	3	Dolphin.	
3503 *A 3823.8*	-No. ′′4" jetty, W.	60° 27.9′ N 1° 18.3′ W	**2 F.R.** (vert.)	23 **7** 16 **5**	3	Dolphin.	
3504 *A 3822.6*	-Calback Ness, N. point Skaw Taing Range, front.	60° 29.1′ N 1° 16.8′ W	**Fl.(2)W.R.G.** period 5s	69 **21**	W. 8 R. 5 G. 5	Orange and white structure; 16.	W. 049°-078°, G.-147°, W.-154°, R.-169°, W.-288°.
3505 *A 3822.61*	- -Rear, about 200 meters 150°30′ from front.	60° 29.0′ N 1° 16.7′ W	**Fl.(2)W.** period 5s	115 **35**	8		
3508 *A 3823*	Vats Houllands.	60° 28.0′ N 1° 17.5′ W	**Oc.W.R.G.Y.** period 3s lt. 2s, ec. 1s	240 **73**	6	Gray metal tower.	W. 343°30′-029°30′, Y.-049°, G.-074°30′, R.-098°30′, G.-123°30′, Y.-148°, W.-163°30′. Occasional by day.
3512 *A 3822.8*	-Ness of Bardister.	60° 28.2′ N 1° 19.5′ W	**Oc.W.R.G.** period 8s	65 **20**	W. 9 R. 6 G. 6	Orange and white structure; 16.	W. 180°30′-240°, R.-310°30′, W.-314°30′, G.-030°30′.
3516 *A 3823.6*	-Ungam Island.	60° 27.3′ N 1° 18.5′ W	**V.Q.(2)W.** period 5s fl. 0.2s, ec. 0.5s fl. 0.2s, ec. 4.1s	6 **2**	2	White column; 7.	**Radar reflector.**
3520 *A 3824*	Vatsetter, Whitehill.	60° 34.9′ N 1° 00.1′ W	**Fl.W.R.** period 3s fl. 1s, ec. 2s	79 **24**	W. 9 R. 6	White tower; 16.	W. from shore NW. to 163°, R.-211°, W.-349°, R.-shore to the S.
3524 *A 3828*	Balta Islet, S. extremity.	60° 44.5′ N 0° 47.6′ W	**Fl.W.R.** period 10s	55 **17**	W. 10 R. 7	White house; 21.	W. 249°-010°, R.-060°, W.-154°, obsc.-249°.
3526 *A 3829*	-Marina, breakwater, head.	60° 45.6′ N 0° 50.2′ W	**Fl.R.** period 6s	6 **2**	2	Red pole; 3.	

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
			SCOTLAND-SHETLAND ISLANDS				
3528 *A 3830*	Uyea Sound.	60° 41.2′ N 0° 55.3′ W	**Fl.(2)W.** period 8s fl. 0.5s, ec. 1.5s fl. 0.5s, ec. 5.5s	25 **8**	7	Red metal framework tower on white base; 28.	
3530 *A 3830.8*	Yell, Gutcher, Ferry Terminal.	60° 40.4′ N 0° 59.6′ W	**2 F.R.** (vert.)	23 **7**	2	Gray metal mast; 16.	1 meter apart.
3530.1 *A 3830.85*	-Sector.	60° 40.4′ N 0° 59.6′ W	**Oc.W.R.G.** period 8s lt. 6s, ec. 2s	13 **4**	2	Concrete structure; 3.	G. 222°-232°, W.-236°, R.-246°.
3530.5 *A 3830.5*	Unst, Belmont, Ferry Terminal.	60° 41.0′ N 0° 57.9′ W	**2 F.G.** (vert.)	20 **6**	2	Gray metal mast; 16.	1 meter apart.
3532 *A 3831*	Cullivoe, breakwater.	60° 41.9′ N 0° 59.7′ W	**Oc.R.** period 7s lt. 5s, ec. 2s	16 **5**	2	Gray metal column; 10.	
3540 *A 3832*	**North Unst,** Muckle Flugga.	60° 51.3′ N 0° 53.0′ W	**Fl.(2)W.** period 20s fl. 0.5s, ec. 3.5s fl. 0.5s, ec. 15.5s	215 **66**	**22**	White tower; 64.	Obstruction lights mark mast 3.9 miles SE.
3542 *A 3834*	Holm of Skaw.	60° 49.9′ N 0° 46.2′ W	**Fl.W.** period 5s fl. 0.5s, ec. 4.5s	26 **8**	8	White metal framework tower; 20.	
3544 *A 3838*	**Esha Ness.**	60° 29.3′ N 1° 37.6′ W	**Fl.W.** period 12s fl. 0.4s, ec. 11.6s	199 **61**	**25**	White square tower; 40.	
3548 *A 3840*	Hillswick, S. end of Ness.	60° 27.2′ N 1° 29.7′ W	**Fl.(4)W.R.** period 15s fl. 1s, ec. 2s fl. 1s, ec. 2s fl. 1s, ec. 2s fl. 1s, ec. 5s	110 **34**	W. 9 R. 6	White house; 17.	W. 217°-093°, R.-114°, obsc.-217°.
3552 *A 3844*	Muckle Roe, Swarbacks Minn, N. side of entrance.	60° 21.0′ N 1° 26.9′ W	**Fl.W.R.** period 3s fl. 1s, ec. 2s	100 **30**	W. 9 R. 6	White tower; 22.	W. 314°-041°, R.-075°, W.-137°, obsc.-314°.
3553 *A 3844.5*	Aith. Breakwater, RNLI berth.	60° 17.2′ N 1° 22.3′ W	**Q.G.**	16 **5**	3	Green post; 6.	
3554 *A 3845*	W. Burru Firth, Transport pier head.	60° 17.7′ N 1° 32.3′ W	**Iso.G.** period 4s	13 **4**	4	Metal mast; 16.	
3554.5 *A 3844.9*	W. Burra Firth. Outer.	60° 17.8′ N 1° 33.5′ W	**Dir.Oc.W.R.G.** period 8s	88 **27**	W. 9 R. 7 G. 7	White square tower; 6.	G. 136°-142°, W.-150°, R.-156°. Shown 24 hours.
3555 *A 3845.5*	-Inner.	60° 17.8′ N 1° 32.0′ W	**Dir.F.W.R.G.**	29 **9**	W. **15** R. 9 G. 9	White square tower; 6.	G. 095°-098°, W.-102°, R.-105°. Shown 24 hours.
3556 *A 3847*	Ve Skerries.	60° 22.4′ N 1° 48.7′ W	**Fl.(2)W.** period 20s fl. 0.7s, ec. 2s fl. 0.7s, ec. 16.6s	56 **17**	11	White concrete tower; 52.	
	RACON		**T(–)**		**15**		
3560 *A 3850*	White Ness, Ram′s Head.	60° 12.0′ N 1° 33.4′ W	**Fl.W.R.G.** period 8s fl. 1s, ec. 7s	52 **16**	W. 9 R. 6 G. 6	White house; 16.	G. 265°-355°, W.-012°, R.-090°, W.-136°, obscured elsewhere.
3561 *A 3854.7*	North Havra.	60° 09.8′ N 1° 20.3′ W	**Fl.W.R.G.** period 12s	80 **24**	W. 11 R. 8 G. 8	White fiberglass tower; 10.	G. 001°-053°30′, W.-060°30′, R.-182°, G.-334°, W.-337°30′, R.-001°.
3562 *A 3860*	**Foula Island South Ness.**	60° 06.8′ N 2° 03.7′ W	**Fl.(3)W.** period 15s fl. 0.2s, ec. 2.7s fl. 0.2s, ec. 2.7s fl. 0.2s, ec. 9s	118 **36**	**18**	White tower.	Visible all around except where obscured by land approx. 123° to 221°.

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
			SCOTLAND-SHETLAND ISLANDS				
3564 *A 3858*	Fugla Ness.	60° 06.4′ N 1° 20.7′ W	**Fl.(2)W.R.G.** period 10s fl. 0.5s, ec. 1.5s fl. 0.5s, ec. 7.5s	66 **20**	W. 10 R. 7 G. 7	White tower; 26.	G. 014°-032°, W.-082°, R.-134°, W.-shore.
			SCOTLAND-NORTH COAST				
3568 *A 3868*	**Sule Skerry.**	59° 05.0′ N 4° 24.3′ W	**Fl.(2)W.** period 15s fl. 0.2s, ec. 3.6s fl. 0.2s, ec. 11s	113 **34**	**21**	White tower; 88.	
	RACON		**T(–)**		**20**		
3572 *A 3870*	Sula Sgeir.	59° 05.6′ N 6° 09.5′ W	**Fl.W.** period 15s fl. 1s, ec. 14s	243 **74**	11	Square metal structure; 16.	
3574 *A 3869*	**Rona.**	59° 07.3′ N 5° 48.8′ W	**Fl.(3)W.** period 20s fl. 0.2s, ec. 3.1s fl. 0.2s, ec. 3.1s fl. 0.2s, ec. 13.2s	374 **114**	**24**	White square tower and 3 buildings.	
3576 *A 3880*	**Cape Wrath.**	58° 37.5′ N 5° 00.0′ W	**Fl.(4)W.** period 30s fl. 0.7s, ec. 2s fl. 0.7s, ec. 2s fl. 0.7s, ec. 2s fl. 0.7s, ec. 21.2s	400 **122**	**24**	White tower; 65.	**Horn:** 3 bl. ev. 45s.
3580 *A 3874*	Loch Eriboll White Head.	58° 31.1′ N 4° 38.8′ W	**Fl.W.R.** period 3s fl. 1s, ec. 2s	58 **18**	W. 13 R. 12	White tower and building; 18.	W. 030°-172°, R.-191°, W.-212°.

Section 4

West Coast of Scotland
Including The Hebrides and Firth of Clyde

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
			SCOTLAND-WEST COAST				
3584 *A 3880.6*	Rubha na Lecaig, (Ministers Point).	58° 27.4′ N 5° 04.5′ W	**Fl.(2)W.** period 10s	100 **30**	8	Concrete pedestal.	
3585 *A 3881*	**Loch Bervie.**	58° 27.5′ N 5° 03.0′ W	**Dir.W.R.G.**	49 **15**	**16**	Dayglow yellow tower. Floodlit.	F.G. 326°-326°30′, Al.G.W.-326°45′, F.W.-327°15′, Al.R.W.-327°30′, F.R.-328°.
3588 *A 3881.3*	No. ″1″.	58° 27.3′ N 5° 02.8′ W	**Fl.R.** period 4s fl. 0.3s, ec. 3.7s	10 **3**	2	Red metal mast; 29.	
3592 *A 3881.4*	No. ″2″.	58° 27.3′ N 5° 02.8′ W	**Q.R.**	10 **3**	2	Red metal mast; 29.	
3596 *A 3881.5*	No. ″3″.	58° 27.3′ N 5° 02.8′ W	**Fl.G.** period 4s fl. 0.3s, ec. 3.7s	10 **3**	2	Green metal mast; 29.	
3598 *A 3881.7*	-Creag Mhor.	58° 27.0′ N 5° 02.4′ W	**Oc.W.R.G.** period 2.8s lt. 2.7s, ec. 0.1s	52 **16**	9		G. 136°30′-146°30′, W.-147°30′, R.-157°30′.
3600 *A 3882*	**Rhu Stoer.**	58° 14.4′ N 5° 24.0′ W	**Fl.W.** period 15s fl. 0.4s, ec. 14.6s	194 **59**	**24**	White tower; 46.	
3602 *A 3882.7*	Kyleskv, fishing jetty.	58° 15.3′ N 5° 01.0′ W	**2 F.G.** (vert.)	19 **6**	3	Gray mast; 5.	2 meters apart.
	LOCH INVER:						
3604 *A 3883*	-Glas Leac.	58° 08.7′ N 5° 16.3′ W	**Fl.W.R.G.** period 3s fl. 0.3s, ec. 2.7s	24 **7**	5	Concrete pedestal; 5.	W. 071°-078°, R.-090°, G.-103°, W.-111°, R.-243°, W.-247°, G.-071°.
3606 *A 3883.2*	-Off Aird Ghlas.	58° 08.9′ N 5° 15.0′ W	**Q.G.**	10 **3**	1	Black column, white bands.	
3608 *A 3883.7*	-Soyea Island.	58° 08.6′ N 5° 19.6′ W	**Fl.(2)W.** period 10s	112 **34**	6	Gray post; 3.	
3612 *A 3886*	Ullapool, Ferry pier.	57° 53.7′ N 5° 09.5′ W	**2 F.R.** (vert.)	21 **6** 16 **5**		Metal column on dolphin.	
3612.5 *A 3886.2*	- -Extension, SE. corner.	57° 53.7′ N 5° 09.3′ W	**Fl.R.** period 3s	21 **6**	1	Pole.	
3616 *A 3885*	Rubha Cadail.	57° 55.5′ N 5° 13.2′ W	**Fl.W.R.G.** period 6s fl. 1s, ec. 5s	35 **11**	W. 9 R. 6 G. 6	White tower; 29.	G. 311°-320°, W.-325°, R.-103°, W.-111°, G.-118°, W.-127°, R.-157°, W.-199°, obsc.-311°.
3620 *A 3885.5*	-Ullapool Point.	57° 53.6′ N 5° 09.8′ W	**Iso.R.** period 4s	26 **8**	6	Gray metal mast; 19.	Visible 258°-108°.
3624 *A 3887*	Cailleach.	57° 55.8′ N 5° 24.1′ W	**Fl.(2)W.** period 12s	196 **60**	9	White tower; 19.	Visible 015°-236°.
3626 *A 3887.5*	Aultbea, Aird pier, head.	57° 50.4′ N 5° 35.6′ W	**2 F.G.** (vert.)	26 **8**	3	Gray steel pole; 20.	2 meters apart.
3628 *A 3888*	NATO POL Jetty, NW. corner.	57° 49.7′ N 5° 35.0′ W	**Fl.G.** period 4s fl. 0.4s, ec. 3.6s	16 **5**	3	Metal bracket on wall; 10.	
3632 *A 3888.2*	-Off N. head.	57° 49.8′ N 5° 35.0′ W	**Fl.G.** period 4s fl. 0.4s, ec. 3.6s			Dolphin.	

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
			SCOTLAND-WEST COAST				
3636 *A 3888.3*	-Off S. head.	57° 49.6′ N 5° 35.1′ W	**Fl.G.** period 4s fl. 0.4s, ec. 3.6s			Dolphin.	
3640 *A 3900*	**Rubha Reidh.**	57° 51.6′ N 5° 48.6′ W	**Fl.(4)W.** period 15s fl. 0.4s, ec. 2.1s fl. 0.4s, ec. 2.1s fl. 0.4s, ec. 2.1s fl. 0.4s, ec. 7.1s	120 **37**	**24**	White tower; 83.	
3644 *A 3902*	Loch Gairloch, Glas Eilean.	57° 42.8′ N 5° 42.3′ W	**Fl.W.R.G.** period 6s fl. 0.5s, ec. 5.5s	29 **9**	W. 6 R. 4 G. -	Metal pedestal on concrete base.	W. 080°-102°, R.-296°, W.-333°, G.-080°.
3648 *A 3903*	-Gairloch pier.	57° 42.6′ N 5° 41.0′ W	**Q.R.**	20 **6**	2	Framework tower; 7.	Occasional.
3660 *A 3904*	**Rona.**	57° 34.7′ N 5° 57.5′ W	**Fl.W.** period 12s fl. 0.6s, ec. 11.4s	225 **69**	**19**	White tower; 42.	Obscured 358°-050°.
3664 *A 3905.3*	--SW. corner.	57° 34.7′ N 5° 57.9′ W	**2 F.R.** (vert.)				
3668 *A 3905*	-Sgeir Shuas.	57° 35.0′ N 5° 58.5′ W	**Fl.R.** period 2s fl. 0.3s, ec. 1.7s	20 **6**	3		Visible 070°-199°.
3672 *A 3905.4*	--No. ″9" Range, front.	57° 34.4′ N 5° 58.0′ W	**Q.W.R.G.**	10 **3**	W. 4 R. 3	White and orange beacon.	W. 135°-138°, R.-318°, G.-135°.
3676 *A 3905.6*	--Rear, No. ″10", 136°31′ from front.	57° 34.3′ N 5° 57.8′ W	**Iso.W.** period 6s	92 **28**	5	White beacon.	
3678 *A 3905.35*	--Undesignated beacon.	57° 34.6′ N 5° 57.9′ W	**Fl.R.** period 5s fl. 0.5s, ec. 4.5s	13 **4**	3	Red beacon.	
3680 *A 3905.8*	--No. ″1".	57° 34.3′ N 5° 58.3′ W	**Fl.G.** period 3s	299 **91**	3	Orange beacon.	
3684 *A 3906*	-Rubha Chuiltairbh.	57° 34.1′ N 5° 57.1′ W	**Fl.W.** period 3s	20 **6**	5	White beacon.	
3688 *A 3906.2*	-No. ″11".	57° 33.1′ N 5° 57.5′ W	**Q.Y.**	20 **6**	4	Orange beacon.	
3692 *A 3906.4*	-No. ″3".	57° 32.6′ N 5° 57.8′ W	**Fl.(2)W.** period 10s	30 **9**	4	White beacon, orange stripes.	
3696 *A 3906.6*	-No. ″12".	57° 32.1′ N 5° 58.1′ W	**Q.R.**	16 **5**	3	Orange beacon.	
3700 *A 3907*	-Garbh Eilean, No. ″8".	57° 30.7′ N 5° 58.5′ W	**Fl.W.** period 3s	25 **8**	5	White beacon.	
3704 *A 3916*	Crowlin, Eilean Beag.	57° 21.3′ N 5° 51.3′ W	**Fl.W.** period 6s fl. 0.5s, ec. 5.5s	105 **32**	6	White beacon; 16.	
3708 *A 3912*	Eyre Point.	57° 20.0′ N 6° 01.3′ W	**Fl.W.R.** period 3s fl. 0.5s, ec. 2.5s	16 **5**	W. 9 R. 6	White tower.	W. 215°-266°, R.-288°, W.-063°, obsc.-215°.
3710 *A 3911*	Raasay Suisnish.	57° 19.9′ N 6° 03.8′ W	**2 F.G.** (vert.)	26 **8** 20 **6**	2	Gray mast; 16.	
3712 *A 3912.5*	Isle of Skye, Loch Sligachan, Sconser Ferry Terminal.	57° 18.9′ N 6° 06.6′ W	**Q.R.**	26 **8**	3	Gray post.	
	SKYE:						
3720 *A 3908*	-Portree pier, head.	57° 24.7′ N 6° 11.3′ W	**2 F.R.** (vert.)	21 **6**	4	Post.	Occasional.

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
			SCOTLAND-WEST COAST				
3724 *A 3910*	-Ru Na Lachan.	57° 29.0′ N 5° 52.1′ W	**Oc.W.R.** period 8s lt. 6s, ec. 2s	69 **21**	10	Metal framework tower; 10.	W. 337°-022°, R.-117°, W.-162°.
3725 *A 3910.2*	-Applecross Pier.	57° 28.4′ N 5° 52.3′ W	**Fl.G.** period 3s fl. 0.3s, ec. 2.7s	10 **3**	3	STARBOARD (A) G, post, topmark.	
3744 *A 3925*	Kyle Akin, jetty, head.	57° 16.5′ N 5° 45.2′ W	**2 F.R.** (vert.)	33 **10** 26 **8**			Visible 075°-270°.
3748 *A 3926*	Kyle Akin.	57° 16.4′ N 5° 43.3′ W	**Q.R.**	19 **6**		Metal post.	
3752 *A 3926.5*	- -Mooring dolphin.	57° 16.4′ N 5° 43.4′ W	**Q.W.**	16 **5**	3	Post on dolphin.	
3756 *A 3928*	Kyle of Loch Alsh, W. side, pier, head.	57° 16.8′ N 5° 42.8′ W	**2 F.G.** (vert.)	16 **5** 13 **4**	5	Post; 10.	
3760 *A 3928.2*	-E. side, pier, head.	57° 16.8′ N 5° 42.7′ W	**2 F.G.** (vert.)	19 **6** 16 **5**	4	Post; 10.	
3762 *A 3928.4*	-Kyle, Old Ferry Pontoons.	57° 16.8′ N 5° 43.0′ W	**2 F.G.** (vert.)	10 **3** 3 **1**	1	Grey pole.	Shown April - Sept.
3764 *A 3930*	-Butec, jetty, W. head.	57° 16.7′ N 5° 42.4′ W	**Oc.G.** period 6s lt. 4s, ec. 2s	16 **5**	3	White metal post; 10.	Two lights 9 meters apart horizontally. Red obstruction lights 10 meters and floodlighting.
3768 *A 3930.2*	- -E. head.	57° 16.8′ N 5° 42.4′ W	**Oc.G.** period 6s lt. 4s, ec. 2s	16 **5**	3	White metal post; 10.	Synchronized with W. end.
3772 *A 3927*	-Eileanan Dubha.	57° 16.5′ N 5° 42.2′ W	**Fl.(2)W.** period 10s fl. 0.5s, ec. 1.5s fl. 0.5s, ec. 7.5s	29 **9**	8	White metal framework tower; 16.	May be obscured 104°-146° by adjacent islet.
3774 *A 3927.5*	- -Island, close W.	57° 16.6′ N 5° 42.6′ W	**Fl.G.** period 6s fl. 0.3s, ec. 5.7s	16 **5**	4	Metal box on concrete base.	
3780 *A 3960*	-Sgeir Dhearg.	57° 00.6′ N 5° 49.5′ W	**Fl.(2)W.G.** period 8s	20 **6**	5	Gray beacon; 25.	G. 190°-055°, W.-190°.
	SKYE:						
3788 *A 3952*	-Point of Sleat.	57° 01.0′ N 6° 01.0′ W	**Fl.W.** period 3s fl. 1s, ec. 2s	67 **20**	9	White tower; 22.	
3790 *A 3956*	-Mallaig Harbor.	57° 00.5′ N 5° 49.4′ W	**Iso.W.R.G.** period 4s	20 **6**	W. 9 R. 6 G. 6	Gray metal framework tower on concrete base; 36.	G. 181°-185°, W.-197°, R.-201° 3 F.R. (vert.) shown from same structure when vessels may not enter harbor.
			Fl.G. period 3s fl. 0.7s, ec. 2.3s	46 **14**	6		
3792 *A 3948*	-Armadale Bay.	57° 03.9′ N 5° 53.4′ W	**Oc.R.** period 6s lt. 4s, ec. 2s	21 **6**	6	Building.	

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
	SCOTLAND-WEST COAST						
	-Isle Ornsay:						
3796 *A 3946*	- -Eilean Iarmain.	57° 08.8′ N 5° 47.8′ W	**2 F.R.** (vert.)	10 **3** 6 **2**	2	Post on rock; 10.	2 floodlights illuminate the pier.
3800 *A 3944*	**- -Eilean Sionnach.**	57° 08.6′ N 5° 46.4′ W	**Oc.W.** period 8s	58 **18**	**15**	White tower; 63.	Visible 157°-030°.
3804 *A 3942*	- -Isle Ornsay, N., head.	57° 09.1′ N 5° 46.9′ W	**Fl.R.** period 6s fl. 0.5s, ec. 5.5s	27 **8**	4	White tank on gray stone beacon; 30.	
3808 *A 3940*	Sandaig, NW. point.	57° 10.1′ N 5° 42.2′ W	**Fl.W.** period 6s fl. 0.5s, ec. 5.5s	40 **12**	8	White octagonal tower; 24.	
3812 *A 3938*	Kyle Rhea.	57° 14.2′ N 5° 39.9′ W	**Fl.W.R.G.** period 3s fl. 0.5s, ec. 2.5s	22 **7**	W. 11 R. 9 G. 8	White beacon.	R. shore-219°, W.-228°, G.-338°, W.-346°, R.-shore.
3816 *A 3934*	Sgeir-na-Caillich.	57° 15.6′ N 5° 38.8′ W	**Fl.(2)R.** period 6s fl. 0.3s, ec. 1s fl. 0.3s, ec. 4.4s	10 **3**	4	Beacon.	
	SCOTLAND-HEBRIDES						
3820 *A 3968*	**Butt of Lewis.**	58° 30.8′ N 6° 15.6′ W	**Fl.W.** period 5s fl. 0.2s, ec. 4.8s	170 **52**	**25**	Red brick tower; 120.	Visible 056°-320°. **DGPS Station.**
3824 *A 3972*	**Tiumpan Head.**	58° 15.7′ N 6° 08.2′ W	**Fl.(2)W.** period 15s fl. 0.4s, ec. 1.5s fl. 0.4s, ec. 12.7s	180 **55**	**25**	White tower; 69.	
	STORNOWAY:						
3828 *A 3976*	**-Arnish Point.**	58° 11.5′ N 6° 22.2′ W	**Fl.W.R.** period 10s fl. 0.5s, ec. 9.5s	56 **17**	W. **19** R. **15**	White round tower; 45.	W. 088°-198°, R.-302°, W.-013°, obsc.-088°.
3832 *A 3978*	-Stoney Field.	58° 11.6′ N 6° 21.3′ W	**Fl.W.R.G.** period 3s	26 **8**	11	Metal pole; 10.	G. shore-073°, R.-102°, W.-109°, G.-shore.
3836 *A 3977*	-Sandwick Bay, NW. side.	58° 12.1′ N 6° 22.3′ W	**Oc.W.R.G.** period 6s lt. 4s, ec. 2s	32 **10**	9	Metal pole; 10.	G. 334°-341°, W.-347°, R.-354°.
3840 *A 3979*	-Eilean na Gothail.	58° 12.2′ N 6° 22.9′ W	**Fl.G.** period 6s	26 **8**		Metal column; 10.	
3844 *A 3980*	-Patent slip jetty, outer head.	58° 12.2′ N 6° 22.9′ W	**2 F.G.** (vert.)				
3848 *A 3981*	-No. ″1" pier, SW. corner.	58° 12.4′ N 6° 23.3′ W	**Q.W.R.G.**	16 **5**	11	Pole; 10.	G. shore-335°, W.-352°, R.-shore.
3860 *A 3984*	Milaid.	58° 01.0′ N 6° 21.8′ W	**Fl.W.** period 15s fl. 1s, ec. 14s	56 **17**	10	White tower; 24.	
3864 *A 3986*	Rubha Uisenish.	57° 56.2′ N 6° 28.2′ W	**Fl.W.** period 5s fl. 1s, ec. 2s	79 **24**	11	White tower.	

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
			SCOTLAND-HEBRIDES				
3868 *A 3990*	**Eilean Glas.**	57° 51.4′ N 6° 38.5′ W	**Fl.(3)W.** period 20s fl. 0.5s, ec. 2s fl. 0.5s, ec. 2s fl. 0.5s, ec. 14.5s	141 **43**	**23**	White tower, red bands; 100.	
	RACON		**T(–)** period 70s		**17**		
3872 *A 3992*	-Dun Cor Mor.	57° 51.0′ N 6° 43.9′ W	**Fl.R.** period 5s fl. 0.4s, ec. 4.6s	33 **10**	5	White painted structure; 6.	
	EAST LOCH TARBERT:						
3876 *A 3993*	-Sgeir Ghlas.	57° 52.3′ N 6° 45.2′ W	**Iso.W.R.G.** period 4s	29 **9**	W. 9 R. 6 G. 6	White round concrete tower; 18.	G. 282°-319°, W.-329°, R.-153°, W.-164°, G.-171°, obsc.-282°.
3881 *A 3994.25*	-Jane's Tower.	57° 45.8′ N 7° 02.0′ W	**Q.(2)G.** period 5s	20 **6**	4	Concrete pedestal; 3.	Obscured by cairn 273°-318°. Q.W. and Oc.W. 3s in line 014°45′ mark entrance to Leverburgh.
3882 *A 3995*	Berneray, breakwater, head.	57° 42.9′ N 7° 10.0′ W	**Iso.R.** period 4s	20 **6**	4	Gray column; 17.	
3884 *A 3995.6*	-Vallay Island.	57° 39.7′ N 7° 26.1′ W	**Fl.W.R.G.** period 3s fl. 0.3s, ec. 2.7s	13 **4**	8	Gray column on white concrete base; 10.	W. 206°-085°, G.-140°, W.-145°, R.-206°.
3885 *A 3995.8*	- -Pier, head.	57° 39.3′ N 7° 26.3′ W	**2 F.G.** (vert.)	20 **6**	4	Gray metal column.	Shown Mar. to Oct.
	LOCH MADDY:						
3888 *A 3996*	-Weavers Point.	57° 36.6′ N 7° 05.8′ W	**Fl.W.** period 3s fl. 1s, ec. 2s	70 **21**	7	White hut; 12.	
3892 *A 3996.4*	-Glas Eilean Mor.	57° 36.0′ N 7° 06.6′ W	**Fl.(2)G.** period 4s	28 **9**	5	Metal column.	
3894 *A 3996.6*	-Rudna Nam Pleac.	57° 35.8′ N 7° 06.7′ W	**Fl.R.** period 4s fl. 0.3s, ec. 3.7s	23 **7**	5	White post; 6.	
3896 *A 3997*	-Ruigh Liath, E. islet.	57° 35.7′ N 7° 08.3′ W	**Q.G.**	20 **6**	5	Concrete pillar.	
3897 *A 3998*	-Vallaquie Island.	57° 35.5′ N 7° 09.3′ W	**Fl.(3)W.R.G.** period 8s fl. 0.4s, ec. 1.2s fl. 0.4s, ec. 1.2s fl. 0.4s, ec. 4.4s	36 **11**	W. 7 R. 5 G. 5	White concrete pillar; 3.	G. shore-205°, W.-210°, R.-240°, G.-254°, W.-257°, R.-shore.
3898 *A 3999.2*	Lochmaddy Range, front.	57° 35.8′ N 7° 09.3′ W	**2 F.G.** (vert.)	26 **8**	4	Column.	2 meters apart.
3898.1 *A 3999.21*	-Rear, 110 meters 298° from front.	57° 35.8′ N 7° 09.3′ W	**Oc.G.** period 8s lt. 6s, ec. 2s	33 **10**	4	Column on dolphin; 13.	Visible 284°-304°.
3899 *A 3999.5*	Grimsay, Kallin Harbor, breakwater, NE. corner.	57° 28.9′ N 7° 12.3′ W	**2 F.R.** (vert.)	20 **6**	5	Gray metal column; 16.	1 meter apart.
3900 *A 4004*	**Ushenish.**	57° 17.9′ N 7° 11.5′ W	**Fl.W.R.** period 20s fl. 0.5s, ec. 19.5s	176 **54**	W. **19** R. **15**	White tower; 39.	W. 193°-356°, R.-013°.
3904 *A 4000*	Loch Carnan Range, front.	57° 22.0′ N 7° 16.0′ W	**Fl.R.** period 2s fl. 0.5s, ec. 1.5s	23 **7**	5	White post, diamond daymark.	
3908 *A 4000.1*	-Rear, 58 meters 222° from front.	57° 22.0′ N 7° 16.3′ W	**Iso.R.** period 10s	37 **11**	5	White post, diamond daymark.	

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			SCOTLAND-HEBRIDES				
3912 *A 4028*	**Flannan Isles.**	58° 17.3′ N 7° 35.4′ W	**Fl.(2)W.** period 30s fl. 0.5s, ec. 5.5s fl. 0.5s, ec. 23.5s	330 **101**	**20**	White tower; 75.	When close-up, obscured over over two small arcs by islands W. of Eilean Mor.
3914 *A 4030*	Gasker Island.	57° 59.1′ N 7° 17.2′ W	**Fl.(3)W.** period 10s fl. 0.3s, ec. 1s fl. 0.3s, ec. 1s fl. 0.3s, ec. 7.1s	125 **38**	10	White metal framework tower.	
3916 *A 4032*	-Loch Carloway, Aird Laimishader.	58° 17.1′ N 6° 49.5′ W	**Fl.W.** period 6s	207 **63**	8	White hut; 15.	Obscured by shore in certain directions.
3920 *A 4036*	-Greinam, Breascleit Beacon.	58° 13.3′ N 6° 46.2′ W	**Fl.W.R.** period 6s fl. 0.5s, ec. 5.5s	27 **8**	W. 8 R. 7	White beacon; 18.	R. 143°-169°, W.-143°.
3922 *A 4038*	Gallan Head.	58° 14.3′ N 7° 01.9′ W	**Aero.2 Q.W.** (vert.)	902 **275**		Radio mast; 600.	Obstruction light. Reported visible at 30 miles. F.R. lights on lower masts close by.
3924 *A 4008*	Calvay.	57° 08.6′ N 7° 15.3′ W	**Fl.(2)W.R.G.** period 10s fl. 0.5s, ec. 1.5s fl. 0.5s, ec. 7.5s	52 **16**	W. 7 R. 4 G. 4	White framework tower; 19.	W. 111-190°, G.-202°, W.-286°, R.-111°.
3928 *A 4010*	RoRo terminal, head.	57° 09.2′ N 7° 18.2′ W	**Iso.R.G.** period 4s	26 **8**	2	Metal framework tower; 16.	G. shore-283°, R.-shore. 2 F.G. (vert.) 8m 3M on dolphin 84 meters W.
3932 *A 4009.5*	- -N. side.	57° 09.0′ N 7° 17.0′ W	**Fl.G.** period 6s	10 **3**	3	Metal post; 6.	
3933 *A 4011.5*	Acairseid Mhor Range, front.	57° 03.9′ N 7° 17.2′ W	**Oc.R.** period 6s lt. 4s, ec. 2s	29 **9**	4	Gray metal column; 16.	
3934 *A 4011.51*	-Rear, 24 meters 285° from front.	57° 03.9′ N 7° 17.2′ W	**Oc.R.** period 6s lt. 4s, ec. 2s	33 **10**	4	Gray metal column; 16.	
3935 *A 4011.7*	Isle of Barra, Ardveenish.	57° 00.2′ N 7° 24.4′ W	**Oc.W.R.G.** period 3s	20 **6**	W. 9 R. 6 G. 6	Gray metal column; 13.	G. 300°-304°, W.-306°, R.-310°.
3936 *A 4012*	Sgeir Dubh.	56° 56.4′ N 7° 28.9′ W	**Q.(3)W.G.** period 6s fl. 0.2s, ec. 0.6s fl. 0.2s, ec. 0.6s fl. 0.2s, ec. 4.2s	20 **6**	W. 6 G. 4	White concrete column, green bands; 26.	W. 280°-117°, G.-280°. In line 283° with Sgeir Liath.
3937 *A 4012.5*	-Channel Rock.	56° 56.2′ N 7° 28.9′ W	**Fl.W.R.** period 6s fl. 0.6s, ec. 5.4s	13 **4**	W. 6 R. 4	White concrete column, red bands; 23.	W. 121°30′-277°, R.-121°30′.
3938	*Castlebay S. Buoy.*	56° 56.1′ N 7° 27.2′ W	**Fl.(2)R.** period 8s			PORT (A) R, can.	
	RACON		**T(–)** period 70s		7		
3939	*Bo Vich Chaun Buoy.*	56° 56.2′ N 7° 23.3′ W	**Q.(6)+L.Fl.W.** period 15s			S. CARDINAL YB, pillar, topmark.	
	RACON		**M(– –)** period 72s		5		
	CASTLEBAY:						
3940 *A 4014*	-Sgeir Liath.	56° 56.7′ N 7° 30.7′ W	**Fl.W.** period 3s fl. 0.4s, ec. 2.6s	22 **7**	8	White building; 20.	
3944 *A 4019*	- -Range, front.	56° 56.8′ N 7° 30.6′ W	**F.G.**	29 **9**	11	White framework tower, orange triangular daymark, point up; 16.	

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
			SCOTLAND-HEBRIDES				
3948 *A 4019.1*	- - -Rear, 457 meters 295° from front.	56° 56.9′ N 7° 31.0′ W	**F.G.**	49 **15**	11	White framework tower, orange triangular daymark, point down; 13.	
3952 *A 4020*	**Barra Head.**	56° 47.1′ N 7° 39.2′ W	**Fl.W.** period 15s fl. 0.3s, ec. 14.7s	683 **208**	**18**	White stone tower; 60.	Obscured by islands NE.
3954 *A 4020.3*	**Haskier Island.**	57° 42.0′ N 7° 41.3′ W	**Fl.W.** period 20s fl. 0.3s, ec. 19.7s	144 **44**	**23**	White fiberglass tower.	
3955 *A 4020.5*	Monach Islands.	57° 31.6′ N 7° 41.7′ W	**Fl.(2)W.** period 15s	62 **19**	10	White framework tower.	
3956 *A 4044*	Rockall.	57° 35.8′ N 13° 41.3′ W	**Fl.W.** period 15s fl. 0.1s, ec. 14.9s	63 **19**	8	Red lantern; 3.	Unreliable.
3958 *A 4047*	St. Kilda Range, front.	57° 48.3′ N 8° 34.2′ W	**Oc.W.** period 5s	85 **26**	3	Cairn; 3.	
3959 *A 4047.1*	-Rear, 100 meters 270° from front.	57° 48.3′ N 8° 34.2′ W	**Oc.W.** period 5s	125 **38**	3	Cairn; 7.	Synchronized with front.
			SCOTLAND-WEST COAST				
3960 *A 4050*	Trodday.	57° 43.6′ N 6° 17.8′ W	**Fl.(2)W.R.G.** period 10s fl. 1s, ec. 1s fl. 1s, ec. 7s	160 **49**	W. 12 R. 9 G. 9	White beacon; 16.	W. 062°-088°, R.-130°, W.-322°, G.-062°.
	SKYE:						
3964 *A 4056*	-Waternish Point.	57° 36.5′ N 6° 38.0′ W	**Fl.W.** period 20s fl. 1s, ec. 19s	70 **21**	8	White tower; 24.	
3968 *A 4052*	-Uig, pier, head.	57° 35.1′ N 6° 22.2′ W	**Iso.W.R.G.** period 4s	30 **9**	W. 7 R. 4 G. 4	Gray mast.	W. 180°-008°, G.-052°, W.-075°, R.-180°.
	-Loch Dunvegan:						
3972 *A 4058*	- -Uiginish Point.	57° 26.8′ N 6° 36.5′ W	**Fl.W.G.** period 3s fl. 1s, ec. 2s	45 **14**	W. 7 G. 5	White hut; 15.	G. 040°-128°, W.-306°. Obscured by Fiadhairt Point on bearings more than 148°.
3976 *A 4060*	- -N. corner of pier.	57° 26.5′ N 6° 35.4′ W	**2 F.R.** (vert.)	16 **5**	3	Post.	When a vessel is expected.
3980 *A 4064*	-**Ness (Neist) Point.**	57° 25.4′ N 6° 47.2′ W	**Fl.W.** period 5s fl. 0.5s, ec. 4.7s	140 **43**	**16**	White tower; 62.	Distress answering.
3984 *A 4068*	- -Ardtreck Point.	57° 20.4′ N 6° 25.8′ W	**Fl.W.** period 6s fl. 0.5s, ec. 5.5s	59 **18**	9	White metal framework tower.	
3986 *A 4069*	- -Elgol.	57° 08.8′ N 6° 06.4′ W	**Fl.G.** period 3s fl. 0.3s, ec. 2.7s	13 **4**	4	Gray pole; 16.	
3988 *A 4074*	Canna, Sanday Island.	57° 02.8′ N 6° 27.9′ W	**Fl.W.** period 6s fl. 0.5s, ec. 5.5s	105 **32**	9	White tower; 30.	Visible 152°-061°.
3992 *A 4076*	**Oigh Sgeir.**	56° 58.2′ N 6° 40.9′ W	**Fl.(3)W.** period 30s fl. 0.2s, ec. 3s fl. 0.2s, ec. 3s fl. 0.2s, ec. 23.4s	136 **41**	**24**	White tower; 128.	**Horn:** (NE. point of Hyskeir Rocks) 1 bl. ev. 30s.
	RACON		**T(–)**		**15**		

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
			SCOTLAND-WEST COAST				
3996 *A 4096*	**Skerryvore.**	56° 19.4′ N 7° 06.8′ W	**Fl.W.** period 10s fl. 0.5s, ec. 9.5s	150 **46**	**23**	Gray granite tower; 158.	**Fog detector light:** U.Q.W. visible 169°. **Horn:** 1 bl. ev. 60s.
	RACON		**M(– –)** period 120s		**25**		
4000 *A 4098*	**Dubh Artach.**	56° 08.0′ N 6° 37.9′ W	**Fl.(2)W.** period 30s fl. 0.2s, ec. 3.8s fl. 0.2s, ec. 25.8s	144 **44**	**20**	Gray granite tower, red band; 126.	
4004 *A 4092*	**Scarinish.**	56° 30.0′ N 6° 48.2′ W	**Fl.W.** period 3s fl. 0.2s, ec. 2.8s	37 **11**	**16**	White square tower; 11.	Visible 210°-030°.
4005 *A 4093*	-Range, front.	56° 30.6′ N 6° 47.9′ W	**F.R.**	26 **8**		Gray metal column; 16.	
4005.5 *A 4093.1*	--Rear, 30 meters 286°30' from front.	56° 30.6′ N 6° 47.8′ W	**F.R.**	36 **11**		Gray metal column; 13.	
4008 *A 4102*	Eileanan Liathanaich (Grey Islands), SE. extremity.	56° 20.5′ N 6° 16.2′ W	**Fl.W.R.** period 6s fl. 0.5s, ec. 5.5s	40 **12**	W. 8 R. 6	White beacon; 25.	R. 088°-108°, W.-088°.
4012 *A 4080*	Eigg, on E. point of Eilean Chathastail.	56° 52.3′ N 6° 07.1′ W	**Fl.W.** period 6s fl. 0.5s, ec. 5.5s	80 **24**	8	White tower; 26.	Visible 181°-shore.
4016 *A 4082*	**Ardnamurchan.**	56° 43.6′ N 6° 13.4′ W	**Fl.(2)W.** period 20s	180 **55**	**24**	Gray granite tower; 118.	Visible 002°-217°. **Horn:** 2 bl. ev. 20s.
4020 *A 4084*	Cairns of Coll, Suil Ghorm.	56° 42.2′ N 6° 26.8′ W	**Fl.W.** period 12s fl. 0.5s, ec. 11.5s	74 **23**	10	White tower; 25.	
4024 *A 4087*	-Loch Eatharna, Arinagour, Pier, near head.	56° 36.9′ N 6° 31.3′ W	**2 F.R.** (vert.)	39 **12**		Metal column.	1.5 meters apart.
	SOUND OF MULL:						
4028 *A 4107*	-Ardmore Point.	56° 39.4′ N 6° 07.6′ W	**Fl.(2)W.** period 10s fl. 1s, ec. 1s fl. 1s, ec. 7s	55 **17**	8	White column; 12.	
4030 *A 4109*	-Kilchoan, Mingary, pier, near head.	56° 41.3′ N 6° 05.6′ W	**Q.R.**	26 **8**	3	Gray pole.	
4032 *A 4112*	**-Rubha nan Gall.**	56° 38.3′ N 6° 03.9′ W	**Fl.W.** period 3s fl. 0.5s, ec. 2.5s	55 **17**	**15**	White tower; 62.	
4036 *A 4122*	-Eileanan Glasa (Green Island), Dearg Sgeir.	56° 32.3′ N 5° 54.7′ W	**Fl.W.** period 6s fl. 0.5s, ec. 5.5s	23 **7**	8	White tower; 26.	
4040 *A 4124*	-Ardtornish Point.	56° 31.1′ N 5° 45.1′ W	**Fl.(2)W.R.G.** period 10s fl. 1s, ec. 1s fl. 1s, ec. 7s	24 **7**	W. 8 R. 5 G. 5	White tower; 24.	G. shore-302°, W.-310°, R.-342°, W.-057°, R.-095°, W.-108°, G.-shore.
4042 *A 4125*	-Lochaline.	56° 32.2′ N 5° 46.5′ W	**2 F.R.** (vert.)	13 **4**	3	Metal posts.	1 meter apart.
4043 *A 4125.3*	--Range, front.	56° 32.4′ N 5° 46.4′ W	**F.W.**	7 **2**			
4043.1 *A 4125.31*	---Rear, 88 meters 356° from front.	56° 32.5′ N 5° 46.4′ W	**F.W.**	13 **4**			
4044 *A 4126*	-Grey Rocks.	56° 29.8′ N 5° 42.7′ W	**Fl.W.** period 3s fl. 0.3s, ec. 2.7s	36 **11**	6	White framework tower; 20.	
4048 *A 4127*	Craignure Range, front, head of pier.	56° 28.3′ N 5° 42.2′ W	**F.R.**	32 **10**		Concrete mast.	

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
			SCOTLAND-WEST COAST				
4052 *A 4127.1*	-Rear, 150 meters 240°50′ from front.	56° 28.2′ N 5° 42.3′ W	**F.R.**	40 **12**		Concrete mast.	Visible 225°48′-255°48′. Shown on request.
4056 *A 4174*	Duart Point, William Black Memorial Tower.	56° 26.9′ N 5° 38.7′ W	**Fl.(3)W.R.** period 18s fl. 0.5s, ec. 1.5s fl. 0.5s, ec. 1.5s fl. 0.5s, ec. 13.5s	45 **14**	W. 5 R. 3	Gray granite building; 30.	W. 162°-261°, R.-275°, W.-353°, R.-shore.
4058 *A 4174.5*	Loch Spelve.	56° 23.2′ N 5° 42.0′ W	**Q.G.**	10 **3**	2	Green pole.	
	LOCH CRENAN:						
4060 *A 4164*	-Off Airds Point.	56° 32.2′ N 5° 25.1′ W	**Fl.W.R.G.** period 2s	6 **2**	W. 3 R. 1 G. 1	PORT (A) R, column.	R. 196°-246°, W.-258°, G.-041°, W.-058°, R.-093°, W.-139°, obsc.-196°.
4064 *A 4165*	-Eriska.	56° 32.2′ N 5° 24.0′ W	**Q.G.**	6 **2**	2	Green column.	Visible 128°-329°.
4068 *A 4172*	Lady's Rock.	56° 27.0′ N 5° 37.0′ W	**Fl.W.** period 6s fl. 0.5s, ec. 5.5s	40 **12**	5	Red round structure on white beacon; 40.	
4072 *A 4170*	**Lismore.**	56° 27.4′ N 5° 36.4′ W	**Fl.W.** period 10s fl. 0.5s, ec. 9.5s	103 **31**	**19**	White tower; 86.	Visible 237°-208°.
4076 *A 4160*	Sgeir Bhuidhe.	56° 33.6′ N 5° 24.6′ W	**Fl.(2)W.R.** period 7s fl. 0.5s, ec. 1.5s fl. 0.5s, ec. 4.5s	24 **7**	9	White beacon; 24.	R. 184°-220°, W.-184°.
	LOCH LINNHE:						
4080 *A 4132*	-Corran Point.	56° 43.3′ N 5° 14.5′ W	**Iso.W.R.G.** period 4s	38 **12**	W. 10 R. 7 G. -	White tower; 42.	R. shore-195°, W.-215°, G.-305°, W.-030°, R.-shore.
4082 *A 4132.4*	-Pier, head.	56° 43.4′ N 5° 14.6′ W	**Fl.R.** period 5s	23 **7**	3	Gray mast.	
4084 *A 4133*	-Corran Narrows NE.	56° 43.6′ N 5° 13.8′ W	**Fl.W.** period 5s fl. 0.5s, ec. 4.5s	14 **4**	4	Metal framework tower; 8.	Visible S. shore-214°.
4092 *A 4140*	-Corpach, entrance to Caledonian Canal lock.	56° 50.5′ N 5° 07.4′ W	**Iso.W.R.G.** period 4s	21 **6**	5	White tower; 20.	G. 287°-310°, W.-335°, R.-030°, obsc.-287°.
4093 *A 4150*	-Glensanda Quarry Berth, jetty, SW. corner.	56° 34.1′ N 5° 31.9′ W	**Fl.R.** period 3s	16 **5**	4		
4094 *A 4150.2*	- -NE. corner.	56° 34.1′ N 5° 31.8′ W	**Fl.R.** period 3s	16 **5**	4		
4095 *A 4151*	-Breakwater, head.	56° 33.9′ N 5° 32.2′ W	**2 F.R.** (vert.)	16 **5**	3	Metal post; 10.	1 meter apart.
	DUNSTAFFNAGE BAY:						
4096 *A 4175.4*	-Pier, NE. head.	56° 27.2′ N 5° 26.1′ W	**2 F.G.** (vert.)	13 **4**	2	Pontoon.	
	OBAN:						
4100 *A 4176*	-Kerrera, Northspit, W. side of entrance.	56° 25.5′ N 5° 29.5′ W	**Fl.R.** period 3s fl. 0.3s, ec. 2.7s	30 **9**	5	Column, white and red bands; 33.	
4104 *A 4178*	-Dunollie.	56° 25.4′ N 5° 29.0′ W	**Fl.(2)W.R.G.** period 6s fl. 0.6s, ec. 1s fl. 0.6s, ec. 3.8s	22 **7**	W. 5 G. 4 R. 4	Stone tower; 19.	G. 351°-009°, W.-047°, R.-120°, W.-138°, G.-143°, obsc.-351°.

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
			SCOTLAND-WEST COAST				
4105 *A 4179*	-Rubh'a' Chruidh.	56° 25.3′ N 5° 29.2′ W	**Q.R.**	10 **3**	2	Metal post; 10.	
4108 *A 4180*	-Middle of N. pier.	56° 24.9′ N 5° 28.4′ W	**2 F.G.** (vert.)	27 **8**	5	Column; 20.	
4112 *A 4183*	-N. Lighthouse, Commissioner's pier.	56° 24.7′ N 5° 28.7′ W	**Oc.G.** period 6s lt. 4s, ec. 2s	33 **10**	3	Column.	
4116 *A 4182*	-Center of S. quay.	56° 24.7′ N 5° 28.7′ W	**2 F.G.** (vert.)	23 **7**	4	Building; 13.	
4120 *A 4186*	Sgeirean Dubha, Sound of Kerrera, 274 meters from shore.	56° 22.8′ N 5° 32.2′ W	**Fl.(2)W.** period 12s fl. 0.5s, ec. 1.5s fl. 0.5s, ec. 9.5s	24 **7**	5	White round structure on concrete base; 22.	
4124 *A 4188*	-Port Lathaich.	56° 22.8′ N 5° 31.3′ W	**Oc.G.** period 6s lt. 4s, ec. 2s		6	Beacon.	Visible 037°-072°, over cable landing.
4128 *A 4190*	Fladda.	56° 14.9′ N 5° 40.8′ W	**Fl.(2)W.R.G.** period 9s fl. 0.4s, ec. 1.6s fl. 0.4s, ec. 6.6s	42 **13**	W. 11 R. 9 G. 9	White tower; 42.	R. 169°-186°, W.-337°, G.-344°, W.-356°, R.-026°, obsc.-169°.
4132 *A 4192*	Dubh Sgeir.	56° 14.8′ N 5° 40.1′ W	**Fl.W.R.G.** period 6s fl. 0.5s, ec. 5.5s	30 **9**	W. 6 R. 4 G. 4	White framework tower; 23.	W. 000°-010°, R.-025°, W.-199°, G.-000°.
	RACON		**M(– –)**		5		
4136 *A 4196*	Isles of the Sea.	56° 13.1′ N 5° 48.9′ W	**Fl.W.** period 6s fl. 1s, ec. 5s	69 **21**	9	White beacon; 13.	Obscured 215°-240°.
4140 *A 4200*	Scalasaig, Colonsay, S. of harbor, head.	56° 04.0′ N 6° 10.8′ W	**Fl.(2)W.R.** period 10s fl. 1.5s, ec. 1.5s fl. 1.5s, ec. 5.5s	19 **6**	W. 8 R. 5	White building; 9.	R. shore-230°, W.-337°, R.-354°.
4144 *A 4202*	-Pier head Range, front.	56° 04.2′ N 6° 10.9′ W	**F.R.**	26 **8**		Concrete column; 19.	
4148 *A 4202.1*	- -Rear, 60 meters from front.	56° 04.2′ N 6° 10.9′ W	**F.R.**	34 **10**		Concrete column; 27.	On request.
	LOCH MELFORT:						
4150 *A 4205*	-Fearnach Bay, pier.	56° 16.2′ N 5° 30.1′ W	**Dir.F.R.**	20 **6**	3	Metal mast; 30.	Shown Apr. 1 to Oct. 31.
4151 *A 4206*	-Craobh Marina.	56° 12.8′ N 5° 33.4′ W	**Iso.W.R.G.** period 5s	34 **10**	W. 5 R. 3 G. 3	Metal structure.	G. 114°-162°, W.-183°, R.-200°.
	SOUND OF JURA:						
4152 *A 4208*	-Reisa an t-Struith.	56° 07.8′ N 5° 38.8′ W	**Fl.(2)W.** period 12s fl. 0.5s, ec. 1.5s fl. 0.5s, ec. 9.5s	41 **12**	7	White column, concrete base; 18.	
	-Crinan Canal:						
4156 *A 4212*	- -27 meters E. of lock entrance.	56° 05.5′ N 5° 33.3′ W	**Fl.W.G.** period 3s fl. 0.3s, ec. 2.7s	26 **8**	4	White tower, red band; 21.	W. 114°-146°, G.-280°.
4160 *A 4214*	- -E. wing of lock entrance.	56° 05.5′ N 5° 33.3′ W	**2 F.R.** (vert.)	41 **12**		Post; 7.	
4164 *A 4218*	- -W. wing of lock entrance.	56° 05.5′ N 5° 33.3′ W	**2 F.G.** (vert.)	41 **12**		Post; 7.	

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
			SCOTLAND-WEST COAST				
4168 *A 4226*	-Ruadh Sgeir.	56° 04.3′ N 5° 39.8′ W	**Fl.W.** period 6s fl. 0.5s, ec. 5.5s	49 **15**	9	White tower; 23.	
4172 *A 4230*	-Skervuile.	55° 52.5′ N 5° 49.8′ W	**Fl.W.** period 15s fl. 1s, ec. 14s	73 **22**	9	White tower; 83.	
4176 *A 4230.6*	-Eilean nan Gabhar, S. point.	55° 50.0′ N 5° 56.2′ W	**Fl.W.** period 5s fl. 0.5s, ec. 4.5s	23 **7**	8	Framework tower; 10.	Visible 225°-010°.
4180 *A 4232*	-Na Cuiltean, off SE. point of Jura.	55° 48.7′ N 5° 54.8′ W	**Fl.W.** period 10s fl. 0.5s, ec. 9.5s	30 **9**	9	Column on white building.	
4182 *A 4259*	Gahmna Gigha.	55° 43.8′ N 5° 41.0′ W	**Fl.(2)W.** period 6s fl. 0.3s, ec. 1.4s fl. 0.3s, ec. 4s	23 **7**	5	Concrete column; 16.	
	WEST LOCH TARBERT:						
4184 *A 4260*	-Dunskeig Bay.	55° 45.2′ N 5° 34.9′ W	**Q.(2)W.** period 10s fl. 0.3s, ec. 0.7s fl. 0.3s, ec. 8.7s	36 **11**	8	Silver metal post; 10.	
4188 *A 4262*	-Eileen Triaghe.	55° 45.4′ N 5° 35.7′ W	**Fl.(2)R.** period 5s	16 **5**	3	Red post.	**Radar reflector.**
4192 *A 4263*	-Corran.	55° 46.1′ N 5° 34.2′ W	**Q.G.**	10 **3**	3	Green post.	**Radar reflector.**
4196 *A 4264*	-Sgeir Mhein.	55° 47.1′ N 5° 32.3′ W	**Q.R.**	10 **3**	3	Red post.	**Radar reflector.**
4200 *A 4265*	-Black Rocks.	55° 47.9′ N 5° 30.1′ W	**Q.G.**		3	Green post.	**Radar reflector.**
4204 *A 4266.4*	-Kennacraig, ferry terminal, head.	55° 48.4′ N 5° 28.9′ W	**2 F.G.** (vert.)	23 **7** 19 **6**	3	Silver metal post; 6.	
4206 *A 4268*	Machrihanish Airfield.	55° 26.3′ N 5° 42.4′ W	**Aero.Mo.(MH)R.**	174 **53**		Identifying beacon.	Occasional.
4208 *A 4236*	**Rhuda Mhail.**	55° 56.2′ N 6° 07.3′ W	**Fl.(3)W.R.** period 15s fl. 0.4s, ec. 2s fl. 0.4s, ec. 2s fl. 0.4s, ec. 9.8s	147 **45**	W. **24** R. **21**	White tower; 113.	R. 075°-180°, W.-075°. Storm signals.
4212 *A 4237*	Carragh an t'Struith.	55° 52.3′ N 6° 05.7′ W	**Fl.W.G.** period 3s fl. 1s, ec. 2s	25 **8**	W. 9 G. 6	White tower; 17.	W. 354°-078°, G.-170°, W.-185°.
4216 *A 4238*	Carraig Mhor.	55° 50.4′ N 6° 06.0′ W	**Fl.(2)W.R.** period 6s fl. 0.5s, ec. 1.5s fl. 0.5s, ec. 3.5s	23 **7**	W. 8 R. 6	White tower; 23.	R. shore-175°, W.-347°, R.-shore.
4220 *A 4240*	McArthur's Head.	55° 45.9′ N 6° 02.8′ W	**Fl.(2)W.R.** period 10s 2 fl. 1s	128 **39**	W. 14 R. 11	White tower; 42.	W. up the sound, from NE. shore of Islay, to 159°, R.-244°, W. through N., as far westward as it can be seen.
4224 *A 4242*	Chuirn, about 1.9 km S. of Ardmore Point.	55° 40.2′ N 6° 01.1′ W	**Fl.(3)W.** period 18s fl. 0.5s, ec. 1.5s fl. 0.5s, ec. 1.5s fl. 0.5s, ec. 13.5s	84 **26**	8	White beacon; 35.	Obscured when bearing more than 040°.
4228 *A 4248*	Port Ellen, Carraig Fhada Point, W. entrance of harbor.	55° 37.2′ N 6° 12.7′ W	**Fl.W.R.G.** period 3s fl. 0.3s, ec. 2.7s	66 **20**	W. 8 R. 6 G. 6	White square tower; 57.	W. shore-248°, G.-311°, W.-340°, R.-shore.

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
			SCOTLAND-WEST COAST				
4232 *A 4256*	**Rhinns of Islay.**	55° 40.4′ N 6° 30.8′ W	**Fl.W.** period 5s fl. 0.2s, ec. 4.8s	150 **46**	**24**	White tower; 96.	Obscured 184°-256°.
4236 *A 4254*	Loch Indaal, Ruhda an Duin, 726 meters N. of Port Charlotte.	55° 44.7′ N 6° 22.4′ W	**Fl.(2)W.R.** period 7s fl. 0.5s, ec. 1.5s fl. 0.5s, ec. 4.5s	50 **15**	W. 13 R. 12	White brick tower; 42.	W. 218°-249°, R.-350°, W.-036°, obscured elsewhere.
4240 *A 4252*	-Bruichladdich, pier, head.	55° 45.8′ N 6° 21.6′ W	**2 F.R.** (vert.)	20 **6**	5	Column; 13.	
4244 *A 4272*	**Mull of Kintyre.**	55° 18.6′ N 5° 48.1′ W	**Fl.(2)W.** period 20s fl. 0.4s, ec. 1.5s fl. 0.4s, ec. 17.7s	297 **91**	**24**	White tower on white building; 38.	Visible 347°-178°. **Horn:** (0.6 mile SSE.) Mo.(N) ev. 90s.
4248 *A 4274*	**Sanda Island.**	55° 16.5′ N 5° 34.9′ W	**Fl.W.** period 10s fl. 0.3s, ec. 9.7s	165 **50**	**15**	White tower; 48.	
4252 *A 4276*	**Davarr.**	55° 25.7′ N 5° 32.4′ W	**Fl.(2)W.** period 10s fl. 0.3s, ec. 1.7s fl. 0.3s, ec. 7.7s	121 **37**	**23**	White tower; 65.	Visible 073°-330°. **Horn:** 2 bl. ev. 20s.
	CAMPBELTOWN:						
4256 *A 4279*	-Kilkerran Range, front.	55° 25.0′ N 5° 35.3′ W	**F.Y.**	24 **7**	6	Beacon, red chevron daymark, point up.	Shown by day.
4260 *A 4279.1*	- -Rear, 250 meters 240°18′ from front.	55° 24.9′ N 5° 35.5′ W	**F.Y.**	91 **28**	6	Beacon, red chevron daymark, point down.	Shown by day.
4264 *A 4284*	-Old pier, head.	55° 25.5′ N 5° 36.0′ W	**2 F.G.** (vert.)	22 **7**	4	Column; 17.	
4268 *A 4282*	-New pier, head.	55° 25.5′ N 5° 35.9′ W	**2 F.R.** (vert.)	17 **5**	4	Mast; 12.	
4272 *A 4290*	Port Crannaich, breakwater, head.	55° 35.7′ N 5° 27.8′ W	**Fl.R.** period 10s	15 **5**	6	Metal column; 10.	Obscured 279°-099°.
4274 *A 4293*	Skipness, Calibration Range.	55° 46.7′ N 5° 19.0′ W	**Iso.R.** period 8s	23 **7**	10	Concrete building, yellow diamond daymark; 13.	Visible 292°12′-312°12′. Oc.(2)Y. 10s 24M shown when range is in use.
	LOCH FYNE:						
4276 *A 4296*	-Sgat More, S. head.	55° 50.8′ N 5° 18.4′ W	**Fl.W.** period 3s fl. 0.7s, ec. 2.3s	30 **9**	12	White round tower on concrete base; 28.	
4280 *A 4297*	-Portavadie, jetty.	55° 52.5′ N 5° 19.2′ W	**2 F.G.** (vert.)	20 **6** 13 **4**	4	Pole.	
4282 *A 4297.5*	-Eilean na Beithe.	55° 52.7′ N 5° 19.5′ W	**Fl.W.R.G.** period 3s	23 **7**	5	Metal post, concrete base; 10.	G. 036°-065°, W.-078°, R.-106°.
4284 *A 4298*	-East Loch Tarbert, Madadh Maol.	55° 52.0′ N 5° 24.2′ W	**Fl.R.** period 2.5s fl. 0.5s, ec. 2s	14 **4**	3	Red column.	
4288 *A 4299*	- -Eilean a'Choic.	55° 52.0′ N 5° 24.3′ W	**Q.G.**	10 **3**	2	Green column.	
4296 *A 4304*	-Ardrishaig, breakwater, head.	56° 00.7′ N 5° 26.5′ W	**L.Fl.W.R.G.** period 6s fl. 2s, ec. 4s	30 **9**	4	White tower; 19.	G. 287°-339°, W.-350°, R.-035°, obsc.-287°. Entrance to lock marked by F.G. and F.R. lights.
4300 *A 4308*	-Otter Spit.	56° 00.6′ N 5° 21.0′ W	**Fl.G.** period 3s fl. 0.7s, ec. 2.3s	23 **7**	8	Green tank on concrete pyramid; 36.	

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
			SCOTLAND-WEST COAST				
4304 *A 4310*	Glas Eilean.	56° 01.1′ N 5° 21.1′ W	**Fl.R.** period 5s fl. 1s, ec. 4s	38 **12**	7	Red column.	
4308 *A 4314*	-Paddy Rock, Sgeir an Eirionnaich.	56° 06.5′ N 5° 13.5′ W	**Fl.W.R.** period 3s fl. 0.7s, ec. 2.3s	22 **7**	8	Black metal framework tower, white stripes; 22.	R. 044°-087°, W.-192°, R.-210°, W.-044°.
4312 *A 4316*	-Furnace wharf.	56° 09.0′ N 5° 10.4′ W	**2 F.R.** (vert.)	29 **9** 23 **7**	5	Gray column.	Private.
4316 *A 4326*	**Pladda.**	55° 25.5′ N 5° 07.3′ W	**Fl.(3)W.** period 30s fl. 0.7s, ec. 3.1s fl. 0.7s, ec. 3.1s fl. 0.7s, ec. 21.7s	130 **40**	**17**	White tower; 95.	
4320 *A 4330*	**Holy Island.**	55° 31.2′ N 5° 03.8′ W	**Fl.(2)W.** period 20s	124 **38**	**25**	White square tower; 77.	
4324 *A 4336*	Brodick Pier.	55° 34.7′ N 5° 08.2′ W	**2 F.R.** (vert.)	29 **9** 23 **7**	4	Concrete column.	Dir.F.W. lights shown on beacons about 6 miles NNW.
4328 *A 4332*	-SW. extremity of island.	55° 30.7′ N 5° 04.1′ W	**Fl.G.** period 3s fl. 0.6s, ec. 2.4s	46 **14**	10	White tower; 56.	Visible 282°-147°.
			SCOTLAND-FIRTH OF CLYDE				
4332 *A 4344*	Runnaneun Point.	55° 43.8′ N 5° 00.2′ W	**Fl.R.** period 6s fl. 1s, ec. 5s	26 **8**	12	White metal tower; 25.	
4336 *A 4346*	Cumbrae, W. side of Little Cumbrae Island.	55° 43.2′ N 4° 58.0′ W	**Fl.W.** period 6s	92 **28**	14	White tower; 36.	Visible 334°-193°.
4338 *A 4346.5*	-Sheanawally Point.	55° 44.1′ N 4° 56.3′ W	**Fl.W.** period 10s	20 **6**	5	Metal post.	Visible 061°-300°.
	MILLPORT:						
4340 *A 4348*	-W. extremity of outer islet.	55° 44.9′ N 4° 55.5′ W	**Q.G.**	18 **5**	2	Post.	Shown from Sept. 1 to Apr. 30.
4344 *A 4350*	-Pier, head, Range, front.	55° 45.1′ N 4° 55.8′ W	**F.R.**	24 **7**	5	Column; 20.	
4348 *A 4352*	- -Rear, on shore, 137 meters 333° from front.	55° 45.1′ N 4° 55.8′ W	**F.R.**	29 **9**	5	Column; 23.	
4348.2 *A 4355*	-Hunterston Ore/Coal Jetty. NE. corner	55° 45.3′ N 4° 52.6′ W	**2 F.G.** (vert.)	36 **11** 26 **8**	5	Green metal column.	
4348.4 *A 4355.2*	- -SW. corner.	55° 45.1′ N 4° 52.8′ W	**2 F.G.** (vert.)	36 **11** 26 **8**	5	Green metal column.	
4348.6 *A 4358*	-NATO Pier, head	55° 46.1′ N 4° 51.7′ W	**2 F.G.** (vert.)				
4348.8 *A 4358.2*	- -Elbow	55° 46.0′ N 4° 51.7′ W	**2 F.G.** (vert.)				
4349 *A 4359*	Largs Marina, S. breakwater head.	55° 46.4′ N 4° 51.7′ W	**Oc.G.** period 10s lt. 7s, ec. 3s	12 **4**	4	STARBOARD (A) G, column, topmark.	

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
			SCOTLAND-FIRTH OF CLYDE				
4350 *A 4359.2*	-W. Breakwater, head.	55° 46.4′ N 4° 51.6′ W	**Oc.R.** period 10s lt. 7s, ec. 3s	12 **4**	4	PORT (A) R, column, topmark.	
4352 *A 4360*	Largs, N. pier, head.	55° 47.7′ N 4° 52.3′ W	**2 F.G.** (vert.)	23 **7** 16 **5**	5	Mast; 15.	Shown 24 hours.
4354 *A 4361*	Ascog Patches, No. ″13″.	55° 49.7′ N 5° 00.2′ W	**Fl.(2)W.** period 10s	16 **5**	5	ISOLATED DANGER BRB, pile, topmark.	
4356 *A 4362*	**Toward Point.**	55° 51.7′ N 4° 58.7′ W	**Fl.W.** period 10s fl. 0.2s, ec. 9.8s	70 **21**	**22**	White tower; 63.	
	ROTHESAY:						
4360 *A 4368*	-N. quay, E. head.	55° 50.3′ N 5° 03.1′ W	**2 F.G.** (vert.)	23 **7**	5	Column; 27.	
4364 *A 4370*	--W. head.	55° 50.3′ N 5° 03.3′ W	**2 F.R.** (vert.)	23 **7**	5	Column; 27.	**Bell:** Sounded when vessels are expected.
4372 *A 4374*	Loch Striven, jetty, S. head.	55° 53.7′ N 5° 02.9′ W	**2 F.G.** (vert.)				
4376 *A 4374.2*	-N. head.	55° 53.8′ N 5° 02.9′ W	**2 F.G.** (vert.)				
4380 *A 4398*	Gantock Beacon.	55° 56.5′ N 4° 55.0′ W	**Fl.R.** period 6s fl. 0.8s, ec. 5.2s	39 **12**	6	White round tower; 44.	
	DUNOON:						
4384 *A 4400*	-Pier, S. head.	55° 56.8′ N 4° 55.2′ W	**2 F.R.** (vert.)	16 **5**	6	Column; 23.	**Bell:** Sounded when vessels are expected.
4388 *A 4400.2*	-Jetty, head.	55° 56.8′ N 4° 55.2′ W	**2 F.R.** (vert.)	17 **5**	6	Column; 6.	
4392 *A 4392*	Wemyss Bay.	55° 52.6′ N 4° 53.4′ W	**2 F.G.** (vert.)	23 **7** 16 **5**	5	Metal mast; 39.	
4393 *A 4392.4*	-No. ″12″.	55° 52.9′ N 4° 53.7′ W	**Oc.(2)Y.** period 10s	16 **5**	3	SPECIAL Y, pile, topmark; 20.	
4394 *A 4395*	Lunderston Bay, No. ″8″.	55° 55.5′ N 4° 52.9′ W	**Fl.(4)Y.** period 10s	16 **5**	3	Yellow pile, yellow spherical daymark; 20.	
4396 *A 4405*	McInroy's Point.	55° 57.1′ N 4° 51.2′ W	**2 F.G.** (vert.)	16 **5** 10 **3**	6	Gray metal column.	
4397 *A 4405.4*	-No. ″5″.	55° 57.0′ N 4° 51.6′ W	**Oc.(2)Y.** period 10s	16 **5**	3	SPECIAL Y, pile, topmark; 20.	
4400 *A 4406*	Hunter's Quay, NW. corner pierhead.	55° 58.3′ N 4° 54.4′ W	**2 F.R.** (vert.)	19 **6** 13 **4**	6	Gray metal column.	
4403 *A 4408*	Barons Point, No. ″3″.	55° 59.2′ N 4° 51.0′ W	**Oc.(2)Y.** period 10s	16 **5**	3	SPECIAL Y, pile, topmark; 20.	
4404 *A 4404*	Cloch Point.	55° 56.6′ N 4° 52.7′ W	**Fl.W.** period 3s fl. 0.6s, ec. 2.4s	79 **24**	8	White round tower, black band.	F.G. 21m light is displayed when D/F calibration service is operating. **Calibration Radiobeacon.**
4408 *A 4417*	Cardwell Bay, T-pier, W. head.	55° 57.5′ N 4° 48.6′ W	**Fl.G.** period 5s	13 **4**	3	Metal post; 10.	

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			SCOTLAND-FIRTH OF CLYDE				
4412 *A 4416*	-T-pier, E. head.	55° 57.5′ N 4° 48.4′ W	**Fl.R.** period 5s	13 **4**	3	Metal post; 10.	
	GOUROCK BAY:						
4416 *A 4414*	-Kempock Point.	55° 57.8′ N 4° 49.0′ W	**2 F.G.** (vert.)	33 **10** 27 **8**	3	Gray framework tower; 26.	Port closure signals on roof of Navy building 0.9 mile E.
4424 *A 4409*	-Ravenrock Point.	56° 02.1′ N 4° 54.3′ W	**Fl.W.** period 4s	39 **12**	10	White metal framework tower on white column;	
			Dir.W.R.G.	29 **9**			F.R. 201°30′-203°, Al.W.R.-203°30′, W. phase increasing with bearing, F.W.-204°30′, Al.W.G.-205°, G. phase increasing with bearing, F.G.-206°30′.
4428 *A 4411*	-Port Dornaige.	56° 03.7′ N 4° 53.6′ W	**Fl.W.** period 6s fl. 0.7s, ec. 5.3s	27 **8**	11	White column; 13.	Visible 026°-206°.
4429 *A 4410.3*	-Jetty, S. corner.	56° 03.9′ N 4° 52.5′ W	**Fl.G.** period 12s	19 **6**	5		3 F.G. (vert.) port closure signals close N.
4430 *A 4410.32*	--N. corner.	56° 04.0′ N 4° 52.5′ W	**Fl.G.** period 12s	19 **6**	2		
4432 *A 4412.8*	-Finnart No. ″2" Jetty, S. head.	56° 06.7′ N 4° 50.4′ W	**2 F.G.** (vert.)	19 **6**			
4436 *A 4412.7*	--N. head Range, front.	56° 06.7′ N 4° 50.4′ W	**2 F.G.** (vert.)	19 **6**			
4436.1 *A 4412.71*	---Rear, 82 meters 066° from front.	56° 06.7′ N 4° 50.3′ W	**Q.G.**	26 **8**			Visible 051°-081°.
4440 *A 4411.4*	-Dog Rock (Carraig nan Ron).	56° 06.0′ N 4° 51.6′ W	**Fl.W.** period 2s fl. 0.7s, ec. 1.3s	23 **7**	11	White column; 17.	
	LOCH GOIL:						
4441 *A 4411.6*	-The Perch Range, front.	56° 06.9′ N 4° 54.2′ W	**Dir.F.W.R.G.**	9 **3**	5	Metal column, orange rectangular daymark.	G. 311°-317°, W.-320°, R.-322°.
			Fl.R. period 3s	9 **3**	3		Visible 187°-322°. Occasional.
4441.1 *A 4411.61*	--Rear, 700 meters 318° from front.	56° 07.2′ N 4° 54.6′ W	**F.W.**	23 **7**	5	Metal column, orange rectangular daymark.	Visible 312°-322°30′.
4442 *A 4411.8*	-Rubha Ardnahein.	56° 06.2′ N 4° 53.5′ W	**Fl.R.** period 5s	9 **3**	3	Metal column, orange rectangular daymark.	Visible 132°-312°. Occasional.
4444 *A 4412*	-Cnap Point Range, front.	56° 07.4′ N 4° 49.9′ W	**Q.W.**	26 **8**	10	White column; 17.	
4444.1 *A 4412.1*	--Rear, 87 meters 031° from front.	56° 07.4′ N 4° 49.8′ W	**F.W.**	43 **13**		White metal framework tower, red rectangular daymark.	
4448 *A 4413.6*	-Strone.	56° 07.7′ N 4° 49.1′ W	**Fl.G.** period 3s	9 **3**		Tripod.	
4452 *A 4413.7*	-Jetty, head.	56° 07.8′ N 4° 49.0′ W	**2 F.G.** (vert.)			Column; 6.	
4456 *A 4413.72*	--Elbow.	56° 07.9′ N 4° 49.0′ W	**2 F.G.** (vert.)			Column; 6.	
4457 *A 4413.9*	-Kempock Point, No. ″4".	55° 57.7′ N 4° 49.3′ W	**Oc.(2)Y.** period 10s	16 **5**	3	SPECIAL Y, pile, topmark; 20.	

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
			SCOTLAND-FIRTH OF CLYDE				
4464 *A 4420*	Rosneath Patch, S. head.	55° 58.5′ N 4° 47.3′ W	**Fl.(2)W.** period 10s	18 **5**	10	Concrete pile and hut with double ball daymark; 23.	
4466 *A 4421*	-Beacon "8N", 080°.	55° 59.1′ N 4° 44.1′ W	**Dir.W.R.G.**	13 **4**	W. **16** R. 13 G. 13	SPECIAL Y, pile, topmark.	F.G. 075°-077°30′, Al.W.G.-079°30′, F.W.-080°30′, Al.W.R.- 082°30′, F.R.-085°.
	-138°.		**Dir.W.R.G.**				F.G.132°-134°, Al.W.G.-137°, F.W.-139°, Al.W.R. -142°.
	-Passing Lt.		**Fl.Y.** period 3s	20 **6**	3		
4472 *A 4421.2*	-Beacon No. ″1".	55° 59.1′ N 4° 43.8′ W	**V.Q.(4)Y.** period 5s	30 **9**		SPECIAL Y, topmark.	In line 080° with beacon 8N.
4475 *A 4422*	Rosneath Patch Beacon "7N", Range, front.	56° 00.1′ N 4° 45.3′ W	**Dir.W.R.G.**	16 **5**	W. **16** R. 13 G. 13	STARBOARD (A) G, pile, topmark.	Al.W.G. 353°-355°, F.W.-357°, Al.W.R.-000°, F.R.-002°. Al.W.G. 111°-114°, F.W.-116°, Al.W.R.-119°, F.R.-121°.
	115°.		**Dir.W.R.G.**				
	Passing Lt.		**Oc.G.** period 6s	20 **6**	3		
4476 *A 4422.1*	Ardencaple Castle, rear, about 940 meters 356° from front.	56° 00.6′ N 4° 45.3′ W	**2 F.G.** (vert.)	86 **26** 76 **23**	12	Stone tower on NW. corner of castle; 45.	Visible 335°-020°.
4490 *A 4423.5*	**Rosneath Bay,** 149°.	56° 00.1′ N 4° 46.6′ W	**Dir.W.R.G.**	30 **9**	W. **16** R. 13 G. 13	Orange metal column; 23.	F.G. 144°-145°, Al.W.G.-148°, F.W.-150°, Al.W.R.-153°, F.R.-154°.
	Passing Lt.		**Oc.R.** period 8s lt. 6s, ec. 2s		3		
4492 *A 4423*	**Rhu Narrows.**	56° 00.7′ N 4° 47.6′ W	**Dir.W.R.G.**	16 **5**	W. **16** R. 13 G. 13	PORT (A) R, beacon, topmark.	Al.W.G. 291°-294°, F.W.-296°, Al.W.R.-299°, F.R.-301°.
4504 *A 4425.5*	-POL Jetty, N. arm.	56° 00.4′ N 4° 47.4′ W	**2 F.R.** (vert.)		5	White concrete pylon; 10.	Visible 150°-330°.
4508 *A 4422.5*	-Rhu Point.	56° 00.9′ N 4° 47.1′ W	**Q.(3)W.R.G.** period 6s	30 **9**	W. 10 R. 7 G. 7	Metal framework tower, orange trapezoidal daymark; 23.	G. 270°-000°, W.-114°, R.-188°.
	--318°.		**Dir.W.R.G.**		W. **16** R. 13 G. 13		Al.W.G. 315°-317°, F.W.-319°, Al.W.R.-321°, F.R.-325°.
4518 *A 4425*	-Castle Point.	56° 00.2′ N 4° 46.4′ W	**Fl.(2)R.** period 10s fl. 0.8s, ec. 1.4s fl. 0.8s, ec. 7s	26 **8**	6	Red mast; 16.	
4519 *A 4426*	-Rhu Spit.	56° 00.8′ N 4° 47.3′ W	**Fl.W.** period 3s fl. 0.4s, ec. 2.6s	19 **6**	6	White round tower, green band; 8.	
4524 *A 4426.5*	-Mambeg, 331°.	56° 03.8′ N 4° 50.4′ W	**Dir.Q.(4)W.R.G.** period 8s	26 **8**	14	White column; 13.	G. 328°30′-330°, W.-332°, R.-333°. Shown 24 hours.
4528 *A 4427.4*	-Faslane Base wharf, S. elbow.	56° 03.2′ N 4° 49.1′ W	**Fl.G.** period 5s	36 **11**	5	Metal mast.	
4530 *A 4427.45*	--Head.	56° 03.1′ N 4° 49.2′ W	**2 F.G.** (vert.)			Building.	
4532 *A 4427.5*	--Carnban Point, S dolphin.	56° 03.1′ N 4° 49.1′ W	**Fl.R.** period 5s fl. 0.5s, ec. 4.5s	10 **3**	2	Dolphin.	Port closure signals on N. dolphin.
4536 *A 4427.6*	---Middles.	56° 03.3′ N 4° 49.2′ W	**2 F.G.** (vert.)	46 **14**	5	Metal mast.	

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			SCOTLAND-FIRTH OF CLYDE				
4542 *A 4427.9*	---Berth No. ″7″.	56° 03.6′ N 4° 49.1′ W	**2 F.G.** (vert.)	23 **7**		Gray mast; 16.	2 meters apart.
4544 *A 4428.6*	-Garelochead, S. fuel jetty, head.	56° 04.2′ N 4° 49.6′ W	**2 F.G** (vert.)	33 **10**	5	White floodlit tower; 40.	2 meters apart.
4548 *A 4428.7*	--N. Fuel Jetty, elbow.	56° 04.3′ N 4° 49.7′ W	**Iso.W.R.G.** period 4s	33 **10**	14	White floodlit tower; 39.	G. 351°-356°, W.-006°, R.-011°.
4549 *A 4428.8*	--N. head.	56° 04.4′ N 4° 49.7′ W	**2 F.G.** (vert.)	33 **10**	5	White floodlit tower; 39.	2 meters apart.
	GREENOCK:						
4552 *A 4438*	-Anchorage Range, front.	55° 57.6′ N 4° 46.5′ W	**F.G.**	23 **7**	12	Yellow column.	
4556 *A 4440*	--Rear, 32 meters 196° from front.	55° 57.6′ N 4° 46.5′ W	**F.G.**	30 **9**	12	Yellow column.	
4560 *A 4444*	-Clydeport Container Terminal.	55° 57.5′ N 4° 45.8′ W	**Q.G.**	26 **8**	8	Metal framework tower on gray metal column.	
4564 *A 4442*	--Range, front.	55° 57.4′ N 4° 45.8′ W	**F.G.**	59 **18**		Building.	
4568 *A 4442.1*	--Rear, 360 meters 194°30′ from front.	55° 57.3′ N 4° 45.9′ W	**F.G.**	108 **33**		Pylon.	
4572 *A 4458*	-Victoria Harbor, W. side of entrance.	55° 56.8′ N 4° 44.6′ W	**2 F.G.** (vert.)	23 **7**		Green mast; 16.	2 meters apart.
4580 *A 4470*	-Garvel Embankment, W. end.	55° 56.8′ N 4° 43.5′ W	**Oc.G.** period 10s	30 **9**	4	Mast.	
4584 *A 4472*	--Maurice Clark Point.	55° 56.6′ N 4° 42.8′ W	**Q.G.**	22 **7**	2	Green stone tower.	
	PORT GLASGOW:						
4588 *A 4476*	-Beacon, off the entrance.	55° 56.3′ N 4° 41.2′ W	**F.G.**	24 **7**	9	Black and white checkered tower, dome; 27.	
4592 *A 4478*	-Steamboat quay.	55° 56.2′ N 4° 41.3′ W	**F.G.**	39 **12**	12	Black and white checkered column; 35.	Visible 210°-290°. Traffic signals.
4596 *A 4484*	Garrison.	55° 55.9′ N 4° 34.0′ W	**Fl.G.** period 5s fl. 0.5s, ec. 4.5s	33 **10**	8	Green structure, green base; 35.	
4600 *A 4486*	Dumbuck.	55° 55.8′ N 4° 32.4′ W	**Fl.G.** period 2s fl. 0.3s, ec. 1.7s	33 **10**	8	Green tower; 40.	
4604 *A 4488*	Longhaugh.	55° 55.6′ N 4° 30.9′ W	**Fl.G.** period 2s fl. 0.3s, ec. 1.7s	33 **10**	8	Green structure; 35.	
4608 *A 4490*	Dunglass.	55° 55.8′ N 4° 30.1′ W	**Fl.R.** period 2s fl. 0.3s, ec. 1.7s	32 **10**	6	Red pedestal; 35.	
4612 *A 4494*	Bowling.	55° 55.8′ N 4° 29.2′ W	**Fl.R.** period 4s fl. 1s, ec. 3s	32 **10**	6	Red steel structure.	
4616 *A 4496*	Donalds quay.	55° 55.5′ N 4° 28.0′ W	**Fl.R.** period 4s fl. 1s, ec. 3s	32 **10**	6	Red structure, red base; 35.	
4620 *A 4498*	St. Patricks Stone.	55° 55.2′ N 4° 27.8′ W	**Fl.G.** period 5s fl. 0.5s, ec. 4.5s	32 **10**	8	Green structure; 35.	

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
			SCOTLAND-FIRTH OF CLYDE				
4624 *A 4500*	Old Kilpatrick.	55° 55.2′ N 4° 27.6′ W	**Fl.R.** period 2s fl. 0.3s, ec. 1.7s	32 **10**	6	Red column; 35.	
4628 *A 4501*	Erskine.	55° 54.8′ N 4° 27.3′ W	**Fl.G.** period 5s fl. 0.5s, ec. 4.5s	32 **10**	8	Green pedestal; 35.	
4632 *A 4502*	Duntocher.	55° 54.5′ N 4° 26.6′ W	**Fl.R.** period 2s fl. 0.3s, ec. 1.7s	32 **10**	6	Red structure; 35.	
4636 *A 4504*	Rashielee.	55° 54.3′ N 4° 26.5′ W	**Fl.G.** period 2s fl. 0.3s, ec. 1.7s	32 **10**	8	Green pedestal; 35.	
4640 *A 4506*	Dalmuir West.	55° 54.4′ N 4° 26.2′ W	**Fl.R.** period 2s fl. 0.3s, ec. 1.7s	32 **10**	6	Red column; 35.	
4644 *A 4510*	Dalmuir East.	55° 54.2′ N 4° 25.0′ W	**Fl.R.** period 4s fl. 1s, ec. 3s	32 **10**	6	Red structure, red base; 35.	
4648 *A 4508*	Newshot Island.	55° 54.2′ N 4° 25.4′ W	**Fl.G.** period 5s fl. 0.5s, ec. 4.5s	32 **10**	8	Green pedestal; 35.	
4652 *A 4511*	Algies.	55° 53.8′ N 4° 24.7′ W	**Fl.G.** period 5s fl. 0.5s, ec. 4.5s	23 **7**	8	Green metal structure; 19.	
4654 *A 4511.2*	Slipway.	55° 53.7′ N 4° 24.2′ W	**Fl.R.** period 4s	16 **5**	3	Red metal pole.	Marks end of slipway.
4656 *A 4512*	Blythswood.	55° 53.4′ N 4° 24.1′ W	**Fl.G.** period 2s fl. 0.3s, ec. 1.7s	32 **10**	8	Green tower, green base; 35.	
4660 *A 4513*	Renfrew West.	55° 53.2′ N 4° 23.1′ W	**Fl.G.** period 5s fl. 0.5s, ec. 4.5s	32 **10**	8	Green metal column; 35.	
4668 *A 4515*	Renfrew East.	55° 53.1′ N 4° 22.7′ W	**Fl.G.** period 5s fl. 0.5s, ec. 4.5s	32 **10**	8	Green column; 35.	
4672 *A 4516*	Braehead.	55° 52.6′ N 4° 21.7′ W	**Fl.G.** period 2s fl. 0.3s, ec. 1.7s	32 **10**	8	Green pedestal; 35.	
4676 *A 4518*	Clydeholm.	55° 52.2′ N 4° 20.4′ W	**Fl.R.** period 4s fl. 1s, ec. 3s	32 **10**	6	Red column.	
4680 *A 4519*	Shieldhall East, wharf, head.	55° 52.1′ N 4° 20.2′ W	**Fl.G.** period 2s fl. 0.3s, ec. 1.7s	55 **17**	8	Green mast; 58.	
4684 *A 4520*	Linthouse.	55° 52.1′ N 4° 19.8′ W	**Fl.G.** period 5s fl. 0.5s, ec. 4.5s	32 **10**	8	Green tower; 35.	
4688 *A 4521*	Fairfield.	55° 52.0′ N 4° 19.3′ W	**Fl.G.** period 5s fl. 0.5s, ec. 4.5s	32 **10**	8	Green mast; 35.	
4692 *A 4526*	Workshops.	55° 51.7′ N 4° 17.8′ W	**Fl.G.** period 5s fl. 0.5s, ec. 4.5s	32 **10**	8	Green mast; 35.	
4693 *A 4527*	-Garden Festival Swing Bridge.	55° 51.5′ N 4° 17.3′ W	**Fl.R.** period 3s	10 **3**	3	PORT (A) R, pile, topmark.	Marks N. channel limit.
4694 *A 4527.2*	-S. side of bridge.	55° 51.5′ N 4° 17.3′ W	**Fl.G.** period 3s	10 **3**	3	STARBOARD (A) G, pile, topmark.	Marks S. channel limit.
4695 *A 4527.4*	-N. channel limit.	55° 51.5′ N 4° 17.2′ W	**Fl.R.** period 3s	10 **3**	3	PORT (A) R, pile, topmark.	Marks N. channel limit.

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
			SCOTLAND-FIRTH OF CLYDE				
4696 *A 4527.6*	-S. channel limits.	55° 51.5′ N 4° 17.2′ W	**Fl.G.** period 3s	10 **3**	3	STARBOARD (A) G, pile, topmark.	Marks S. channel limit.
			SCOTLAND-WEST COAST				
	ARDROSSAN:						
4700 *A 4532*	-055°.	55° 38.7′ N 4° 49.1′ W	**Dir.W.R.G.**	49 **15**	W. 14 R. 11 G. 11	Metal framework tower; 39.	F.G. 050°-051°12′, Al.W.G.-053°48′, F.W.-056°12′, Al.W.R.-058°48′, F.R.-060°.
			F.R.	43 **13**	6		Passing light visible 325°-145°.
4704 *A 4538*	-Pier, head.	55° 38.5′ N 4° 49.5′ W	**Iso.W.G.** period 4s	37 **11**	9	White tower; 29.	G. 317°-035°, W.-317°.
4708 *A 4536*	-N. breakwater, head.	55° 38.5′ N 4° 49.6′ W	**Fl.R.** period 5s	22 **7**	5	Red gantry; 3.	
	IRVINE:						
4716 *A 4546*	-S. side of entrance.	55° 36.2′ N 4° 42.0′ W	**Fl.G.** period 3s	19 **6**	5	Green tower; 19.	
4720 *A 4544*	-N. side of entrance.	55° 36.2′ N 4° 42.0′ W	**Fl.R.** period 3s	19 **6**	5	Red metal column with platform; 19.	
4724 *A 4548*	-Range, front.	55° 36.4′ N 4° 41.5′ W	**F.G.**	33 **10**	5	Green mast; 33.	Visible 019°-120°.
4728 *A 4548.1*	- -Rear, 101 meters 051° from front.	55° 36.4′ N 4° 41.4′ W	**F.R.**	50 **15**	5	Green mast; 50.	Visible 019°-120°.
	TROON HARBOR:						
4732 *A 4554*	-W. pier, head.	55° 33.1′ N 4° 40.9′ W	**Fl.(2)W.G.** period 5s fl. 0.6s, ec. 0.9s fl. 0.6s, ec. 2.9s	35 **11**	9	White tower; 26.	G. 036°-090°, W.-036°.
4740 *A 4558*	-E. pier, head.	55° 33.0′ N 4° 40.9′ W	**Fl.R.** period 10s	19 **6**	3	Red column; 13.	
4744 *A 4562*	Lady Isle.	55° 31.6′ N 4° 44.0′ W	**Fl.(4)W.** period 30s fl. 0.5s, ec. 1.5s fl. 0.5s, ec. 1.5s fl. 0.5s, ec. 1.5s fl. 0.5s, ec. 23.5s	63 **19**	8	White beacon.	
	AYR HARBOUR:						
4752 *A 4574*	-Near pilot's house, Range, front.	55° 28.2′ N 4° 38.3′ W	**F.R.**	33 **10**	5	Red tower, white lantern; 20.	Traffic signals.
4756 *A 4574.1*	- -Rear, 130 meters 098° from front.	55° 28.1′ N 4° 38.2′ W	**Oc.R.** period 10s lt. 8s, ec. 2s	58 **18**	9	Masonry tower, white lantern; 72.	
4760 *A 4568*	-S. pier, head.	55° 28.1′ N 4° 38.6′ W	**Q.W.**	24 **7**	7	White tower.	Visible 012°-161°.
			F.G.	18 **5**	5		Visible 012°-082°.
4764 *A 4566*	-N. breakwater, head.	55° 28.2′ N 4° 38.7′ W	**Q.R.**	29 **9**	5	Metal framework tower; 29.	

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
			SCOTLAND-WEST COAST				
4768 *A 4582*	**Ailsa Craig.**	55° 15.1′ N 5° 06.4′ W	**Fl.W.** period 4s fl. 0.3s, ec. 3.7s	60 **18**	**17**	White tower; 35.	Visible 145°-028°.
4772 *A 4580*	**Turnberry.**	55° 19.6′ N 4° 50.6′ W	**Fl.W.** period 15s fl. 0.4s, ec. 14.6s	95 **29**	**24**	White tower; 80.	
4776 *A 4588*	Girvan, S. pier, head.	55° 14.6′ N 4° 51.7′ W	**2 F.G.** (vert.)	26 **8**	4	White tower; 19.	Traffic signals 220 meters SE.
4778 *A 4588.4*	-N. breakwater, head.	55° 14.7′ N 4° 51.8′ W	**Fl.(2)R.** period 6s	23 **7**	4	Pole on concrete base; 13.	
4780 *A 4586*	-N. groyne, head.	55° 14.7′ N 4° 51.6′ W	**Iso.W.** period 4s	11 **3**	4	Column; 11.	
	LOCH RYAN:						
4784 *A 4592*	-Cairn Ryan Point.	54° 58.5′ N 5° 01.8′ W	**Fl.(2)R.** period 10s	46 **14**	12	White tower; 50.	
4786 *A 4594*	-Cairnryan Ferry Terminal, mooring dolphin.	54° 57.8′ N 5° 00.9′ W	**Fl.R.** period 5s fl. 0.5s, ec. 4.5s	18 **5**	5	Mast.	
4788 *A 4598*	-Stranraer, W. pier, head.	54° 54.5′ N 5° 01.7′ W	**2 F.G.** (vert.)	26 **8**	4	Red column; 13.	2 meters apart.
4796 *A 4604*	**Corsewall.**	55° 00.5′ N 5° 09.5′ W	**Fl.(5)W.** period 30s	112 **34**	**22**	White tower; 112.	Visible 027°-257°.
4800 *A 4606*	**Killantringan.**	54° 51.7′ N 5° 08.7′ W	**Fl.(2)W.** period 15s fl. 0.4s, ec. 2s fl. 0.4s, ec. 12.2s	160 **49**	**25**	West side of balcony on white tower; 72.	
4804 *A 4607*	Portpatrick Range, front.	54° 50.5′ N 5° 06.9′ W	**F.G.**			Orange stripe on sea wall.	Occasional. Private light.
4808 *A 4607.1*	-Rear, 68 meters 050°30′ from front.	54° 50.5′ N 5° 06.9′ W	**F.G.**	26 **8**		Building, orange stripe.	Occasional. Private light.
4812 *A 4608*	**Crammag Head.**	54° 39.9′ N 4° 57.8′ W	**Fl.W.** period 10s fl. 0.4s, ec. 9.6s	114 **35**	**18**	White tower; 19.	
4816 *A 4610*	**Mull of Galloway.**	54° 38.1′ N 4° 51.4′ W	**Fl.W.** period 20s fl. 0.5s, ec. 19.5s	325 **99**	**28**	White tower; 86.	Visible 182°-105°. Distress answering.
4818 *A 4620*	Port William Range, front.	54° 45.6′ N 4° 35.1′ W	**Fl.G.** period 3s fl. 0.3s, ec. 2.7s	23 **7**	3	Metal mast; 20.	
4818.1 *A 4620.1*	-Rear, 130 meters 105° from front.	54° 45.6′ N 4° 35.1′ W	**F.G.**	33 **10**	2	Bracket on building.	
4820 *A 4622*	Isle of Whithorn Harbor.	54° 41.8′ N 4° 21.7′ W	**Q.G.**	13 **4**	5	Gray column.	
4822 *A 4624*	-Range, front.	54° 42.0′ N 4° 22.0′ W	**Oc.R.** period 8s	23 **7**	7	Orange metal mast, diamond daymark.	
4823 *A 4624.1*	- -Rear, 35 meters 355° from front.	54° 42.0′ N 4° 22.0′ W	**Oc.R.** period 8s	29 **9**	7	Orange metal mast, diamond daymark.	Synchronized with front.
4823.5 *A 4624.2*	Isle of Whithorn.	54° 41.8′ N 4° 21.6′ W	**Fl.W.R.** period 3s fl. 0.5s, ec. 2.5s	66 **20**	W. 6 R. 4	White square tower; 13.	W. 310°-005°, R.-040°.
4824 *A 4630*	Garlieston, pier, head.	54° 47.5′ N 4° 21.7′ W	**2 F.R.** (vert.)	26 **8**	3	Column; 16.	1 meter apart.
4828 *A 4634*	Little Ross.	54° 45.9′ N 4° 05.0′ W	**Fl.W.** period 5s fl. 1s, ec. 4s	165 **50**	12	White tower; 65.	Obscured in Wigton Bay S. of 103°.

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
			SCOTLAND-WEST COAST				
4832 *A 4640*	Hestan Islet, E. head.	54° 50.0′ N 3° 48.4′ W	**Fl.(2)W.** period 10s fl. 0.5s, ec. 1.5s fl. 0.5s, ec. 7.5s	138 **42**	9	White metal framework tower.	
	RIVER ANNAN:						
4836 *A 4652*	-Barnkirk.	54° 58.0′ N 3° 15.9′ W	**Fl.W.** period 2s	59 **18**	2	Framework tower; 23.	

Section 5

West Coast of England and North and West Coasts of Wales
Including Bristol Channel

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
			ENGLAND-WEST COAST				
	SILLOTH:						
4844 *A 4670*	-Lees Scar Rock.	54° 51.8′ N 3° 24.7′ W	**Fl.G.** period 10s	36 **11**	2	White structure on piles; 14.	Visible 005°-317°.
4848 *A 4671*	- -East Cote.	54° 52.8′ N 3° 22.8′ W	**F.G.**	50 **15**	12	White structure on piles; 39.	Visible 046°-058°, intensified 052°.
4852 *A 4672*	-Groyne, head.	54° 52.1′ N 3° 24.0′ W	**2 F.G.** (vert.)	13 **4**	4	Dolphin.	Fl.Bu. traffic signals exhibited from New Dock Signal Mast.
4856 *A 4672.6*	-Outfall.	54° 52.4′ N 3° 23.4′ W	**2 F.G.** (vert.)			STARBOARD (A) G, beacon, topmark.	
	MARYPORT:						
4860 *A 4676*	-S. pier, head.	54° 43.1′ N 3° 30.5′ W	**Fl.W.** period 1.5s	32 **10**	6	Tower.	
4861 *A 4677*	- -Outfall.	54° 42.8′ N 3° 31.4′ W	**Fl.G.** period 5s			Beacon, green triangular daymark.	
	WORKINGTON:						
4864 *A 4688*	-Pier, head, S. side of entrance.	54° 39.1′ N 3° 34.6′ W	**Fl.W.** period 5s fl. 1s, ec. 4s	36 **11**	8	Coastguard station; 20.	Q.G. marks end of outer S. pier extension. Storm signals. **Siren:** 1 bl. ev. 20s.
4868 *A 4692*	-Range, front.	54° 38.9′ N 3° 34.1′ W	**F.R.**	32 **10**	3	White pyramidal tower, orange bands; 23.	
4872 *A 4692.1*	- -Rear, 134 meters 131°49′ from front.	54° 38.9′ N 3° 34.0′ W	**F.R.**	40 **12**	3	White pyramidal tower, orange bands; 29.	
	WHITEHAVEN:						
4880 *A 4698*	-W. pier, head.	54° 33.2′ N 3° 35.8′ W	**Fl.G.** period 5s fl. 1s, ec. 4s	52 **16**	13	White round tower; 47.	
4884 *A 4700*	-N. pier, head.	54° 33.2′ N 3° 35.6′ W	**2 F.R.** (vert.)	26 **8**	9	White round tower; 20.	
4888 *A 4702*	-North Wall quay, head.	54° 33.1′ N 3° 35.5′ W	**2 F.R.** (vert.)	25 **8**	2	White post; 10.	
4892 *A 4710*	**St. Bees Head.**	54° 30.8′ N 3° 38.1′ W	**Fl.(2)W.** period 20s fl. 1s, ec. 3s fl. 1s, ec. 15s	336 **102**	**18**	White round tower; 55.	Obscured shore-340°.
			ENGLAND-WEST COAST-ISLE OF MAN				
4896 *A 4720*	**Point of Ayre.**	54° 24.9′ N 4° 22.1′ W	**Fl.(4)W.** period 20s fl. 0.2s, ec. 2.3s fl. 0.2s, ec. 2.3s fl. 0.2s, ec. 2.3s fl. 0.2s, ec. 12.3s	106 **32**	**19**	White tower, 2 red bands; 99.	**Horn:** 3 bl. ev. 60s. **Fog detector light.**
	RACON		**M(– –)**		13		

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
			ENGLAND-WEST COAST-ISLE OF MAN				
4900 *A 4722*	-On extremity.	54° 25.0′ N 4° 21.7′ W	**Fl.W.** period 3s fl. 0.3s, ec. 2.7s	33 **10**	8	Tower, upper part red, lower part white on black base; 34.	Partially obscured 335°-341°.
4904 *A 4726*	Cronk y Cliwe.	54° 22.3′ N 4° 31.4′ W	**2 Fl.R.** (vert.) period 5s			Mast on hut.	2 meters apart. Synchronized.
4908 *A 4728*	Orrisdale.	54° 19.3′ N 4° 34.1′ W	**2 Fl.R.** (vert.) period 5s			Mast on hut.	2 meters apart. Synchronized.
4912 *A 4728.8*	*N. ″DZ″ Buoy.*	54° 23.6′ N 4° 36.7′ W	**Fl.Y.** period 10s			Orange buoy.	Unreliable.
4916 *A 4729*	*S. ″DZ″ Buoy.*	54° 21.5′ N 4° 38.8′ W	**Fl.Y.** period 10s			Orange buoy.	Unreliable.
	PEEL:						
4924 *A 4734*	-Breakwater, head.	54° 13.7′ N 4° 41.5′ W	**Oc.W.** period 7s lt. 5s, ec. 2s	37 **11**	6	White tower; 26.	**Bell:** 4 strokes ev. 12s. Sounded when vessels are expected.
4928 *A 4730*	-Pier, head, E. side of harbor entrance.	54° 13.5′ N 4° 41.7′ W	**Oc.R.** period 7s lt. 5s, ec. 2s	27 **8**	5	White tower, red band, on office building.	Visible 156°-249°.
4932 *A 4732*	-Castle jetty, head.	54° 13.6′ N 4° 41.7′ W	**Oc.G.** period 7s lt. 5s, ec. 2s	18 **5**	4	White tower, green bands; 12.	
	PORT ERIN:						
4936 *A 4740*	-Range, front.	54° 05.3′ N 4° 45.4′ W	**F.R.**	33 **10**	5	White tower, red band; 38.	
4940 *A 4740.1*	- -Rear, on E. shore, 39 meters 099°06′ from front.	54° 05.3′ N 4° 45.4′ W	**F.R.**	62 **19**	5	White post, red band; 12.	
4944 *A 4744*	-Raglan pier, head.	54° 05.1′ N 4° 45.7′ W	**Oc.G.** period 5s	26 **8**	5	White tower, green band; 22.	
4948 *A 4746*	**Calf of Man.**	54° 03.2′ N 4° 49.6′ W	**Fl.W.** period 15s fl. 0.4s, ec. 14.6s	306 **93**	**26**	White octagonal tower on granite building; 36.	Visible 274°-190°. **Horn:** 1 bl. ev. 45s.
4952 *A 4745*	Thousla Rock.	54° 03.7′ N 4° 48.0′ W	**Fl.R.** period 3s fl. 0.7s, ec. 2.3s	30 **9**	4	White octagonal tower.	
4956 *A 4748*	Chicken Rock.	54° 02.3′ N 4° 50.1′ W	**Fl.W.** period 5s fl. 1s, ec. 4s	125 **38**	13	Granite tower; 143.	**Horn:** 1 bl. ev. 60s.
	PORT ST. MARY:						
4960 *A 4752*	-The Carrick.	54° 04.3′ N 4° 42.5′ W	**Q.(2)W.** period 5s fl. 0.1s, ec. 0.9s fl. 0.1s, ec. 3.9s	21 **6**	3	ISOLATED DANGER BRB, pillar, topmark; 26.	
4964 *A 4756*	-Inner pier, head.	54° 04.4′ N 4° 44.0′ W	**Oc.R.** period 3s lt. 2s, ec. 1s	25 **8**	5	White tower, red band; 26.	
4968 *A 4754*	-Alfred pier, head.	54° 04.3′ N 4° 43.7′ W	**Oc.R.** period 10s lt. 6s, ec. 4s	25 **8**	5	White tower, red band; 23.	
	CASTLETOWN HARBOUR:						
4972 *A 4760*	-New pier, head.	54° 04.3′ N 4° 38.8′ W	**Oc.R.** period 15s lt. 13s, ec. 2s	27 **8**	5	White tower, red band; 30.	

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
			ENGLAND-WEST COAST-ISLE OF MAN				
4976 *A 4761*	-Irish quay.	54° 04.4′ N 4° 38.9′ W	**Oc.R.** period 4s lt. 3s, ec. 1s	16 **5**	5	White tower, red band; 12.	Visible 142°-322°. 2 F.R. shown from each each swing bridge.
4980 *A 4760.5*	-N. side of entrance.	54° 04.4′ N 4° 38.9′ W	**Oc.G.** period 4s lt. 3s, ec. 1s	11 **3**		White metal post, on round concrete column.	
4984 *A 4762*	Langness, Dreswick Point.	54° 03.3′ N 4° 37.4′ W	**Fl.(2)W.** period 30s fl. 0.6s, ec. 5.1s fl. 0.6s, ec. 23.7s	69 **21**	12	White tower; 63.	
4988 *A 4764*	Derby Haven, breakwater, SW. head.	54° 04.6′ N 4° 36.9′ W	**Iso.G.** period 2s	15 **5**	5	White tower, green band.	
	DOUGLAS BAY:						
4992 *A 4770*	**-Douglas Head.**	54° 08.6′ N 4° 27.9′ W	**Fl.W.** period 10s	104 **32**	**24**	White tower; 65.	Obscured when bearing more than 037°.
4996 *A 4771*	-Princess Alexandra Pier, head.	54° 08.8′ N 4° 27.8′ W	**Fl.R.** period 5s	53 **16**	8	Red metal mast.	**Whistle:** 2 bl. ev. 40s.
5000 *A 4772*	-Battery pier, head.	54° 08.8′ N 4° 27.9′ W	**Q.R.**	39 **12**	1	White tower, red band.	Visible 038°-218°.
5004 *A 4774*	-Victoria pier, head.	54° 08.8′ N 4° 28.0′ W	**Iso.G.** period 10s	33 **10**	3	White column; 19.	Visible 225°-327°. International Port Traffic Signals.
5008 *A 4773*	-Harbor Range, front.	54° 08.7′ N 4° 28.2′ W	**Oc.W.** period 10s	29 **9**	5	Metal mast on concrete column, white and red triangular daymark, point up.	For use W. of 004°26′ W. only.
5012 *A 4773.1*	- -Range, rear, 62 meters 229°18′ from front.	54° 08.7′ N 4° 28.2′ W	**Oc.W.** period 10s	40 **12**	2	Metal mast, white and red triangular daymark, point down.	Synchronized with front.
5016 *A 4780*	-King Edward VIII pier, center of head.	54° 08.8′ N 4° 28.2′ W	**2 F.G.** (vert.)	21 **6**	2	White tower, green band.	Visible 253°-005°.
5020 *A 4776*	-Fort Anne jetty, head.	54° 08.7′ N 4° 28.2′ W	**2 F.R.** (vert.)	16 **5**	1	Post.	Visible 107°-297°.
5024 *A 4782*	-Tongue, head.	54° 08.8′ N 4° 28.8′ W	**F.R.**	13 **4**		White post, red band.	
5028 *A 4784*	Laxey, pier, head.	54° 13.5′ N 4° 23.2′ W	**Oc.R.** period 3s lt. 2s, ec. 1s	22 **7**	5	White tower, red band; 13.	Obscured when bearing less than 318°.
5032 *A 4785*	-Breakwater, head.	54° 13.5′ N 4° 23.2′ W	**Oc.G.** period 3s lt. 2s, ec. 1s	22 **7**		White tower, green band; 13.	
5036 *A 4786*	**Maughold Head.**	54° 17.7′ N 4° 18.5′ W	**Fl.(3)W.** period 30s fl. 0.5s, ec. 2s fl. 0.5s, ec. 2s fl. 0.5s, ec. 24.5s	212 **65**	**21**	White tower; 77.	
	RAMSEY:						
5040 *A 4796*	-S. pier, head.	54° 19.4′ N 4° 22.4′ W	**Q.R.**	26 **8**	10	White tower, red band, black base; 25.	
5044 *A 4798*	-N. pier, head.	54° 19.0′ N 4° 22.0′ W	**Q.G.**	30 **9**	10	White tower, black base; 25.	
5048 *A 4799*	-Mooragh Bank.	54° 19.3′ N 4° 22.8′ W	**Iso.G.** period 4s	11 **3**		White post, violet band, on dolphin.	Not visible seaward. 2 F.R. (horiz.) marks center of each side of swing bridge.

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
			ENGLAND-WEST COAST				
	MORECAMBE BAY:						
5052 *A 4820*	**-Walney.**	54° 02.9′ N 3° 10.6′ W	**Fl.W.** period 15s fl. 1.5s, ec. 13.5s	70 **21**	**23**	Stone tower; 80.	Obscured 122°-127° when within 3 miles of the shore.
5054 *A 4821*	-Halfway Shoal.	54° 01.5′ N 3° 11.8′ W	**Q.R.**	52 **16**	10	Beacon, rectangular daymark, red and yellow checkers.	
	-RACON		**B(– • • •)**		10		
5056 *A 4823*	-Haws Point.	54° 03.0′ N 3° 10.0′ W	**Q.R.**	26 **8**	6	Beacon, white rectangular daymark, black band.	
5060 *A 4840*	-Cartmel.	54° 09.6′ N 2° 59.6′ W	**F.W.**	82 **25**	9		Occasional.
	-Walney Channel:						
5064 *A 4822*	--No. ″1", SE. side of Foulney, front.	54° 03.2′ N 3° 09.1′ W	**Q.W.**	23 **7**	10	Orange rectangular daymark on pile.	
5068 *A 4822.1*	---Rear, No. ″2", 0.61 mile 040°41′ from front.	54° 03.6′ N 3° 08.5′ W	**Iso.W.** period 2s	43 **13**	10	Orange rectangular daymark on pile.	
5072 *A 4824*	--No. ″3", near Rampside Sands, front.	54° 04.4′ N 3° 09.7′ W	**Q.W.**	29 **9**	10	White round tower.	
5076 *A 4824.1*	---Rear, No. ″4", 0.77 mile 005°05′ from front.	54° 05.2′ N 3° 09.6′ W	**Iso.W.** period 2s	46 **14**	6	Red brick column, white face.	
5080 *A 4825*	--No. ″5", W. side of channel opposite Ramsden Dock entrance, front.	54° 05.2′ N 3° 13.5′ W	**Q.W.**	23 **7**	6	Black pile, orange triangular daymark, point down.	Dir.Oc.W.R.G. 12s (occas.) also shown.
5084 *A 4825.1*	---Rear, No. ″6", 0.58 mile 297°23′ from front.	54° 05.4′ N 3° 14.4′ W	**Iso.W.** period 2s	43 **13**	6	Structure, orange triangular daymark, point down.	
5088 *A 4833.2*	--W. pile, W. side.	54° 05.3′ N 3° 13.4′ W	**Q.R.**	26 **8**	4	White daymark on pile structure.	
5092	*-Morecambe Buoy.*	53° 52.0′ N 3° 23.0′ W	**Q.(9)W.** period 15s			W. CARDINAL YBY, pillar.	**Whistle.** **Radar reflector.**
5094	*-Lune Deep Buoy.*	53° 55.8′ N 3° 10.9′ W	**Q.(6)+L.Fl.W.** period 15s			S. CARDINAL YB, pillar, topmark.	**Whistle.**
	-RACON		**T(–)** period 30s		10		
5096 *A 4852*	--Middle of stone pier W. side harbor, front.	54° 04.4′ N 2° 52.5′ W	**F.R.**	34 **10**	2	Green mast; 21.	
5100 *A 4852.1*	---Rear, root of E. pier, 140 meters 090° from front.	54° 04.4′ N 2° 52.4′ W	**F.R.**	45 **14**	2	Green mast; 32.	
5112 *A 4847*	--Sewer, outfall.	54° 04.3′ N 2° 53.7′ W	**Fl.G.** period 2s fl. 0.5s, ec. 1.5s	13 **4**	2	Metal framework tower.	
5116 *A 4862*	--SW. quay Range, front.	54° 01.9′ N 2° 55.1′ W	**F.Bu.**	37 **11**	2	Post, orange and black diamond daymark.	Marks center of dredged channel into the harbor.
5120 *A 4862.1*	---Rear, 137 meters 102°15′ from front.	54° 01.9′ N 2° 55.0′ W	**F.Bu.**	46 **14**	2	Mast, orange and black diamond daymark; 16.	
5124 *A 4860*	--S. breakwater, head.	54° 01.9′ N 2° 55.6′ W	**2 F.G.** (vert.)	30 **9** 23 **7**	5	White metal framework tower; 20.	**Siren:** 1 bl. ev. 30s. **Radar reflector.**
5128 *A 4864*	--N. pier, head.	54° 02.0′ N 2° 55.3′ W	**2 F.R.** (vert.)	35 **11**	2	Mast; 18.	Obscured from seaward.
5132 *A 4863*	--S. pier, head.	54° 01.9′ N 2° 55.4′ W	**Oc.G.** period 7.5s lt. 6s, ec. 1.5s	30 **9**	6	White metal tower, red base; 20.	

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
			ENGLAND-WEST COAST				
5136 *A 4863.3*	--S. outfall.	54° 01.7′ N 2° 55.7′ W	**Fl.(2)G.** period 10s fl. 0.5s, ec. 1s fl. 0.5s, ec. 8s	16 **5**	2	Metal post.	
	-Lune River:						
5144 *A 4876*	--Plover Scar Range, front.	53° 58.9′ N 2° 52.9′ W	**Fl.W.** period 2s	20 **6**	6	White stone tower, black lantern; 27.	
5148 *A 4876.1*	---Rear, 854 meters 083°40′ from front.	53° 58.9′ N 2° 52.1′ W	**F.W.**	58 **18**	8	Red framework tower.	
	-Fleetwood:						
5152 *A 4892*	--On esplanade, Range, front.	53° 55.7′ N 3° 00.4′ W	**Fl.G.** period 2s	46 **14**		Stone tower.	Visible on range line only.
5156 *A 4892.1*	---Rear, in town, 320 meters 156° from front.	53° 55.6′ N 3° 00.4′ W	**Fl.G.** period 4s	93 **28**		Stone tower.	Visible on range line only.
5160 *A 4893*	--Steep Breast.	53° 55.8′ N 3° 00.5′ W	**Iso.G.** period 2s	11 **3**	2	Black post and base; 26.	
5164 *A 4902*	--S. side of ferry dock.	53° 55.6′ N 3° 00.2′ W	**2 F.G.** (vert.)	20 **6**	1	Red metal post; 10.	
5168 *A 4900*	--Knott End pier, head.	53° 55.7′ N 3° 00.0′ W	**2 F.R.** (vert.)	10 **3**	2	Platform on column; 34.	
5172 *A 4896*	--Groyne.	53° 55.7′ N 3° 00.8′ W	**Fl.G.** period 3.5s	21 **6**		Platform on post.	
	BLACKPOOL:						
5176 *A 4918*	-N. pier, head.	53° 49.2′ N 3° 03.8′ W	**2 F.G.** (vert.)		3		2 meters apart.
5180 *A 4920*	-Central pier, head.	53° 48.6′ N 3° 03.9′ W	**2 F.G.** (vert.)		4	Triangular metal structure; 18.	2 meters apart.
5184 *A 4922*	-S. pier, head.	53° 47.7′ N 3° 03.6′ W	**2 F.G.** (vert.)		4	Building.	
5188	*Gut Buoy.*	53° 41.0′ N 3° 09.0′ W	**L.Fl.W.** period 10s			SAFE WATER RW, spherical.	
	RIBBLE RIVER:						
	-Lytham St. Annes:						
5192 *A 4927.6*	--N. training wall.	53° 43.2′ N 3° 02.8′ W	**Fl.R.** period 5s	20 **6**	3	Black metal framework tower on tripod.	
5200 *A 4940*	Southport, pier, head.	53° 39.4′ N 3° 01.4′ W	**2 F.G.** (vert.)	20 **6**	5	White post; 6.	Visible 033°-213°.
	RIVER MERSEY:						
5204 *A 4942*	*-BAR LIGHTFLOAT.*	53° 32.0′ N 3° 20.9′ W	**Fl.W.** period 5s	33 **10**	12	Red hull, light tower amidships.	**Horn:** 2 bl. ev. 20s.
	-RACON		**T(–)** period 30s		10		
5208 *A 4942.5*	*-Formby Float.*	53° 31.1′ N 3° 13.4′ W	**Iso.W.** period 4s	35 **11**	6	Red hull, white stripes.	
5212 *A 4944*	*-Crosby Float.*	53° 30.7′ N 3° 06.2′ W	**Oc.W.** period 5s lt. 4s, ec. 1s	35 **11**	8	Red hull, white stripes.	
5213 *A 4952*	-New Brighton breakwater No. "13".	53° 26.4′ N 3° 02.2′ W	**2 F.G.** (vert.)	13 **4**	6	STARBOARD (A) G, mast, topmark.	2 meters apart.

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
			ENGLAND-WEST COAST				
5214 *A 4952.2*	--Corner, No. ″12".	53° 26.6′ N 3° 02.1′ W	**2 F.G.** (vert.)	13 **4**	6	STARBOARD (A) G, mast, topmark.	2 meters apart.
5215 *A 4952.4*	--No. ″11", NW. head.	53° 26.7′ N 3° 02.7′ W	**2 F.G.** (vert.)	13 **4**	6	STARBOARD (A) G, mast, topmark.	2 meters apart.
5215.2 *A 4952.5*	--No. ″5".	53° 25.4′ N 3° 06.3′ W	**Fl.G.**	23 **7**		STARBOARD (A) G, topmark.	
5215.4 *A 4952.6*	--No. ″2".	53° 24.7′ N 3° 08.5′ W	**Fl.W.**	20 **6**		Double triangular daymark, points up.	
	-Seacombe:						
5216 *A 4954*	--N. corner of head of ferry pier.	53° 24.6′ N 3° 00.8′ W	**3 F.G.** (triangular-shaped)	16 **5**	5	Metal column; 10.	
5220 *A 4956*	--Center of head.	53° 24.6′ N 3° 00.8′ W	**F.Y.**	27 **8**	6	Tower on roof; 33.	
5224 *A 4958*	--S. corner of head.	53° 24.5′ N 3° 00.8′ W	**3 F.G.** (triangular-shaped)	16 **5**	5	Metal column; 10.	**Bell:** 3 strokes ev. 20s.
5232 *A 4972*	--Woodside Landing Stage, N. head.	53° 23.8′ N 3° 00.5′ W	**3 F.G.** (triangular-shaped)	15 **5**	4	Metal column; 16.	
5236 *A 4974*	---S. head.	53° 23.7′ N 3° 00.4′ W	**2 F.G.** (vert.)	15 **5**	7	Metal column.	
5238 *A 4974.5*	----40 meters NNW.	53° 23.7′ N 3° 00.4′ W	**F.Y.**				**Bell:** 4 strokes ev. 15s. **Fog detector light.**
5240 *A 4975*	-Cammell Laird, SE. corner of slip.	53° 23.0′ N 3° 00.2′ W	**Fl.(2)G.** period 6s	18 **5**	5	White structure; 29.	
5244 *A 4977*	-Tranmere Terminal, N. dolphin.	53° 22.9′ N 3° 00.0′ W	**Fl.G.** period 3s	23 **7**	7	Dolphin.	
5248 *A 4978*	-N. Stage, N. head.	53° 22.8′ N 3° 00.0′ W	**2 F.G.** (vert.)	32 **10** 26 **8**	3		**Bell:** (50 meters SE.) 2 strokes ev. 10s.
5252 *A 4978.2*	--S. head.	53° 22.8′ N 2° 59.9′ W	**2 F.G.** (vert.)	32 **10**	5		
5256 *A 4979*	-S. Stage, N. head.	53° 22.7′ N 2° 59.8′ W	**3 F.G.** (triangular-shaped)	29 **9**	3		
5260 *A 4979.2*	--S. head.	53° 22.6′ N 2° 59.8′ W	**2 F.G.** (vert.)	32 **10**	5		
5264 *A 4980*	-Rock Ferry, jetty, N. head.	53° 22.5′ N 2° 59.6′ W	**Q.G.**	20 **6**			
5268 *A 4980.3*	--S. head.	53° 22.4′ N 2° 59.6′ W	**2 F.G.** (vert.)	20 **6**			
5272 *A 4980.6*	-S. dolphin.	53° 22.4′ N 3° 00.0′ W	**Fl.G.** period 3s	15 **5**			
5273 *A 4980.7*	-Outfall.	53° 22.1′ N 2° 59.4′ W	**2 F.G.** (vert.)			Beacon, green triangular daymark.	
5276 *A 4981*	-Bromborough Dock, jetty, N. head.	53° 21.7′ N 2° 59.0′ W	**3 F.G.** (triangular-shaped)	16 **5**	3	Metal post and cross bar.	
5278 *A 4983*	--Sewer outfall.	53° 21.1′ N 2° 58.2′ W	**2 F.G.** (vert.)				
	-Eastham Channel:						
5280 *A 4985*	--Jetty, S. head.	53° 20.8′ N 2° 58.0′ W	**3 F.G.** (triangular-shaped)	16 **5**		Metal post and cross bar.	
5296 *A 4990*	--E. dolphin.	53° 19.6′ N 2° 56.9′ W	**Fl.(2)R.** period 6s	16 **5**	8	Perch; 6.	

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
			ENGLAND-WEST COAST				
5300 *A 4994*	--Eastham Locks, Center Island.	53° 19.4′ N 2° 56.8′ W					**Bell:** 4 strokes occas.
5304 *A 4998*	-Runcorn Bridge.	53° 20.8′ N 2° 44.0′ W	**2 Fl.R.**				Fl.R. lights, one on each side, mark center of channel.
5308 *A 4996*	-Old quay, lock FOG SIGNAL.	53° 19.4′ N 2° 56.8′ W					When tide serves. **Bell:** occasional.
	O"						
5316 *A 5018*	-Speke AVIATION LIGHT.	53° 20.5′ N 2° 52.4′ W	**Al.Fl.W.G.**				
	-Garston:						
5320 *A 5024*	--NW. dolphin..	53° 20.9′ N 2° 54.5′ W	**2 F.G.** (vert.)	38 **12**	9	Mast on black dolphin.	**Horn:** 1 bl. ev. 11s.
5324 *A 5020*	--E. jetty, head.	53° 20.9′ N 2° 54.5′ W	**2 F.R.** (vert.)	36 **11**	8	Gray framework tower, diamond daymark; 26.	**Bell:** 1 stroke ev. 20s.
5328 *A 5026*	--Stalbridge dock, S. side of entrance.	53° 20.8′ N 2° 54.3′ W	**2 F.G.** (vert.)	34 **10**	3	Gray steel framework tower, triangular daymark, point up; 33.	
	-Liverpool:						
5336 *A 5063*	--Liverpool Landing Stage, N. head.	53° 24.4′ N 2° 59.9′ W	**3 F.R.** (triangular-shaped)	23 **7** 20 **6**	4	Metal column; 16.	
5340 *A 5060*	- - -S. head.	53° 24.2′ N 2° 59.8′ W	**3 F.R.** (triangular-shaped)	23 **7** 20 **6**	4	Metal column; 16.	Traffic signal 300 meters SSE.
5344 *A 5091*	--Range, front.	53° 26.1′ N 3° 00.5′ W	**3 F.R.**	33 **10**	3	Concrete column; 33.	
5346 *A 5091.1*	---Rear, 039° from front.	53° 26.1′ N 3° 00.5′ W	**3 F.R.**	49 **15**	3	Metal structures on shed; 40.	
5348 *A 5092*	--Range, front.	53° 26.2′ N 3° 00.5′ W	**F.R.**	26 **8**	3	Concrete column on river wall; 17.	Indicates distance of 213 meters from lock entrance.
5350 *A 5092.1*	---Rear, 079° from front.	53° 26.2′ N 3° 00.4′ W	**F.R.**	39 **12**	3	W. wall of shed; 30.	
5352 *A 5093*	--Range, front.	53° 26.3′ N 3° 00.5′ W	**2 F.R.** (vert.)	26 **8**	3	Concrete column on river wall; 17.	Indicates distance of 122 meters from lock.
5354 *A 5093.1*	---Rear, 079° from front.	53° 26.3′ N 3° 00.5′ W	**2 F.R.** (vert.)	39 **12**	3	W. wall of shed; 30.	Docking signals shown 150 meters NW.
	--Gladstone Dock:						
5356 *A 5102*	---Range, front.	53° 26.9′ N 3° 00.8′ W	**2 F.R.** (vert.)	29 **9**	5	Concrete column on river wall; 17.	Indicate distance of 213 meters from lock.
5360 *A 5102.1*	----Rear, S. side of entrance 072° from front.	53° 26.9′ N 3° 00.9′ W	**2 F.R.** (vert.)	49 **15**	5	W. wall of shed; 40.	
5364 *A 5104*	--Range, front.	53° 26.9′ N 3° 00.9′ W	**F.R.**	29 **9**	5	Concrete column on river wall; 17.	Indicate distance of 122 meters from lock.
5368 *A 5104.1*	----Rear, N. side of entrance 072° from front.	53° 26.9′ N 3° 00.9′ W	**F.R.**	49 **15**	5	W. wall of shed; 40.	Docking signals shown 160 meters NW.
	RIVER DEE:						
5380 *A 5115*	-Hilbre Island.	53° 23.0′ N 3° 13.7′ W	**Fl.R.** period 3s fl. 0.3s, ec. 2.7s	46 **14**	5	White metal structure; 10.	

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
			ENGLAND-WEST COAST				
5384 *A 5116*	-Mostyn quay.	53° 19.5′ N 3° 15.7′ W	**2 F.R.** (vert.)	33 **10**	3	Black mast.	2 meters apart.
5385 *A 5117*	-Range, front.	53° 19.2′ N 3° 16.2′ W	**F.R.**	39 **12**		Black mast, white diamond daymark; 36.	
5385.1 *A 5117.1*	- -Rear, 135 meters 215°40′ from front.	53° 19.1′ N 3° 16.3′ W	**F.R.**	72 **22**		Black mast, white diamond daymark.	
5388 *A 5118*	-N. training wall, outer end, opposite Flint.	53° 15.1′ N 3° 06.4′ W	**Fl.R.** period 3s	12 **4**	6	Steel framework tower; 27.	
5392 *A 5119*	-S. training wall, near outer end.	53° 14.0′ N 3° 04.5′ W	**Fl.G.** period 5s	10 **3**	6	Steel framework tower; 24.	
5394 *A 5121*	N. Hoyle.	53° 25.0′ N 3° 24.6′ W	**Fl.Y.** period 5s	151 **46**	5	Anemometry mast; 131.	**Horn:** Mo(U) 15s.
			WALES-NORTH AND WEST COASTS				
	RHYL:						
5396 *A 5125*	-Breakwater, head.	53° 19.5′ N 3° 30.3′ W	**Q.R.**	22 **7**	2	Beacon.	F.W. on tower 820 meters SE.
5400 *A 5126*	Llanddulas, Llysfaen jetty.	53° 17.6′ N 3° 39.4′ W	**Fl.G.** period 10s				
5408 *A 5132*	Llandudno, pier, head.	53° 19.9′ N 3° 49.4′ W	**2 F.G.** (vert.)	27 **8** 20 **6**	4	Mast; 16.	
5412	*West Constable Buoy.*	53° 23.1′ N 3° 49.2′ W	**Q.(9)** period 15s			W. CARDINAL YBY, pillar, topmark.	
	RACON		**M(– –)** period 30s		10		
5416 *A 5138*	Conwy River, entrance.	53° 18.0′ N 3° 50.9′ W	**Fl.W.R.** period 5s fl. 0.5s, ec. 4.5s	15 **5**	2	Black metal column; 36.	W. 076°-088°, R.-171°, W.-319°, R.-076°.
	MENAI STRAIT:						
5420 *A 5140*	-Menai, Trwyn-duPoint.	53° 18.8′ N 4° 02.4′ W	**Fl.W.** period 5s fl. 1s, ec. 4s	62 **19**	12	White round castellated tower, black bands; 96.	Visible 101°-023°. Sounded continuously. F.R. marks radio mast about 4 km. SW. of Trwyn-Du. **Bell:** 1 stroke ev. 30s.
5428 *A 5146*	-Beaumaris, on pier.	53° 15.7′ N 4° 05.3′ W	**F.W.G.**	17 **5**	6	Mast; 14.	G. 212°-286°, W.-014°, G.-071°.
5440 *A 5155*	-St. George′s pier.	53° 13.5′ N 4° 09.4′ W	**Fl.G.** period 10s fl. 1s, ec. 9s			Mast.	
5444 *A 5156.5*	-Price Point.	53° 13.1′ N 4° 10.4′ W	**Fl.W.R.** period 2s	15 **5**	3	White beacon; 13.	R. 059°-239°, W.-259°, obsc.-059°.
5448 *A 5157*	-Britannia Tubular Bridge Caernarvon shore, front.	53° 12.9′ N 4° 11.0′ W	**F.W.**			Steel framework tower; 15.	
5452 *A 5157.1*	- -Rear, 45 meters 231° from front.	53° 12.9′ N 4° 11.0′ W	**F.W.**			Steel framework tower; 30.	
5456 *A 5157.2*	-Center of span.	53° 12.9′ N 4° 11.0′ W	**Iso.W.** period 5s	89 **27**	3	Center of bridge span.	1 on either side of bridge.

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
			WALES-NORTH AND WEST COASTS				
5464 *A 5160*	**Point Lynas.**	53° 25.0′ N 4° 17.3′ W	**Oc.W.** period 10s lt. 8s, ec. 2s	128 **39**	**20**	White castellated tower; 37.	Visible 109°-315°. Shown 24 hours. **Horn:** 1 bl. ev. 45s. **Fog detector light.** **DGPS Station.**
5465 *A 5164.4*	-Main Breakwater.	53° 25.0′ N 4° 19.8′ W	**Fl.G.** period 15s	36 **11**	3	White mast; 20.	Visible 141°-271°.
5466 *A 5164.5*	-Inner Breakwater.	53° 25.0′ N 4° 19.9′ W	**2 F.R.** (vert.)	39 **12**	5	White mast; 23.	Visible 164°-239°; 2 meters apart.
5468 *A 5166*	Wylfa Power station pier, head.	53° 25.5′ N 4° 29.5′ W	**2 F.G.** (vert.)	42 **13**	6		
5472 *A 5168*	**Skerries.**	53° 25.3′ N 4° 36.4′ W	**Fl.(2)W.** period 10s fl. 0.2s, ec. 1.5s fl. 0.2s, ec. 8.1s	119 **36**	**22**	White round tower, red band; 75.	Shown 24 hours. **Nautophone:** 2 bl. ev. 20s.
			F.R.	85 **26**	**16**	Same tower.	Visible 231°-254°.
	RACON		**T(–)**		**25**		
			WALES-WEST COAST				
	HOLYHEAD:						
5476 *A 5174*	-Breakwater, head.	53° 19.8′ N 4° 37.1′ W	**Fl.(3)G.** period 10s	70 **21**	14	White square stone tower, black band; 63.	**Siren:** 1 bl. ev. 20s (bl. 3s, si. 17s).
5478 *A 5174.5*	- -Elbow.	53° 19.5′ N 4° 37.6′ W	**2 F.G.** (vert.)		2	Metal structure.	Visible 226°-089°.
	-Old Harbor:						
5484 *A 5178*	- -128 meters E. off breakwater, head.	53° 18.9′ N 4° 37.0′ W	**2 F.G.** (vert.)	26 **8**	5	Concrete mast on dolphin; 25.	**Horn:** 1 bl. ev. 15s. Sounded when railway vessel is expected.
5492 *A 5181*	- -South quay, head.	53° 18.7′ N 4° 37.2′ W	**2 F.R.** (vert.)	23 **7** 16 **5**		Steel mast; 16.	Visible only in dredged channel.
5496 *A 5182*	- -Outer dredged channel, N. side.	53° 18.8′ N 4° 37.5′ W	**Fl.G.** period 3s	23 **7**		Dolphin.	Visible on dredged channel.
5500 *A 5184*	- -Inner dredged channel, N. side.	53° 18.8′ N 4° 37.6′ W	**Fl.G.** period 5s	20 **6**		Dolphin.	
	-Inner Harbor:						
5504 *A 5186*	- -E. side of entrance, near N. end of public quay.	53° 18.8′ N 4° 37.4′ W	**2 F.R.** (vert.)	20 **6**	5	Mast.	
5512 *A 5198*	-New Harbor, Mackenzie pier.	53° 19.0′ N 4° 38.0′ W	**2 F.R.** (vert.)	16 **5**	5	Post; 10.	
5520 *A 5204*	**South Stack.**	53° 18.4′ N 4° 41.9′ W	**Fl.W.** period 10s fl. 0.1s, ec. 9.9s	197 **60**	**20**	White round tower; 91.	Visible 145°-325°. Shown 24 hours. Obscured by N. Stack to the N. **Horn:** 1 bl. ev. 30s (bl. 3s, si. 27s). **Fog detector light.**
5522 *A 5205*	Valley Airfield AVIATION LIGHT.	53° 14.9′ N 4° 31.4′ W	**Mo.(VY)R.**				Occasional.

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
	CAERNARVON BAY:						
	-Menai Strait:						
5528 *A 5210*	- -Llanddwyn Island, SW. head.	53° 08.0′ N 4° 24.7′ W	**Fl.W.R.** period 2.5s fl. 0.3s, ec. 2.2s	39 **12**	W. 7 R. 4	White tower.	R. 280°-015°, W.-120°.
5532 *A 5212*	- -Abermenai.	53° 07.6′ N 4° 19.6′ W	**Fl.W.R.** period 3.5s fl. 0.5s, ec. 3s	20 **6**	3	White mast; 16.	W. 245°-065°, R.-245°.
5536 *A 5213*	- -Tidal basin, S. pier, head.	53° 08.6′ N 4° 16.6′ W	**2 F.G.** (vert.)	16 **5**	2	Stone column.	
5540 *A 5214*	- -Pile pier, head.	53° 08.7′ N 4° 16.4′ W	**2 F.G.** (vert.)	16 **5**	2	White tower, black stripes; 13.	
5544 *A 5220*	-Port Dinorwic, pier, head.	53° 11.2′ N 4° 12.6′ W	**F.W.R.**	16 **5**	2	Post; 9.	R. 225°-357°, W.-225°.
5548 *A 5234*	**Bardsey.**	52° 45.0′ N 4° 47.9′ W	**Fl.(5)W.** period 15s fl. 0.3s, ec. 1.1s fl. 0.3s, ec. 1.1s fl. 0.3s, ec. 1.1s fl. 0.3s, ec. 1.1s fl. 0.3s, ec. 9.1s	129 **39**	**26**	White square tower, red bands; 98.	Obscured by Bardsey Island 198°-250° and in Tremadoc Bay when bearing less than 260°. **Nautophone:** Mo.(N) ev. 45s.
5552 *A 5238*	St. Tudwal's W. Island.	52° 47.9′ N 4° 28.2′ W	**Fl.W.R.** period 15s fl. 1s, ec. 14s	151 **46**	W. 14 R. 10	White round tower; 35.	W. 349°-169°, R.-221°, W.-243°, R.-259°, W.-293°, R.-349°. Obscured by East Island 211°-231°.
5556 *A 5246*	Barmouth, N. Bank.	52° 42.8′ N 4° 03.7′ W	**Q.R.**	12 **4**	5	Red framework tower.	
5560 *A 5254*	Aberystwyth, S. pier, head.	52° 24.4′ N 4° 05.4′ W	**Fl.(2)W.G.** period 10s fl. 1s, ec. 1s fl. 1s, ec. 7s	39 **12**	10	Black post; 16.	G. 030°-053°, W.-210°, obsc.-elsewhere. ??2 F.R. range lights shown near inner end of S. pier.
5564 *A 5256*	-Timber jetty, head.	52° 24.4′ N 4° 05.3′ W	**Q.W.R.**	29 **9**	4	Metal column; 13.	W. 244°-141°, R.-175°.
5566 *A 5257*	Aberaeron, S. pier.	52° 14.6′ N 4° 15.9′ W	**Fl.(3)G.** period 10s	36 **11**	6		Visible 050°-243°.
5566.5 *A 5257.2*	-N. pier.	52° 14.6′ N 4° 15.9′ W	**Fl.(4)W.R.G.** period 15s	33 **10**	6		G. 050°-104°, W.-178°, R.-232°.
5568 *A 5258*	New Quay, pier, head.	52° 12.9′ N 4° 21.3′ W	**Fl.W.G.** period 3s fl. 1s, ec. 2s	39 **12**	W. 8 G. 5	Green triangular daymark, point up.	W. 135°-252°, G.-295°.
5569 *A 5258.5*	Cardigan, Coast Guard building.	52° 07.0′ N 4° 41.1′ W	**2 F.R.** (vert.)			On wall.	2 meters apart.
5569.1 *A 5258.6*	-Beacon.	52° 06.4′ N 4° 41.3′ W	**Fl.(2)W.** period 5s			ISOLATED DANGER BRB, beacon, topmark.	
5570 *A 5259*	-Bridge.	52° 04.8′ N 4° 39.6′ W	**Iso.Y.** period 2s				On upstream and downstream sides of bridge.
	FISHGUARD HARBOUR:						
5572 *A 5262*	-N. breakwater, head.	52° 00.7′ N 4° 58.1′ W	**Fl.G.** period 4.5s fl. 0.5s, ec. 4s	60 **18**	13	Octagonal concrete tower; 67.	**Bell:** 1 stroke ev. 8s.
5576 *A 5264*	-E. breakwater, head.	52° 00.3′ N 4° 58.8′ W	**Fl.R.** period 3s fl. 0.3s, ec. 2.7s	33 **10**	5	Steel framework tower; 36.	
5580 *A 5266*	-Range, front.	52° 00.7′ N 4° 59.2′ W	**F.G.**	253 **77**	5	White mast, diamond daymark; 26.	

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
			WALES-WEST COAST				
5584 *A 5266.1*	--Rear, 46 meters 282° from front.	52° 00.7′ N 4° 59.2′ W	**F.G.**	291 **89**	5	White mast, diamond daymark; 26.	
5588 *A 5270*	Penanglas, near point, FOG SIGNAL.	52° 01.5′ N 4° 59.4′ W				White obelisk.	**Diaphone:** 2 quick bl. ev. 60s.
5592 *A 5274*	**Strumble Head.**	52° 01.8′ N 5° 04.3′ W	**Fl.(4)W.** period 15s fl. 0.1s, ec. 2.2s fl. 0.1s, ec. 2.2s fl. 0.1s, ec. 2.2s fl. 0.1s, ec. 8s	148 **45**	**26**	White round tower; 56.	Visible 038°-257°. Shown 24 hours.
5596 *A 5276*	**South Bishop.**	51° 51.1′ N 5° 24.6′ W	**Fl.W.** period 5s fl. 0.1s, ec. 4.9s	144 **44**	**16**	White round tower; 36.	**Nautophone:** 3 bl. ev. 45s.
	RACON		**O(– – –)** period 30s		10		
5600 *A 5278*	**Smalls.**	51° 43.2′ N 5° 40.2′ W	**Fl.(3)W.** period 15s	118 **36**	**25**	Granite tower, red lantern. Helicopter platform.	Shown 24 hours. **Nautophone:** 2 bl. ev. 60s.
			F.R.	108 **33**	13		Visible 253°-285°.
	RACON		**T(–)** period 30s		**25**		
5604 *A 5282*	**Skokholm.**	51° 41.6′ N 5° 17.2′ W	**Fl.W.R.** period 10s fl. 0.1s, ec. 9.9s	177 **54**	W. **18** R. **15**	White octagonal tower; 59.	W. 301°-154°, R.-301°. Shown by night only.
	MILFORD HAVEN:						
5608 *A 5284*	**-St. Ann's Head.**	51° 40.9′ N 5° 10.4′ W	**Fl.W.R.** period 5s fl. 0.6s, ec. 4.4s	157 **48**	W. **18** R. 14	White octagonal tower; 42.	W. 233°-247°, R.-285°, R. (intensified)-314°, R.-332°, W.-124°, obsc.-129°, W.-131°, obsc.-233°. **Horn:** (110 meters WSW. of light) 2 bl. ev. 60s.
5612 *A 5285*	-Middle Channel Rocks.	51° 40.3′ N 5° 09.8′ W	**Fl.(3)G.** period 7s fl. 0.1s, ec. 1.6s fl. 0.1s, ec. 1.6s fl. 0.1s, ec. 3.5s	58 **18**	8	Black round metal tower, aluminum lantern.	
5616 *A 5286*	-Entrance, First Range, front, West Blockhouse Point.	51° 41.3′ N 5° 09.5′ W	**F.W.**	178 **54**	13	White concrete tower, black vertical rectangular daymark, white stripe; 44.	Visible 004°30′-040°30′. Shown by day on request through Milford Haven Port Radio (10M).
5620 *A 5286.3*	--**Watwick Point,** 926 meters 022°30′ from front.	51° 41.8′ N 5° 09.2′ W	**F.W.**	262 **80**	**15**	Black vertical rectangular daymark, white stripe; 165.	Visible 013°30′-031°30′. Common rear.
5624 *A 5286.1*	-Auxiliary front, in line 021°20′ with common rear Watwick Point.	51° 41.3′ N 5° 09.5′ W	**F.R.**	175 **53**	12	White concrete tower, black diamond daymark; 50.	Visible 014°-031°. Watwick Point marks E. side of channel.
5628 *A 5286.2*	-Auxiliary front, in line 023°44′ with common rear Watwick Point.	51° 41.3′ N 5° 09.5′ W	**F.R.**	175 **53**	12	White concrete tower, black diamond daymark; 35.	Visible 014°-031°. Watwick Point marks W. side of channel.
5632 *A 5287*	**-Great Castle Head.**	51° 42.6′ N 5° 07.0′ W	**F.W.R.G.**	89 **27**	W. 5 R. 3 G. 3	White square tower, black stripes; 16.	R. 243°-281°, G.-299°, W.-029°.
	--Range, front.		**Oc.W.** period 4s lt. 3s, ec. 1s	89 **27**	**15**	Same structure.	Visible 031°12′-048°12′.
5636 *A 5287.1*	**--Little Castle Head,** 890 meters 039°45′ from front.	51° 43.0′ N 5° 06.5′ W	**Oc.W.** period 8s lt. 6s, ec. 2s	173 **53**	**15**	White round concrete tower, vertical rectangular daymark, black stripe; 85.	Visible 031°12′-048°12′.
5640 *A 5291*	-West Blockhouse Point.	51° 41.3′ N 5° 09.4′ W	**Q.W.R.**	70 **21**	W. 9 R. 7	Red lantern on white base; 7.	W. 220°-250°, R.-020°, W.-036°, R.-049°.

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
			WALES-WEST COAST				
5644 *A 5292*	-Dale Fort.	51° 42.1′ N 5° 08.9′ W	**Fl.(2)W.R.** period 5s fl. 0.5s, ec. 1s fl. 0.5s, ec. 3s	64 **20**	W. 5 R. 3	Metal column; 10.	R. 222°-276°, W.-019°.
5648 *A 5292.39*	-Popton Point Range, front, 274° from common rear.	51° 41.7′ N 5° 03.0′ W	**Iso.Y.** period 1.5s	36 **11**	13	White square daymark, black stripe.	Visible 084°-104°. Shown by day on request 089°30′-098°30′ (5M).
5652 *A 5292.4*	--Common rear.	51° 41.6′ N 5° 02.1′ W	**Oc.W.** period 4s lt. 3s, ec. 1s	62 **19**	14	Metal framework tower, white triangular daymark, point up, black stripe.	Visible 085°-105°. Shown by day on request 090°30′-099°30′ (7M).
5656 *A 5292.41*	--Front, 275° from common rear.	51° 41.7′ N 5° 03.0′ W	**Iso.W.** period 1.5s	36 **11**	14	Metal framework tower, white round daymark, black stripe.	Visible 085°-105°. Shown by day on request 090°30′-099°30′ (7M).
5660 *A 5294.9*	-S. Range, front.	51° 42.2′ N 5° 00.4′ W	**Oc.W.** period 3s lt. 2s, ec. 1s	138 **42**	14	Metal framework tower, white rectangular daymark, black stripe; 33.	Visible 070°-090°. Shown by day on request through Milford Haven port radio 075°30′-084°30′ (7M).
5664 *A 5295*	--Common rear, 330 meters 080° from S. front, 320 meters 087° from N. front.	51° 42.2′ N 5° 00.1′ W	**Oc.W.Y.** period 3s lt. 2s, ec. 1s	167 **51**	W. 14 Y. 13	Metal framework tower, white rectangular daymark, black stripe; 26.	Visible W. 070°-090°, Y. 077°-097°. Shown by day, W. 075°30′-084°30′ (7M), Y. 082°30′-091°30′ (5M).
5668 *A 5295.1*	-N. Range, front.	51° 42.2′ N 5° 00.3′ W	**Oc.Y.** period 3s lt. 2s, ec. 1s	135 **41**	13	Framework tower, white octagonal daymark, black stripe; 16.	Visible 077°-097°. Shown by day 082°30′- 091°30′ (5M).
	-Milford:						
5672 *A 5307*	--E. pier Range, front.	51° 42.6′ N 5° 02.1′ W	**F.G.**	16 **5**		Black hut; 13.	
5676 *A 5307.1*	---Rear, 299 meters 348° from front.	51° 42.7′ N 5° 02.2′ W	**F.G.**	66 **20**		Black column; 13.	
5680 *A 5308*	--W. pier, head.	51° 42.2′ N 5° 02.2′ W	**2 F.R.** (vert.)	29 **9**		White mast; 29.	
5684 *A 5306*	-Extremity of pipeline.	51° 42.2′ N 5° 02.5′ W	**Fl.Y.** period 2.5s	19 **6**		Metal framework tower, yellow square daymark.	
5692 *A 5310.2*	-Newton Noyes, pier, head.	51° 42.1′ N 5° 00.7′ W	**2 F.R.** (vert.)	19 **6**	1	Black metal mast; 16.	2 F.R. (vert.) also shown at elbow.
5696 *A 5311.2*	-Wear Spit Range, front.	51° 41.8′ N 4° 58.8′ W	**Q.R.**	24 **7**	6	Black column, red and white triangular daymark, point up.	
5700 *A 5311.21*	--Rear, 0.78 mile 102° from front, on SW. Martello tower.	51° 41.6′ N 4° 57.5′ W	**Iso.R.** period 4s	40 **12**	10	White stripe on SW. Martello tower.	Visible 098°-106°.
5704 *A 5311*	-Pennar Range, front.	51° 41.6′ N 4° 58.2′ W	**Q.W.**	24 **7**	6	Pile, black triangular daymark, point up, white stripe.	
5708 *A 5311.1*	--Llanreath, rear, 640 meters 101° from front.	51° 41.5′ N 4° 57.7′ W	**Iso.W.** period 4s	29 **9**	10	Pile, black triangular daymark, point up, white stripe.	Visible 097°-105°.
5712 *A 5316*	-Pembroke dock Range, front.	51° 41.8′ N 4° 57.3′ W	**Q.G.**	16 **5**		Daymark, white diamond daymark, black stripe.	
5716 *A 5316.1*	--Rear, 82 meters 153° from front.	51° 41.8′ N 4° 57.3′ W	**Q.G.**	30 **9**		Daymark, white diamond daymark, black stripe.	
			WALES-BRISTOL CHANNEL				
5720 *A 5317*	--Carr jetty, head.	51° 41.9′ N 4° 57.4′ W	**2 F.G.** (vert.)	49 **15**			
5724 *A 5317.2*	---Elbow.	51° 41.9′ N 4° 57.4′ W	**2 F.G.** (vert.)	49 **15**			

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
			WALES-BRISTOL CHANNEL				
5725 *A 5319.5*	-Fish Farm, NW. head.	51° 42.1′ N 4° 55.5′ W	**2 F.G.** (vert.)				
5726 *A 5319.6*	--SE. head.	51° 42.1′ N 4° 55.3′ W	**2 F.G.** (vert.)				
5728 *A 5322*	*St. Gowan Buoy.*	51° 31.9′ N 4° 59.7′ W	**Q.(6)+L.Fl.W.** period 15s			S. CARDINAL YB, pillar, topmark.	**Whistle.**
	RACON		**T(–)** period 30s		10		
	CARMARTHEN BAY:						
5732 *A 5328*	-Caldy Island, S. side.	51° 37.9′ N 4° 41.0′ W	**Fl.(3)W.R.** period 20s fl. 0.9s, ec. 1.1s fl. 0.9s, ec. 1.1s fl. 0.9s, ec. 15.1s	214 **65**	W. 13 R. 9	White round tower; 52.	R. 173°-212°, W.-088°, R.-102°, obsc.-173°.
	-Tenby:						
5736 *A 5336*	--Harbor pier, head.	51° 40.4′ N 4° 41.8′ W	**F.R.**	24 **7**	7	Metal mast; 16.	
5740 *A 5338*	--Harbor pier, near head.	51° 40.4′ N 4° 41.8′ W	**F.W.**	20 **6**	1	Post; 10.	
5744 *A 5342*	-Saundersfoot, S. pier, head.	51° 42.6′ N 4° 41.7′ W	**Fl.R.** period 5s fl. 1s, ec. 4s	21 **6**	7	Stone cupola; 12.	
5748 *A 5356*	**-Burry Port.**	51° 40.6′ N 4° 15.0′ W	**Fl.W.** period 5s	24 **7**	**15**	White tower, red top.	
5752 *A 5357*	--Barrel Post.	51° 40.5′ N 4° 15.0′ W	**Fl.R.** period 3s		5		
5754	*W. Helwick Buoy.*	51° 31.4′ N 4° 23.6′ W	**Q.(9)W.** period 15s			W. CARDINAL YBY, pillar, topmark.	**Whistle.**
	RACON		**T(–)** period 30s		10		
	SWANSEA BAY:						
5756 *A 5358*	**-Mumbles.**	51° 34.0′ N 3° 58.2′ W	**Fl.(4)W.** period 20s fl. 0.8s, ec. 2.2s fl. 0.8s, ec. 2.2s fl. 0.8s, ec. 2.2s fl. 0.8s, ec. 10.2s	114 **35**	**15**	White octagonal tower; 56.	**Horn:** 3 bl. ev. 60s.
	-Swansea:						
5760 *A 5360*	--Railway pier.	51° 34.2′ N 3° 58.4′ W	**2 F.R.** (vert.)	36 **11**	9	White framework tower; 23.	
5764 *A 5364*	--W. pier, head.	51° 36.5′ N 3° 55.7′ W	**Fl.(2)R.** period 10s	36 **11**	9	Yellow metal column; 23.	F.R. lights on radio mast 1.3 miles NNE.
5768 *A 5366*	--E. breakwater, head.	51° 36.4′ N 3° 55.5′ W	**2 F.G.** (vert.)	32 **10**	6	Yellow framework tower; 23.	**Horn:** 1 bl. ev. 30s. Sounded at tide time.
5769 *A 5370*	--Barrage, E. side.	51° 36.9′ N 3° 55.6′ W	**2 F.G.** (vert.)	16 **5**	1	Metal post; 10.	2 meters apart.
5770 *A 5370.2*	---W. side.	51° 36.9′ N 3° 55.7′ W	**2 F.R.** (vert.)	16 **5**	1	Metal post; 10.	2 meters apart.
5772 *A 5367*	--New Approach jetty, Range, front.	51° 36.5′ N 3° 55.5′ W	**Oc.G.** period 4s	16 **5**	2		Mark E. limit of dredged area. Obscured when bearing less than 020°. Conspicuous R. and G. traffic signals 300 meters N.

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
			WALES-BRISTOL CHANNEL				
5776 *A 5367.1*	-Rear, 260 meters 020° from front.	51° 36.7′ N 3° 55.4′ W	**F.G.**		6		
5780 *A 5369*	-Car Ferry terminal, S. head.	51° 36.8′ N 3° 55.5′ W	**2 F.G.** (vert.)	30 **9** 20 **6**	5		
	-Neath River Entrance:						
5784 *A 5374*	--Monkstone.	51° 36.3′ N 3° 51.9′ W	**Fl.(2)G.** period 6s	20 **6**	5	Green mast; 43.	F.R. lights on chimney 1.45 miles ENE. Emergency light.
5788 *A 5376*	--Middle of training wall.	51° 36.7′ N 3° 51.3′ W	**Fl.G.** period 1.5s	20 **6**	5	Red mast; 42.	
5792 *A 5377*	--Training wall, N. head.	51° 37.1′ N 3° 50.8′ W	**Fl.(3)G.** period 10s	20 **6**	5	Red mast; 29.	
5794 *A 5373*	--Entrance.	51° 37.2′ N 3° 50.6′ W	**Dir.F.W.R.G.** **2 F.R.** (vert.)			Metal framework mast; 26.	Marks channel.
5797 *A 5381*	-Baglan Brook. Pumping station.	51° 37.4′ N 3° 49.9′ W	**2 F.G.** (vert.)			STARBOARD (A) G, beacon, topmark.	
	-Port Talbot:						
5800 *A 5391*	--Range, front.	51° 35.0′ N 3° 47.7′ W	**Oc.R.** period 3s	39 **12**	6	Metal frame tower, yellow and orange diamond daymark; 39.	Shown when required.
5804 *A 5391.1*	---Rear, 400 meters 059°49′ from front.	51° 35.0′ N 3° 47.7′ W	**Oc.R.** period 6s lt. 5s, ec. 1s	105 **32**	6	Metal frame tower, yellow and orange diamond daymark; 98.	Shown when required.
5805 *A 5389*	-N. breakwater, head.	51° 34.7′ N 3° 48.9′ W	**Fl.(4)R.** period 10s fl. 0.7s, ec. 1s fl. 0.7s, ec. 1s fl. 0.7s, ec. 1s fl. 0.7s, ec. 4.2s	36 **11**	3	Metal framework tower.	
5806 *A 5390*	-S. breakwater, head.	51° 34.4′ N 3° 48.9′ W	**Fl.G.** period 3s fl. 0.5s, ec. 2.5s	36 **11**	3	Metal framework tower.	
5807 *A 5394*	--Ore terminal, head.	51° 34.4′ N 3° 48.2′ W	**2 F.Y.** (vert.)	29 **9**	1	Concrete column on dolphin.	2 meters apart.
5808 *A 5395*	--Dredged area, NE. side.	51° 34.8′ N 3° 48.3′ W	**Fl.R.** period 2s	26 **8**	2	Concrete column on dolphin.	
5808.1 *A 5395.2*	---E. side.	51° 34.6′ N 3° 48.0′ W	**Fl.R.** period 2s	20 **6**	1	Pile structure.	
5808.2 *A 5395.3*	---E. side, N. limit.	51° 34.5′ N 3° 47.7′ W	**Iso.W.** period 2s	23 **7**	1	Mast.	Marks N. limit of 15 meter dredged area.
5808.3 *A 5395.4*	----S. limit.	51° 34.3′ N 3° 47.7′ W	**Iso.W.** period 2s		2	Metal column.	Marks S. limit of 17.2 meter dredged area.
5808.4 *A 5395.6*	--S. side.	51° 34.3′ N 3° 48.4′ W	**Fl.G.** period 2s	26 **8**	2	Concrete column on dolphin.	
5808.5 *A 5395.8*	--SW. side.	51° 34.4′ N 3° 48.7′ W	**Fl.G.** period 2s	26 **8**	2	Concrete column on dolphin.	
5809	*Cabenda Buoy.*	51° 33.3′ N 3° 52.4′ W	**V.Q.(6)+L.Fl.W.** period 10s			S. CARDINAL YB, pillar, topmark.	
	RACON		**Q(– – • –)**				

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
			WALES-BRISTOL CHANNEL				
5810	*W. Scarweather Buoy.*	51° 28.3′ N 3° 55.5′ W	**Q.(9)W.** period 15s			W. CARDINAL YBY, pillar, topmark.	**Bell.**
	RACON				10		
5812 *A 5402*	Porthcawl, breakwater, SE. head.	51° 28.4′ N 3° 41.9′ W	**F.W.R.G.**	34 **10**	W. 6 R. 4 G. 4	White hexagonal tower, black base; 30.	G. 302°-036°, W.-082°, R.-122°, obsc.-302°.
5816 *A 5406*	**Nash Point.**	51° 24.0′ N 3° 33.1′ W	**Fl.(2)W.R.** period 15s fl. 0.1s, ec. 3.7s fl. 0.1s, ec. 11.1s	184 **56**	W. **21** R. **16**	White round tower; 122.	R. 280°-290°, W.-100°, R.-120°, W.-128°. **DGPS Station.**
5820 *A 5406.6*	St. Hilary, AVIATION LIGHT.	51° 27.4′ N 3° 24.1′ W	**Q.R.**	1135 **346**	11	Radio mast; 750.	Obstruction light.
			4 F.R. (vert.)		6		
5824 *A 5407*	Breaksea Point, intake structure.	51° 22.5′ N 3° 24.5′ W	**Fl.R.**	37 **11**		Concrete tower.	
5828 *A 5408*	*BREAKSEA LIGHTFLOAT.*	51° 19.9′ N 3° 19.0′ W	**Fl.W.** period 15s fl. 1s, ec. 14s	36 **11**	12	Red hull, ″BREAKSEA"" in white letters amidships.	F.W. light carried about 16 feet above waterline. **Nautophone:** 2 bl. ev. 30s.
	RACON		**T(–)** period 30s		10		
5832 *A 5410*	Wenvoe, AVIATION LIGHT.	51° 27.5′ N 3° 16.8′ W	**Q.W.**	1198 **365**	12	Radio mast; 794.	Obstruction light. F.R. lights on radio mast nearby.
	BARRY DOCK:						
5836 *A 5412*	-W. breakwater, head.	51° 23.4′ N 3° 15.5′ W	**Fl.W.** period 2.5s fl. 0.1s, ec. 2.4s	40 **12**	10	White round tower; 30.	
5840 *A 5414*	-Steamboat pier, head.	51° 23.6′ N 3° 15.6′ W	**2 F.R.** (vert.)	42 **13**	6	White mast; 42.	Traffic signals. Shown when port is closed.
5844 *A 5413*	-E. breakwater, head.	51° 23.5′ N 3° 15.3′ W	**Q.G.**	24 **7**	8	Mast; 17.	
5848 *A 5418*	-Lady Windsor Lock, W. side of entrance.	51° 23.6′ N 3° 15.6′ W					Traffic signals. **Horn:** 2 bl. ev. 30s. When entrance is clear.
5852 *A 5420*	-No. ″3" Dock, W. side of entrance.	51° 23.6′ N 3° 15.6′ W					Storm signals. Traffic signals. **Horn:** Sounded at irregular intervals when entrance is clear.
5856 *A 5411*	Barry Harbor, Yorke Rock breakwater, head.	51° 23.4′ N 3° 17.1′ W	**2 F.G.** (vert.)	16 **5**	5	Mast; 12.	
5860 *A 5426*	**Flat Holm.**	51° 22.5′ N 3° 07.0′ W	**Fl.(3)W.R.** period 10s	164 **50**	W. **15** R. 12	White round tower; 99.	R. 106°-140°, W.-151°, R.-203°, W.-106°.
5864 *A 5428*	Monkstone Rock.	51° 24.8′ N 3° 05.9′ W	**Fl.W.** period 5s fl. 0.9s, ec. 4.1s	43 **13**	13	Red column on masonry tower; 74.	
	CARDIFF:						
5876 *A 5440*	-Queen Alexandra dock, S. jetty.	51° 27.1′ N 3° 09.5′ W	**2 F.G.** (vert.)				Traffic signals. **Diaphone:** 1 bl. ev. 60s. Occasional.
5880 *A 5440.3*	- -N. jetty.	51° 27.1′ N 3° 09.6′ W	**2 F.R.** (vert.)				
5900 *A 5430*	Penarth, Promenade pier, head.	51° 26.1′ N 3° 09.8′ W	**2 F.R.** (vert.)	26 **8** 20 **6**	3	Brown mast; 36.	Port signals. **Reed:** Mo.(BA) ev. 60s. Sounded 10 min. before a vessel is expected.

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
			WALES-BRISTOL CHANNEL				
	USK RIVER:						
5904 *A 5454*	**-East Usk.**	51° 32.4′ N 2° 57.9′ W	**Fl.(2)W.R.G.** period 10s fl. 1s, ec. 2s fl. 1s, ec. 6s	36 **11**	W. **15** R. 11 G. 11	White round tower; 44.	W. 284°-290°, R.-017°, W.-037°, G.-115°, W.-120°.
			Oc.W.R.G. period 10s lt. 8s, ec. 2s	33 **10**	W. 11 R. 9 G. 9		G. 018°-022°, W.-024°, R.-028°.
5908 *A 5460*	-Alexandra Dock, W. pier, head.	51° 32.8′ N 2° 59.2′ W	**2 F.R.** (vert.)	30 **9** 24 **7**	6	White steel framework tower; 21.	2 meters apart. Traffic signals. **Horn:** 1 bl. ev. 60s. Sounded from 4 hours before to 4 hours after high water.
5912 *A 5462*	- -E. pier, head.	51° 32.9′ N 2° 59.0′ W	**2 F.G.** (vert.)	30 **9** 24 **7**	6	White framework tower; 21.	2 meters apart.
5920 *A 5468*	-Julian's Pill Range, front.	51° 33.3′ N 2° 57.9′ W	**F.G.**	17 **5**	4	Mast; 20.	
5921 *A 5467.9*	-Rear, 61 meters 057° from front.	51° 33.3′ N 2° 57.8′ W	**F.G.**	26 **8**	4	Mast; 20.	
5928 *A 5470*	-Alpha Steel Wharf, S. head.	51° 33.4′ N 2° 57.8′ W	**2 F.G.** (vert.)	13 **4** 6 **2**			
5932 *A 5470.2*	- -N. head.	51° 33.4′ N 2° 57.9′ W	**2 F.G.** (vert.)	13 **4** 6 **2**			
5944 *A 5472.5*	-Bellport, jetty.	51° 33.6′ N 2° 58.0′ W	**2 F.G.** (vert.)	19 **6** 13 **4**			
5948 *A 5473*	-Dallimores wharf.	51° 33.8′ N 2° 58.4′ W	**2 F.G.** (vert.)				
5952 *A 5474*	-Transporter Bridge, W. side.	51° 34.2′ N 2° 59.1′ W	**2 F.R.** (vert.)				2 F.Y. (vert.) shown on transporter car. ??Headway indicator lights for George Street bridge shown from E. pier of bridge.
5956 *A 5474.2*	- -E. side.	51° 34.2′ N 2° 59.0′ W	**2 F.G.** (vert.)				
5960 *A 5475*	-Lysaghts, wharf, SW. head.	51° 34.4′ N 2° 58.5′ W	**2 F.G.** (vert.)				
5964 *A 5475.2*	- -NE. head.	51° 34.4′ N 2° 58.4′ W	**2 F.G.** (vert.)				
5968 *A 5476*	-George Street Bridge, center of span.	51° 35.0′ N 2° 59.0′ W	**F.Y.**				Headway indicator lights shown from E. pier of bridge.
5972 *A 5478*	-Newport Bridge, center.	51° 35.4′ N 2° 59.6′ W	**F.Y.**				
5976	*English and Welsh Grounds Buoy.*	51° 26.9′ N 3° 00.1′ W	**L.Fl.W.** period 10s			SAFE WATER RW, pillar, topmark.	**Whistle.**
	RACON		**T(–)** period 30s		7		

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
			ENGLAND-BRISTOL CHANNEL				
5984 *A 5535*	Charston Rock.	51° 35.3′ N 2° 41.6′ W	**Fl.W.** period 3s fl. 0.5s, ec. 2.5s	16 **5**	8	White round tower, black stripe; 23.	
5988 *A 5536*	Redcliffe, Range, front.	51° 36.2′ N 2° 41.3′ W	**F.Bu.**	51 **16**		Black steel skeleton tower, white daymark and lantern; 33.	Visible 358°-028°. Neon.
5992 *A 5536.1*	-Rear, 320 meters 012°51′ from front.	51° 36.4′ N 2° 41.2′ W	**F.Bu.**	108 **33**	10	Metal mast; 30.	Neon.
5994 *A 5541*	Chapel Rock.	51° 36.4′ N 2° 39.1′ W	**Fl.W.R.G.** period 2.6s fl. 0.4s, ec. 2.2s	19 **6**	8	Black metal framework tower, white lantern; 26.	W. 213°-284°, R.-049°, W.-051°30′, G.-160°
	AVON RIVER:						
5996 *A 5489*	-Portbury wharf Range, front.	51° 29.5′ N 2° 44.1′ W	**Oc.G.** period 5s lt. 3s, ec. 2s	23 **7**	10	Gray mast; 26.	Visible 171°30′-211°30′.
6000 *A 5489.1*	--Rear, 100 meters 191°33′ from front.	51° 29.4′ N 2° 44.1′ W	**Oc.G.** period 5s lt. 3s, ec. 2s	39 **12**	10	Gray mast; 39.	Visible 171°30′-211°30′. Shown by day.
6010 *A 5490*	-Seabank Range, front.	51° 30.0′ N 2° 43.7′ W	**I.Q.W.**	43 **13**	5	Gray mast; 33.	Visible 070°18′-103°18′.
6010.1 *A 5490.1*	--Rear, 500 meters 086°47′ from front.	51° 30.1′ N 2° 43.3′ W	**I.Q.W.**	52 **16**	5	White mast; 43.	Visible 070°18′-103°18′. Visible by day 076°48′-096°48′. Shown 24 hours.
6012 *A 5490.2*	-W. Dock pier, head.	51° 30.1′ N 2° 43.7′ W	**L.Fl.G.** period 15s fl. 3s, ec. 12s	16 **5**	6	White pillar; 6.	
6016 *A 5490.4*	--Pier corner.	51° 30.1′ N 2° 43.8′ W	**Fl.G.** period 2s fl. 0.8s, ec. 1.2s	23 **7**	7	Gray pillar; 16.	**Diaphone:** (40 meters NE.) 1 bl. ev. 30s.
6020 *A 5490.6*	--Knuckle Range, front.	51° 29.9′ N 2° 43.6′ W	**Oc.G.** period 5s lt. 4s, ec. 1s	19 **6**	6	Gray pillar; 10.	
6020.1 *A 5490.61*	---Rear, 165 meters 099°34′ from front.	51° 29.9′ N 2° 43.5′ W	**F.G.**	43 **13**	6	On building.	Visible 044°-134°.
6024 *A 5492*	--Avonmouth Docks, N. pier, head.	51° 30.5′ N 2° 43.0′ W	**Fl.W.** period 4s	50 **15**	10	Round granite tower; 53.	Visible 060°-228°30′.
6032 *A 5492.21*	---S. pier, head.	51° 30.4′ N 2° 43.0′ W	**Oc.R.G.** period 30s lt. 27s, ec. 3s	30 **9**	10	Round granite tower; 30.	R. 294°-036°, G.-194°, **Bell:** 1 stroke ev. 10s.
6036 *A 5494*	--King Road Range, front, N. pier, head.	51° 30.5′ N 2° 43.0′ W	**Oc.R.** period 5s lt. 4.5s, ec. 0.5s	16 **5**	9	White obelisk two red bands; 7.	Visible 062°-082°. Supplemented by a Xenon Fl W.
6040 *A 5494.1*	---Rear, 546 meters 072°26′ from front.	51° 30.6′ N 2° 42.6′ W	**Q.R.**	49 **15**	10	Tower, orange bands, black and white round daymark; 44.	Visible 066°-078°. Supplemented by a Xenon Fl W.
6044 *A 5497*	---Oil jetty, head.	51° 30.6′ N 2° 42.8′ W	**2 F.G** (vert.)	20 **6** 13 **4**	2	White column; 10.	
	--King Road:						
6052 *A 5501*	---Avonmouth Range, front.	51° 30.0′ N 2° 42.5′ W	**F.R.**	23 **7**	3	White mast, white square daymark, red stripes; 16.	Visible 010°-160°.
6056 *A 5501.1*	----Rear 142 meters 127°10′ from front.	51° 30.0′ N 2° 42.4′ W	**F.R.**	56 **17**	3	White mast, white round daymark, red stripes; 79.	Visible 048°-138°.

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
			ENGLAND-BRISTOL CHANNEL				
	-Nelson Point Channel:						
6060 *A 5504*	- - -Monoliths.	51° 30.2′ N 2° 42.7′ W	**Fl.R.** period 5s fl. 1.5s, ec. 3.5s	16 **5**	3	White column, white square daymark, black stripes; 13.	Visible 317°-137°.
6062 *A 5505*	-St. George Range, front.	51° 29.7′ N 2° 42.6′ W	**Oc.G.** period 5s lt. 4s, ec. 1s	20 **6**	1	Orange column; 10.	Visible 158°-305°.
6062.1 *A 5505.1*	- -Rear, about 40 meters 173°17′ from front.	51° 29.7′ N 2° 42.6′ W	**Oc.G.** period 5s lt. 4s, ec. 1s	30 **9**	1	White column, orange daymark; 20.	Visible 158°-305°. Synchronized with front.
6064 *A 5507*	-Gloucester Bank, Nelson Point.	51° 29.9′ N 2° 42.4′ W	**Fl.R.** period 3s fl. 0.5s, ec. 2.5s	30 **9**	3	White mast; 23.	
6068 *A 5508*	-Broad Pill, N. jetty, head.	51° 29.7′ N 2° 41.9′ W	**Q.Y.**	35 **11**	1	White framework mast; 35.	
6072 *A 5511*	-Custom House, Somerset Bank.	51° 28.8′ N 2° 40.9′ W	**Fl.G.** period 2s	16 **5**	1	White column; 12.	
6076 *A 5512*	-Adam and Eve, Somerset Bank.	51° 28.8′ N 2° 40.4′ W	**Q.(3)G.** period 6s	25 **8**	1	White column; 12.	
6080 *A 5513*	-Chapel Pill, Somerset Bank.	51° 28.9′ N 2° 40.0′ W	**Q.(2)G.** period 4s	24 **7**	1	White column; 12.	
6084 *A 5514*	-Lower Horseshoe, Gloucester Bank.	51° 29.2′ N 2° 39.8′ W	**Fl.R.** period 2s	16 **5**	1	White column; 12.	
6088 *A 5515*	-Upper Horseshoe, Gloucester Bank.	51° 29.3′ N 2° 39.6′ W	**Fl.(3)R.** period 6s	16 **5**	1	White column; 12.	
6092 *A 5516*	-Fir Tree, Gloucester Bank.	51° 29.1′ N 2° 39.4′ W	**Q.(2)R.** period 4s	18 **5**	1	White column; 12.	
6100 *A 5518*	-Sea Mills.	51° 28.8′ N 2° 39.0′ W	**Iso.R.** period 5s	23 **7**	1	White framework tower; 16.	Visible 342°-148°.
6104 *A 5520*	-Miles Dock, Somerset Bank, upper.	51° 28.4′ N 2° 39.0′ W	**Fl.G.** period 2s	22 **7**	1	White column; 12.	
6108 *A 5519*	- -Lower.	51° 28.5′ N 2° 39.0′ W	**Q.(3)G.** period 6s	18 **5**	1	White column; 12.	
6112 *A 5522*	-Leigh Woods, Somerset Bank, upper.	51° 28.2′ N 2° 38.6′ W	**Fl.G.** period 2s	18 **5**	1	White column; 12.	
6116 *A 5521*	- -Lower.	51° 28.3′ N 2° 38.8′ W	**Q.(2)G.** period 4s	18 **5**	1	White column.	
6120 *A 5523*	-Black Rock Quarry, Gloucester Bank.	51° 28.1′ N 2° 38.0′ W	**Fl.R.** period 2s	18 **5**	1	White column; 12.	
6128 *A 5525*	-Round Point, Gloucester Bank.	51° 27.5′ N 2° 37.7′ W	**Q.(2)R.** period 4s	25 **8**	1	White column; 12.	
6132 *A 5526*	-Nightingale Valley, Somerset Bank.	51° 27.5′ N 2° 37.8′ W	**Q.(3)G.** period 6s	18 **5**	1	White column; 12.	
6140 *A 5486*	Portishead, pier, head.	51° 29.7′ N 2° 45.2′ W	**Iso.G.** period 2s	18 **5**	3	White column; 12.	
6144 *A 5484*	**-Portishead Point.**	51° 29.6′ N 2° 46.4′ W	**Q.(3)W.** period 10s fl. 0.3s, ec. 0.8s fl. 0.3s, ec. 0.8s fl. 0.3s, ec. 7.5s	30 **9**	**16**	Black framework tower, white concrete base; 28.	Visible 060°-262°. **Horn:** 1 bl. ev. 20s.
6148 *A 5482*	**Black Nore Point.**	51° 29.1′ N 2° 48.0′ W	**Fl.(2)W.** period 10s fl. 0.2s, ec. 1.6s fl. 0.2s, ec. 8s	36 **11**	**17**	White round tower; 36.	Visible 044°-243°, obsc. N. of 049°.

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
			ENGLAND-BRISTOL CHANNEL				
6156 *A 5480*	Clevedon pier, head.	51° 26.6′ N 2° 51.8′ W	**2 F.G.** (vert.)	23 **7** 16 **5**	3	Post; 3.	
6158 *A 5480.5*	Clevedon Pill Entrance.	51° 25.8′ N 2° 52.8′ W	**Fl.G.** period 10s	7 **2**	1	Post, green triangle daymark, point up.	Shown 2 hours before to 2 hours after HW.
	WESTON-SUPER-MARE:						
6164 *A 5566*	-Pier, head.	51° 20.8′ N 2° 59.3′ W	**2 F.G.** (vert.)	19 **6** 15 **5**		White post; 7.	
6168 *A 5582*	Hinkley Point.	51° 12.9′ N 3° 07.8′ W	**2 F.G.** (vert.)	24 **7** 18 **5**	3	Metal column.	
	RIVER PARRETT:						
6172 *A 5570*	**-Burnham.**	51° 14.9′ N 3° 00.3′ W	**Fl.W.** period 7.5s fl. 0.3s, ec. 7.2s	23 **7**	12	White tower, red stripe; 30.	Visible 074°-164°.
	-076°.		**Dir.F.W.R.G.**	13 **4**	W. 12 R. 10 G. 10		G. 071°-075°, W.-077°, R.-081°.
6176 *A 5572*	-Seafront Range, front.	51° 14.4′ N 2° 59.9′ W	**F.R.**	20 **6**	3	White square, orange stripe, on sea wall.	
6180 *A 5572.1*	- -Rear 112° from front.	51° 14.4′ N 2° 59.9′ W	**F.R.**	40 **12**	3	Church tower.	
6188 *A 5573*	-Stert Reach.	51° 11.3′ N 3° 01.9′ W	**Fl.W.** period 3s fl. 0.3s, ec. 2.7s	12 **4**	7	White beacon.	Visible 187°-217°.
6196 *A 5584*	Watchet Harbor, W. breakwater.	51° 11.0′ N 3° 19.7′ W	**F.G.**	31 **9**	9	Red hexagonal metal tower, white lantern, green cupola; 16.	
6200 *A 5584.2*	-E. breakwater.	51° 11.0′ N 3° 19.6′ W	**2 F.R.** (vert.)		3		
6204 *A 5586*	Minehead, pier, head.	51° 12.8′ N 3° 28.3′ W	**Fl.(2)G.** period 5s		4	Post on parapet; 7.	Visible 127°-262°.
6204.5 *A 5586.4*	-Outfall.	51° 12.9′ N 3° 28.2′ W	**Q.G.**	20 **6**	7	STARBOARD (A) G, beacon, topmark.	
6208 *A 5590*	**Lynmouth Foreland.**	51° 14.7′ N 3° 47.1′ W	**Fl.(4)W.** period 15s fl. 0.1s, ec. 2.2s fl. 0.1s, ec. 2.2s fl. 0.1s, ec. 2.2s fl. 0.1s, ec. 8s	220 **67**	**18**	White round tower; 50.	Visible 083°-275°. Shown 24 hours.
6209 *A 5588*	-Foreland Ledge.	51° 15.3′ N 3° 47.5′ W	**Fl.(2)W.** period 10s fl. 1s, ec. 1s fl. 1s, ec. 7s		5	ISOLATED DANGER BRB, beacon, topmark.	Marine turbine. **Siren:** Mo.(U) ev.30s. (bl. 1s, si. 1s, bl. 1s, si. 1s, bl. 3s, si. 23s).
6212 *A 5592*	-River training arm.	51° 13.8′ N 3° 49.8′ W	**2 F.R.** (vert.)	20 **6**	5	Column.	
6216 *A 5593*	-Harbor Arm.	51° 13.9′ N 3° 49.8′ W	**2 F.G.** (vert.)	20 **6**	5	Column.	
6220 *A 5594*	Ilfracombe, Lantern Hill, N. side of harbor.	51° 12.6′ N 4° 06.7′ W	**Fl.G.** period 2.5s	127 **39**	6	White lantern on chapel; 37.	
6224 *A 5596*	-Inner pier, head.	51° 12.6′ N 4° 06.7′ W	**2 F.G.** (vert.)	20 **6**	1	Post; 8.	

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
			ENGLAND-BRISTOL CHANNEL				
6228 *A 5600*	**Bull Point.**	51° 12.0′ N 4° 12.0′ W	**Fl.(3)W.** period 10s fl. 0.2s, ec. 1.6s fl. 0.2s, ec. 1.6s fl. 0.2s, ec. 6.2s	177 **54**	**20**	White round tower; 35.	Obscured shore-056°.
			F.R.	157 **48**	12		Visible 058°-096°.
	BIDEFORD:						
6232 *A 5610*	**-Instow Landing Range,** front.	51° 03.6′ N 4° 10.6′ W	**Oc.W.** period 6s lt. 5s, ec. 1s	71 **22**	**15**	White framework tower, white rectangular daymark; 60.	Visible 104°30′-131°30′. Shown 24 hours.
6236 *A 5610.1*	- -Rear, 427 meters 118° from front.	51° 03.5′ N 4° 10.3′ W	**Oc.W.** period 10s lt. 7.5s, ec. 2.5s	126 **38**	**15**	White tower; 28.	Visible 104°-132°. Shown 24 hours.
6240 *A 5612*	Crow Point, Taw River.	51° 03.9′ N 4° 11.4′ W	**Fl.W.R.** period 5s fl. 0.5s, ec. 4.5s	27 **8**	W. 6 R. 5	White framework tower; 22.	R. 225°-232°, W.-237°, R.-358°, W.-015°, R.-045°.
6242 *A 5615*	Clovelly Harbor, pier, head.	50° 59.9′ N 4° 23.8′ W	**Fl.G.** period 5s	16 **5**	5	Green metal structure.	Visible to seaward.
6244 *A 5616*	**Lundy Island.**	51° 12.1′ N 4° 40.6′ W	**Fl.W.** period 15s fl. 0.1s, ec. 14.9s	157 **48**	**17**	White round tower; 56.	Visible 009°-285°.
6248 *A 5618*	-SE. point.	51° 09.7′ N 4° 39.3′ W	**Fl.W.** period 5s fl. 0.1s, ec. 4.9s	175 **53**	**15**	White round tower; 52.	Visible 170°-073°. Distress signals. **Horn:** 1 bl. ev. 25s.
6252 *A 5622*	**Hartland Point.**	51° 01.3′ N 4° 31.4′ W	**Fl.(6)W.** period 15s fl. 0.2s, ec. 1.3s fl. 0.2s, ec. 1.3s fl. 0.2s, ec. 1.3s fl. 0.2s, ec. 1.3s fl. 0.2s, ec. 1.3s fl. 0.2s, ec. 7.3s	120 **37**	**25**	White round tower; 59.	Shown 24 hours. **Horn:** 1 bl. ev. 60s.
			ENGLAND-WEST COAST				
	PADSTOW:						
6256 *A 5630*	-Stepper Point.	50° 34.1′ N 4° 56.6′ W	**L.Fl.W.** period 10s fl. 2s, ec. 8s	41 **12**	4	Column; 5.	
6260 *A 5634*	-N. quay, head.	50° 32.5′ N 4° 56.1′ W	**2 F.G.** (vert.)	21 **6**	2	Column; 20.	F.W. shown from each inner quay.
6264 *A 5636*	-S. quay, head.	50° 32.4′ N 4° 56.1′ W	**2 F.R.** (vert.)	24 **7**	2	Column; 20.	
6268 *A 5631*	-St. Saviours Point.	50° 32.7′ N 4° 56.0′ W	**L.Fl.G.** period 10s			STARBOARD (A) G, topmark.	
6272 *A 5638*	**Trevose Head.**	50° 32.9′ N 5° 02.1′ W	**Fl.W.** period 7.5s fl. 0.2s, ec. 7.3s	204 **62**	**21**	White round tower; 87.	Storm signals. R. light on radio mast 180 meters ESE. **Horn:** 2 bl. ev. 30s.
	NEWQUAY:						
6276 *A 5642*	-N. pier, head.	50° 25.0′ N 5° 05.1′ W	**2 F.G.** (vert.)	16 **5**	2	Bracket on wall.	
6280 *A 5644*	-S. pier, head.	50° 25.5′ N 5° 05.1′ W	**2 F.R.** (vert.)	14 **4**	2	Stone tower; 8.	

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
			ENGLAND-WEST COAST				
6284 *A 5654*	Godrevy Island.	50° 14.5′ N 5° 23.9′ W	**Fl.W.R.** period 10s fl. 1s, ec. 9s	120 **37**	W. 12 R. 9	White octagonal stone tower; 86.	W. 022°-101°, R.-145°, W.-272°, obsc.-022°. 4 F.R. (vert.) shown on TV tower 6.5 miles SE.
	HAYLE:						
6288 *A 5658*	-W. side of entrance, Range, front.	50° 11.5′ N 5° 26.1′ W	**F.W.**	56 **17**	4	Pile structure, red and white lantern; 15.	
6292 *A 5658.1*	- -Rear, 110 meters 180° from front.	50° 11.4′ N 5° 26.1′ W	**F.W.**	76 **23**	4	Pile structure, red and white lantern; 15.	
6294 *A 5658.5*	-Perch.	50° 11.7′ N 5° 26.1′ W	**F.G.**				
6296 *A 5665*	St. Ives, inner pier, head.	50° 12.8′ N 5° 28.5′ W	**2 F.G.** (vert.)	27 **8**	5	Round tower; 32.	
6300 *A 5666*	-W. pier, head.	50° 12.8′ N 5° 28.7′ W	**2 F.R.** (vert.)	18 **5**	3	Gray mast; 18.	
6304 *A 5670*	**Pendeen.**	50° 09.8′ N 5° 40.2′ W	**Fl.(4)W.** period 15s fl. 0.1s, ec. 2.2s fl. 0.1s, ec. 2.2s fl. 0.1s, ec. 2.2s fl. 0.1s, ec. 8s	195 **59**	**16**	White round tower; 56.	Visible 042°-240°. **Horn:** 1 bl. ev. 20s.

Section 6

Ireland and Northern Ireland

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
			IRELAND-SOUTH COAST				
6308 *A 5702*	**Fastnet Rock.**	51° 23.3′ N 9° 36.1′ W	**Fl.W.** period 5s fl. 0.1s, ec. 4.9s	160 **49**	**28**	Gray granite tower; 176.	Shown by day when fog signal is operating. **Horn:** 4 bl. ev. 60s.
	RACON		**G(– – •)**		**18**		
6312 *A 5703*	Cooper Point, Long Island, E. end.	51° 30.2′ N 9° 32.0′ W	**Q.(3)W.** period 10s	52 **16**	8	White round tower.	
6316 *A 5704*	Schull Harbor Range, front.	51° 31.6′ N 9° 32.5′ W	**Oc.W.** period 5s lt. 4s, ec. 1s	16 **5**	11	White mast.	
6320 *A 5704.1*	-Rear, 91 meters 346° from front.	51° 31.7′ N 9° 32.4′ W	**Oc.W.** period 5s lt. 4s, ec. 1s	26 **8**	11	White mast.	
6324 *A 5705*	Baltimore, Barrack Point.	51° 28.3′ N 9° 23.6′ W	**Fl.(2)W.R.** period 6s fl. 0.3s, ec. 1.4s fl. 0.3s, ec. 4s	130 **40**	W. 6 R. 3	White tower; 27.	R. 168°-294°, W.-038°, obsc.-168°.
6328 *A 5707*	Castle Haven, on Reen Point.	51° 30.9′ N 9° 10.5′ W	**Fl.W.R.G.** period 10s fl. 0.5s, ec. 9.5s	31 **9**	W. 5 R. 3 G. 3	White tower.	G. shore-338°, W.-001°, R.-shore.
6332 *A 5708*	**Galley Head.**	51° 31.7′ N 8° 57.1′ W	**Fl.(5)W.** period 20s fl. 0.1s, ec. 2.4s fl. 0.1s, ec. 2.4s fl. 0.1s, ec. 2.4s fl. 0.1s, ec. 2.4s fl. 0.1s, ec. 9.9s	174 **53**	**23**	White tower; 69.	Visible 256°-065°.
6336 *A 5709*	Courtmacsherry Harbor, Land Point.	51° 38.3′ N 8° 41.0′ W	**Fl.(2)W.R.** period 5s	49 **15**	5	White column; 10.	W. 315°-332°, R.-315°.
6340 *A 5710*	**Old Head of Kinsale.**	51° 36.3′ N 8° 31.9′ W	**Fl.(2)W.** period 10s fl. 0.1s, ec. 1.6s fl. 0.1s, ec. 8.2s	236 **72**	**25**	Black tower, two white bands; 100.	**Horn:** 3 bl. ev. 45s.
6344 *A 5712*	Kinsale, Charles Fort, E. side of harbor.	51° 41.7′ N 8° 29.9′ W	**Fl.W.R.G.** period 5s fl. 1s, ec. 4s	60 **18**	W. 9 R. 6 G. 6	Lantern on rampart of fort.	G. 348°-358°, W.-004°, R.-168°. Shown throughout 24 hours.
6352	*Cork Buoy.*	51° 42.9′ N 8° 15.5′ W	**L.Fl.W.** period 10s			SAFE WATER RW, pillar, topmark.	**Whistle.** **Radar reflector.**
	RACON		**T(–)**		7		
	CORK HARBOR AND COBH (QUEENSTOWN):						
6356 *A 5718*	**-Roche's Point.**	51° 47.6′ N 8° 15.3′ W	**Fl.W.R.** period 3s	98 **30**	W. **20** R. **16**	White tower; 49.	R. shore-292°, W.-016°, R.-033°, W. (unintensified) 033°-159°, R.-shore. Shown by day when fog signal is operating. **Horn:** 1 bl. ev. 30s.
6360 *A 5722*	-White Bay Range, front.	51° 48.5′ N 8° 15.2′ W	**Oc.R.** period 5s lt. 4.5s, ec. 0.5s	35 **11**	5	White hut; 6.	
6364 *A 5722.1*	- -Rear, 113 meters 034°35′ from front.	51° 48.6′ N 8° 15.1′ W	**Oc.R.** period 5s	70 **21**	5	White hut; 8.	Synchronized with front.

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
			IRELAND-SOUTH COAST				
6368 *A 5728*	-Fort Davis Range, front.	51° 48.8′ N 8° 15.8′ W	**Dir.W.R.G.**	95 **29**	**17**		F.G. 351°30′-352°15′, Al.W.G.-353°, F.W.-355°, Al.W.R.-355°45′, F.R.-356°30′.
6372 *A 5728.1*	- -Rear, Dognose landing quay, 203 meters 354°05′ from front.	51° 48.9′ N 8° 15.8′ W	**Oc.W.** period 5s	121 **37**	10	Framework tower, orange square daymark; 38.	
6376 *A 5732*	-Corkbeg, Whitegate, oil pier, T head.	51° 49.9′ N 8° 15.7′ W	**2 F.G.** (vert.)			Dolphin; 10.	
6380 *A 5736*	-Spit Bank, E. elbow, off Cobh (Queenstown).	51° 50.7′ N 8° 16.4′ W	**Iso.W.R.** period 4s	33 **10**	W. 10 R. 7	White house on red piles; 34.	R. 087°-196°, W.-221°, R.-358°, obsc.-087°.
6384 *A 5729*	-Crosshaven Approach Range, front.	51° 48.6′ N 8° 17.6′ W	**F.W.**	33 **10**	3	Column, white diamond daymark.	Visible 229°30′-274°30′.
6388 *A 5729.1*	- -Rear, 61 meters 252° from front.	51° 48.6′ N 8° 17.6′ W	**F.W.**	49 **15**	3	Column, white diamond daymark.	Visible 229°30′-274°30′.
6392 *A 5748*	-Haulbowline Basin, E. side of entrance.	51° 50.6′ N 8° 18.0′ W	**2 F.R.** (vert.)	26 **8**		Dolphin.	
6396 *A 5749*	- -W. side.	51° 50.6′ N 8° 18.1′ W	**2 F.R.** (vert.)	26 **8**		Dolphin.	
6404 *A 5758*	-Monkstown, SE. corner of pier.	51° 50.9′ N 8° 19.8′ W	**Fl.R.** period 2.5s fl. 0.2s, ec. 2.3s	12 **4**	4	Red tower.	Visible 356°-209°.
6406 *A 5757*	-Verolme Cork Dockyard pier, NW. corner.	51° 50.8′ N 8° 19.6′ W	**2 F.G.** (vert.)			Dolphin.	
6417 *A 5763*	-Cattle berth, jetty, head.	51° 54.0′ N 8° 24.6′ W	**2 F.G.** (vert.)			Dolphin.	
6420 *A 5764*	-Tivoli, N. side of river.	51° 54.1′ N 8° 26.0′ W	**Fl.G.** period 3s fl. 0.5s, ec. 2.5s	10 **3**	10	Lantern on wall; 3.	Visible 275°-095°.
6428 *A 5774*	**Ballycotton Island.**	51° 49.5′ N 7° 59.1′ W	**Fl.W.R.** period 10s fl. 0.6s, ec. 9.4s	195 **59**	W. **21** R. **17**	Black tower within white walls, black lantern; 50.	W. 238°-048°, R.-238°. Shown by day when fog signal is operating. **Horn:** 4 bl. ev. 90s.
6432 *A 5776*	**Youghal.**	51° 56.5′ N 7° 50.5′ W	**Fl.W.R.** period 2.5s fl. 0.5s, ec. 2s	79 **24**	W. **17** R. 14	White tower; 49.	W. 183°-273°, R.-295°, W.-307°, R.-351°, W.-003°, obscured elsewhere.
6436 *A 5778*	**Mine Head.**	51° 59.6′ N 7° 35.2′ W	**Fl.(4)W.** period 20s fl. 0.1s, ec. 2.4s fl. 0.1s, ec. 2.4s fl. 0.1s, ec. 2.4s fl. 0.1s, ec. 12.4s	285 **87**	**28**	White tower, black band; 68.	Visible 228°-052°.
	DUNGARVAN BAY:						
6440 *A 5782*	-Ballinacourty Point.	52° 04.7′ N 7° 33.1′ W	**Fl.(2)W.R.G.** period 10s fl. 0.5s, ec. 1s fl. 0.5s, ec. 8s	52 **16**	W. 10 R. 8 G. 8	White tower; 44.	G. 245°-274°, W.-302°, R.-325°, W.-117°, obsc.-245°.
	WATERFORD:						
6460 *A 5798*	**-Hook Head.**	52° 07.4′ N 6° 55.8′ W	**Fl.W.** period 3s fl. 0.1s, ec. 2.9s	152 **46**	**23**	White tower, 2 black bands; 115.	Shown by day when fog signal is operating. **Horn:** 2 bl. ev. 45s.
	-RACON		**K(– • –)** period 120s		10		Azimuth coverage 237°-177°.
6464 *A 5800*	**-Dunmore East.**	52° 08.9′ N 6° 59.3′ W	**Fl.W.R.** period 8s	44 **13**	W. **17** R. 13	Gray granite tower, white lantern; 51.	W. 225°-310°, R.-004°, obscured elsewhere.

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
			IRELAND-SOUTH COAST				
6468 *A 5801*	--E. breakwater extension.	52° 08.9′ N 6° 59.3′ W	**Fl.R.** period 2s	20 **6**	4		Visible 000°-310°.
6472 *A 5802*	--West wharf.	52° 08.9′ N 6° 59.4′ W	**Fl.G.** period 2s	20 **6**	4		Visible 165°-246°.
6476 *A 5806*	--Duncannon, 002°.	52° 13.2′ N 6° 56.2′ W	**Dir.Oc.W.R.G.** period 4s lt. 3s, ec. 1s	43 **13**	W. 11 R. 8 G. 8	White tower on fort; 25.	G. 358°-001°42′, W.-002°12′, R.-006°.
			Oc.W.R. period 4s lt. 3s, ec. 1s	43 **13**	W. 9 R. 7		R. 119°-149°, W.-172°.
6484 *A 5808*	-Passage Point, on spit.	52° 14.2′ N 6° 57.7′ W	**Fl.W.R.** period 5s fl. 0.5s, ec. 4.5s	23 **7**	W. 6 R. 5	Red pile structure, white top; 42.	W. from west bank of river NW. of light to 127°, R.-302°, obscured elsewhere.
6488 *A 5810*	-Cheek Point.	52° 16.1′ N 6° 59.3′ W	**Q.W.R.**	20 **6**	5	White mast; 16.	R. 289°-007°, W. elsewhere.
6492 *A 5812*	-Kilmokea.	52° 16.4′ N 6° 58.9′ W	**Fl.W.** period 5s fl. 0.5s, ec. 4.5s				
6496 *A 5814*	-Snowhill Range front.	52° 16.4′ N 7° 00.9′ W	**Fl.W.R.** period 2.5s fl. 0.3s, ec. 2.2s	18 **5**	3	White mast; 19.	W.-222°-020°, R.-057°, W.-107°
6500 *A 5814.1*	--Rear, Glass House, mill, 750 meters 255° from front.	52° 16.3′ N 7° 01.5′ W	**Q.W.**	39 **12**	5	White framework tower; 36.	
	-Queens Channel:						
6504 *A 5818*	--S. side of E. entrance Range, front.	52° 15.3′ N 7° 02.2′ W	**Oc.R.** period 6s	26 **8**	5	Black tower, white band; 23.	
6508 *A 5820*	---Rear, Faithleg Demesne, 550 meters 098° from front.	52° 15.3′ N 7° 01.8′ W	**Q.W.**	50 **15**	5	White mast; 20.	
6512 *A 5822*	--Giles Quay.	52° 15.4′ N 7° 04.2′ W	**Fl.W.** period 3s fl. 0.3s, ec. 2.7s	29 **9**			Visible 255°-086°.
6516 *A 5826*	-Cove, S. side of river.	52° 15.0′ N 7° 05.1′ W	**Fl.W.R.G.** period 6s fl. 0.3s, ec. 5.7s	20 **6**	2	White tower; 23.	R. 111°-161°, G.-234°, W.-111°. When entering, light changes from G. to R. when abreast of it.
6520 *A 5828*	-Smelting House Point.	52° 15.1′ N 7° 05.2′ W	**Q.W.**	25 **8**	3	White mast; 31.	Traffic signal lights are shown on both sides of Redmond Bridge.
6524 *A 5830*	-Ballycar, S. side of river.	52° 15.0′ N 7° 05.4′ W	**Fl.R.G.** period 3s fl. 0.3s, ec. 2.7s	17 **5**			G. 127°-212°, R.-284°, obsc.-127°.
6528 *A 5832*	*CONINGBEG LIGHT FLOAT.*	52° 02.4′ N 6° 39.5′ W	**Fl.(3)W.** period 30s fl. 0.4s, ec. 4.6s fl. 0.4s, ec. 4.6s fl. 0.4s, ec. 19.6s	39 **12**	**24**	Red hull and tower, lantern amidships.	Also shown by day when fog signal is operating. **Fog detector light:** V.Q.W., 10 meters on tower. **Horn:** 3 bl. ev. 60s.
	RACON		**M(– –)**		13		
6532 *A 5836*	Kilmore, breakwater, head.	52° 10.2′ N 6° 35.1′ W	**Q.R.G.**	23 **7**	5	Metal column.	R. 269°-354°, G.-003°, R.-077°.
6536 *A 5837*	-Carne, pier, head.	52° 11.9′ N 6° 20.8′ W	**Fl.R.** period 3s	20 **6**	4	Metal column.	
			IRELAND-EAST COAST				
6540 *A 5838*	**Tuskar Rock.**	52° 12.2′ N 6° 12.4′ W	**Q.(2)W.** period 7.5s fl. 0.2s, ec. 1.1s fl. 0.2s, ec. 6s	108 **33**	**24**	White tower; 113.	Distress signals. **Horn:** 4 bl. ev. 45s.

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
			IRELAND-EAST COAST				
	RACON		**T(–)**		**18**		(3 & 10 cm)
	ROSSLARE:						
6544 *A 5842*	-Pier, head.	52° 15.4′ N 6° 20.2′ W	**Oc.W.R.G.** period 5s lt. 1s, ec. 4s	50 **15**	W. 13 R. 10 G. 10	Red metal tower; 15.	G. 098°-188°, W.-208°, R.-246°, G.-283°, W.-286°, R.-320°.
6556 *A 5845*	*ARKLOW LANBY.*	52° 39.5′ N 5° 58.1′ W	**Fl.(2)W.** period 12s fl. 1s, ec. 2s fl. 1s, ec. 8s	39 **12**	**15**	Red column, on buoy.	**Horn:** Mo.(A) ev. 30s.
	RACON		**O(– – –)**		10		
6560 *A 5847*	Arklow Head, Roadstone jetty.	52° 46.7′ N 6° 08.4′ W	**Oc.R.** period 10s lt. 8s, ec. 2s	30 **9**	9	Hut.	
6564 *A 5848*	Arklow Harbor, S. pier, head.	52° 47.6′ N 6° 08.2′ W	**Fl.W.R.** period 6s fl. 1s, ec. 5s	36 **11**	13	Framework tower; 20.	R. shore-223°, W.-350°, R.-shore.
6568 *A 5849*	-N. pier, head.	52° 47.6′ N 6° 08.2′ W	**L.Fl.G.** period 7s	23 **7**	10	White column.	Visible shore-287°.
6572 *A 5850*	**Wicklow Head.**	52° 57.9′ N 5° 59.8′ W	**Fl.(3)W.** period 15s fl. 0.2s, ec. 2.3s fl. 0.2s, ec. 2.3s fl. 0.2s, ec. 9.8s	121 **37**	**23**	White tower; 46.	
	WICKLOW HARBOR:						
6576 *A 5854*	-E. pier, head.	52° 59.0′ N 6° 02.1′ W	**Fl.W.R.** period 5s	35 **11**	6	White tower, red base; 23.	R. 136°-293°, W. elsewhere.
6580 *A 5856*	-W. pier, head.	52° 59.0′ N 6° 02.0′ W	**Iso.G.** period 4s	15 **5**	6	Column.	
6584 *A 5858*	-W. Packet quay, head.	52° 58.9′ N 6° 02.1′ W	**Fl.W.G.** period 10s	15 **5**	6	Column.	W. 256°-076°, G.-256°.
6588 *A 5861*	*CODLING LANBY.*	53° 03.0′ N 5° 40.7′ W	**Fl.W.** period 4s fl. 1s, ec. 3s	39 **12**	**15**	Red buoy.	F.W. riding light visible 10M. **Horn:** 1 bl. ev. 20s (bl. 2s, si. 18s).
	RACON		**G(– – •)**		10		
	DUBLIN BAY:						
6592 *A 5865*	**-Kish Bank.**	53° 18.7′ N 5° 55.4′ W	**Fl.(2)W.** period 20s	94 **29**	**22**	White round concrete tower, red band. Helicopter platform.	**Horn:** 2 bl. ev. 30s.
			T(–)		**15**		
	-RACON						
6594	*-Dublin Bay Buoy.*	53° 19.9′ N 6° 04.6′ W	**Mo.(A)W.** period 10s			SAFE WATER RW, spherical, topmark.	
	-RACON		**M(– –)**				
6596 *A 5868*	-Muglins.	53° 16.5′ N 6° 04.5′ W	**Fl.W.** period 5s fl. 0.7s, ec. 4.3s	46 **14**	11	White round tower, red band.	
	-Dun Laoghaire (Kingstown):						
6600 *A 5872*	- -E. pier, head.	53° 18.1′ N 6° 07.6′ W	**Fl.(2)R.** period 10s	53 **16**	**17**	Granite tower, red lantern; 41.	Shown by day when fog signal is operating. **Horn:** 1 bl. ev. 30s. **Reserve Bell:** 1 stroke ev. 6s.

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
			IRELAND-EAST COAST				
6604 *A 5874*	--W. pier, head.	53° 18.2′ N 6° 07.8′ W	**Fl.(3)G.** period 7.5s fl. 0.3s, ec. 1s fl. 0.3s, ec. 1s fl. 0.3s, ec. 4.6s	36 **11**	7	Granite tower, white lantern; 29.	Visible 188°-062°.
6608 *A 5876*	--Carlisle pier, head.	53° 17.7′ N 6° 07.7′ W	**Fl.R.** period 3s fl. 0.3s, ec. 2.7s	30 **9**	1	Roof of pier.	
6612 *A 5877*	-St. Michael's Pier, NE. pile.	53° 17.8′ N 6° 07.9′ W	**2 F.G.** (vert.)				Q.Y. traffic signals 170 meters SW and 160 meters SSW.
6616 *A 5878*	--Traders wharf, head.	53° 17.9′ N 6° 08.5′ W	**2 F.R.** (vert.)	24 **7**	1	Mast; 18.	
	-River Liffey:						
6620 *A 5882*	**--Poolbeg.**	53° 20.5′ N 6° 09.0′ W	**Oc.(2)R.** period 20s lt. 4s, ec. 4s lt. 8s, ec. 4s	66 **20**	**15**	Red round tower; 66.	**Horn:** 2 bl. ev. 60s.
6622 *A 5889*	-Coal Quay, E. head.	53° 20.5′ N 6° 11.8′ W	**2 F.R.** (vert.)	16 **5**	2	Dolphin.	
6624 *A 5888*	--N. Bank, culvert, head.	53° 20.5′ N 6° 11.4′ W	**Iso.R.** period 4s	13 **4**	4	Red pedestal on dolphin.	Visible 098°-270°.
6625 *A 5887.9*	Cape Ferry Quay, SE. corner.	53° 20.8′ N 6° 11.4′ W	**2 F.G.** (vert.)	23 **7**	2	Column.	
6626 *A 5886.4*	-AVIATION LIGHT.	53° 20.4′ N 6° 11.3′ W	**2 V.Q.R.** (vert.)	673 **205** 279 **85**	11	Chimney; 689.	F.R. obstruction lights at 165m, 123m and 41m. ??F.R. marks chimney 80 meters E.
6628 *A 5884*	**--Bull.**	53° 20.7′ N 6° 08.9′ W	**Fl.(3)G.** period 10s fl. 1s, ec. 1s fl. 1s, ec. 1s fl. 1s, ec. 5s	50 **15**	**15**	Green round tower; 49.	
6632 *A 5886*	**--North Bank.**	53° 20.7′ N 6° 10.5′ W	**Oc.G.** period 8s lt. 7s, ec. 1s	32 **10**	**16**	Green square tower, on concrete piles; 36.	
6636 *A 5892*	--Alexandra Basin, E. breakwater, head.	53° 20.7′ N 6° 12.1′ W	**Fl.W.** period 6s fl. 0.6s, ec. 5.4s	51 **16**	14	Black square tower; 51.	
6644 *A 5891.2*	--Ferry ramp.	53° 20.6′ N 6° 12.3′ W	**F.R.**	23 **7**	2		
6648 *A 5894*	--N. wall quay, head.	53° 20.7′ N 6° 12.9′ W	**Fl.W.** period 2s fl. 0.2s, ec. 1.8s	39 **12**	10	Black round tower, white bands; 39.	Traffic signals 750 meters W.
6652 *A 5898*	**-Baily.**	53° 21.7′ N 6° 03.1′ W	**Fl.W.** period 15s fl. 0.8s, ec. 14.2s	134 **41**	**26**	Granite tower; 42.	
6656 *A 5900*	**-Howth.**	53° 23.6′ N 6° 04.0′ W	**Fl.(2)W.R.** period 7.5s fl. 0.7s, ec. 1.3s fl. 0.7s, ec. 4.8s	43 **13**	W. 12 R. 9	White concrete structure; 33. Floodlit.	W. 256°-295°, R.-256°.
6657 *A 5900.3*	--W. pier, head.	53° 23.5′ N 6° 04.0′ W	**Fl.G.** period 3s	23 **7**	6		
6660 *A 5902*	AVIATION LIGHT.	53° 25.7′ N 6° 14.7′ W	**Al.Fl.W.G.** period 4s	311 **95**		Control tower.	
6664 *A 5904*	**Rockabill.**	53° 35.8′ N 6° 00.3′ W	**Fl.W.R.** period 12s fl. 0.2s, ec. 11.8s	148 **45**	W. **22** R. **18**	White tower, black band; 105.	W.178°-329°, R.-178° Also shown by day when fog signal is operating. **Horn:** 4 bl. ev. 60s.
6668 *A 5906*	Skerries Bay, pier, head.	53° 35.1′ N 6° 06.4′ W	**Oc.R.** period 6s	23 **7**	7	White column; 25.	Visible 103°-154°.

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
	IRELAND-EAST COAST						
6672 *A 5908*	Balbriggan Island.	53° 36.7′ N 6° 10.7′ W	**Fl.(3)W.R.G.** period 20s fl. 1s, ec. 1s fl. 1s, ec. 1s fl. 1s, ec. 15s	39 **12**	W. 13 R. 10 G. 10	White tower; 53.	G. 159°-193°, W.-288°, R.-305°, obsc.-159°.
6673 *A 5909*	Platin AVIATION LIGHT.	53° 41.1′ N 6° 23.4′ W	**Aero.Q.R.**	489 **149**	11	Chimney; 351.	
			Aero.F.R.	381 **116**			
			Aero.F.R.	266 **81**			
	DROGHEDA HARBOR ENTRANCE:						
6682 *A 5910.5*	-Port approach.	53° 43.3′ N 6° 14.7′ W	**Dir.W.R.G.**	33 **10**	W. **19** R. **15** G. **15**		F.G. 268°-269°, Al.W.G.-269.5°, F.W.-270.5°, Al.W.R.-271°, F.R.-272°. Shown 24 hours.
6684 *A 5911*	**--River Boyne.**	53° 43.4′ N 6° 15.2′ W	**Fl.R.** period 4s fl. 1s, ec. 3s	23 **7**	**15**	Wooden framework tower, white lantern; 24.	Visible 282°-288°. Traffic signals.
6692 *A 5912*	--Aleria, N. side of entrance to River Boyne.	53° 43.3′ N 6° 14.2′ W	**Q.G.**	36 **11**	3	Green beacon.	
	IRELAND AND NORTHERN IRELAND-EAST COAST						
	DUNDALK BAY:						
6696 *A 5920*	-N. training wall, head.	53° 58.5′ N 6° 17.6′ W	**Fl.W.R.** period 15s fl. 0.4s, ec. 14.6s	33 **10**	W. **21** R. **18**	White house on red piles; 33.	W. 124°-151°, R.-284°, W.-313°, R.-124°. **Horn:** 3 bl. ev. 60s.
			Oc.G. period 5s lt. 4s, ec. 1s	26 **8**			Visible 325°30′-328°30′. **Fog detector light:** V.Q.W. 7 meters, visible 358°. Shown by day when fog signal is operating.
6700 *A 5920.4*	--No. ″4″.	53° 58.8′ N 6° 18.3′ W	**Q.R.**				
6702	--*Hellyhunter Buoy.*	54° 00.3′ N 6° 02.0′ W	**Q.(6)+L.Fl.W.** period 15s			S. CARDINAL YB, pillar, topmark.	
	--RACON		**K(– • –)**		14		
	CARLINGFORD LOUGH:						
6704 *A 5928*	**-Haulbowline.**	54° 01.2′ N 6° 04.7′ W	**Fl.(3)W.** period 10s fl. 0.5s, ec. 1.2s fl. 0.5s, ec. 1.2s fl. 0.5s, ec. 6.1s	105 **32**	**17**	Gray granite tower; 111.	Reserve light range 15M. **Horn:** 1 bl. ev. 30s.
	-Turning light.		**F.R.**	68 **21**	9		Visible 196°-208°.
6708 *A 5932*	-Range, front.	54° 01.8′ N 6° 05.4′ W	**Oc.W.** period 3s lt. 2.3s, ec. 0.7s	23 **7**	11	Framework tower, red triangular daymark, point up; 26.	Visible 296°-324°. Shown throughout 24 hours.
6712 *A 5934*	--Rear, 457 meters 310°26′ from front.	54° 02.0′ N 6° 05.7′ W	**Oc.W.** period 3s lt. 2.3s, ec. 0.7s	40 **12**	11	Framework tower, red triangular daymark, point down; 46.	Visible 296°-324°. Shown throughout 24 hours.
6714 *A 5938*	-Greenore pier, head.	54° 02.1′ N 6° 08.0′ W	**Fl.R.** period 7.5s	33 **10**	5	Concrete column.	

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			IRELAND AND NORTHERN IRELAND-EAST COAST				
6720 *A 5944*	-Carlingford, W. pier, head.	54° 02.6′ N 6° 11.0′ W	**Fl.G.** period 3s	15 **5**	3	Red pillar; 7.	
6724 *A 5946*	-Newry River Range, front.	54° 06.4′ N 6° 16.5′ W	**Iso.W.** period 4s	16 **5**	2	Stone column; 8.	
6728 *A 5946.1*	- -Rear, 274 meters 310°25′ from front.	54° 06.5′ N 6° 16.6′ W	**Iso.W.** period 4s	48 **15**	2	Stone column; 8.	
6732 *A 5948*	-Warren Point, breakwater, head.	54° 05.8′ N 6° 15.2′ W	**Fl.G.** period 3s	19 **6**	3		
6736 *A 5949*	- -Deep water quay.	54° 05.9′ N 6° 15.5′ W	**Fl.G.** period 5s fl. 0.5s, ec. 4.5s	16 **5**	3	Red post; 6.	
6740 *A 5952*	-Kilkeel Harbor, pier, head.	54° 03.4′ N 5° 59.2′ W	**Fl.W.R.** period 2s fl. 0.5s, ec. 1.5s	26 **8**	8	Metal column; 10.	R. 296°-313°, W.-017°, obsc.-296°. Storm signals.
6752 *A 5953*	Annalong, E. breakwater, head.	54° 06.4′ N 5° 53.6′ W	**Oc.W.R.G.** period 5s lt. 4s, ec. 1s	27 **8**	9	Steel framework tower; 20.	G. 204°-249°, W.-309°, R.-024°, obsc.-204°.
6756 *A 5958*	**St. John's Point.**	54° 13.6′ N 5° 39.5′ W	**Q.(2)W.** period 7.5s fl. 0.2s, ec. 1s fl. 0.2s, ec. 6.1s	120 **37**	**25**	Black round tower, yellow bands; 130.	**Fog detector light:** V.Q.W., visible 270°. Shown by day when fog signal is operating. **Horn:** 2 bl. ev. 60s.
	-Auxiliary.		**Fl.W.R.** period 3s fl. 1s, ec. 2s	45 **14**	W. **15** R. 11	Same tower.	W. 064°-078°, R.-shore.
6760 *A 5962*	Ardglass, inner pier, head.	54° 15.8′ N 5° 36.3′ W	**Iso.W.R.G.** period 4s	34 **10**	W. 8 R. 7 G. 5	Tower; 32.	G. shore-308°, W.-314°, R.-shore.
6764 *A 5962.4*	-Outer pier, head.	54° 15.8′ N 5° 36.0′ W	**Fl.R.** period 3s	33 **10**	5		
6768 *A 5963.3*	Angus Rock.	54° 19.8′ N 5° 31.4′ W	**Fl.R.** period 5s	48 **15**	6	On tower; 42.	
6772 *A 5966*	*SOUTH ROCK LIGHT FLOAT.*	54° 24.5′ N 5° 21.9′ W	**Fl.(3)R.** period 30s fl. 0.4s, ec. 4.6s fl. 0.4s, ec. 4.6s fl. 0.4s, ec. 19.6s	39 **12**	**20**	Red hull superstructure, light tower, white mast on foredeck, "South Rock" on sides in white.	**Fog detector light:** V.Q.W. 10 meters. Also shown by day when fog signal is operating. **Horn:** 3 bl. ev. 45s.
	RACON		**T(–)**		13		(3 & 10 cm)
6776 *A 5970*	Portavogie Harbor, S. pier.	54° 27.4′ N 5° 26.1′ W	**Iso.W.R.G.** period 5s	30 **9**	9	Square masonry tower; 16.	G. shore-258°, W.-275°, R.-348°.
6780	*Skulmartin Buoy.*	54° 32.0′ N 5° 25.0′ W	**L.Fl.W.** period 10s			SAFE WATER RW, spherical.	**Whistle.** **Radar reflector.**
6784 *A 5973*	Ballywalter, breakwater, head.	54° 32.7′ N 5° 28.8′ W	**Fl.W.R.G.** period 1.5s fl. 0.5s, ec. 1s	18 **5**	9	Steel column; 10.	G. 240°-267°, W.-277°, R.-314°.
6788 *A 5974*	**Donaghadee Harbor.**	54° 38.7′ N 5° 31.8′ W	**Iso.W.R.** period 4s	56 **17**	W. **18** R. 14	White tower; 53.	R. 326°-shore, W.-326°. **Siren:** 1 bl. ev. 12s. When vessels are expected.
6792 *A 5976*	**Mew Island.**	54° 41.9′ N 5° 30.7′ W	**Fl.(4)W.** period 30s fl. 0.1s, ec. 4.9s fl. 0.1s, ec. 4.9s fl. 0.1s, ec. 4.9s fl. 0.1s, ec. 14.9s	121 **37**	**24**	Black tower, white band; 123.	**Fog detector light:** V.Q.W. Distress signals.
	RACON		**O(– – –)**		14		
6794 *A 5980*	Bangor Harbor, N. pier, head.	54° 40.0′ N 5° 40.3′ W	**Iso.R.** period 12s	30 **9**	14	Red concrete column; 36.	

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
			IRELAND AND NORTHERN IRELAND-EAST COAST				
6796 *A 5988*	Kilroot Point, jetty, head.	54° 43.5′ N 5° 44.6′ W	**Oc.G.** period 10s lt. 8s, ec. 2s	20 **6**	9	Green mast; 6.	Starboard light.
6800 *A 5987*	Kilroot Power Station Intake basin.	54° 43.2′ N 5° 45.9′ W	**Oc.G.** period 4s				Q.R. and 4 F.R. (vert) on chimney 500 meters N.
6801 *A 5987.5*	-Unloading jetty.	54° 43.3′ N 5° 45.2′ W	**2 F.G.** (vert.)	19 **6**	2	Mast; 16.	2 meters apart.
6804 *A 5986*	Cloghan, jetty, N. head.	54° 44.3′ N 5° 42.2′ W	**Fl.G.** period 3s fl. 1s, ec. 2s		2	Green post.	**Horn:** 1 bl. ev. 15s.
6808 *A 5986.4*	-S. head.	54° 44.1′ N 5° 42.4′ W	**Fl.G.** period 3s fl. 1s, ec. 2s		2	Green post.	
	CARRICKFERGUS HARBOR:						
6812 *A 5992*	-E. pier, head.	54° 42.6′ N 5° 48.4′ W	**Fl.G.** period 7.5s fl. 0.7s, ec. 6.8s	18 **5**	4	Green metal column; 12.	
6816 *A 5993*	-W. pier, head.	54° 42.6′ N 5° 48.5′ W	**Fl.R.** period 7.5s fl. 0.7s, ec. 6.8s	18 **5**	4	Red metal column; 12.	
	BELFAST-VICTORIA CHANNEL:						
6820 *A 6000*	-No. ″9″.	54° 39.6′ N 5° 50.7′ W	**Fl.G.** period 3s			STARBOARD (A) G, pile, topmark.	
6824 *A 6002*	-No. ″11″.	54° 39.2′ N 5° 51.2′ W	**Fl.G.** period 3s			STARBOARD (A) G, pile, topmark.	
6828 *A 6003*	-No. ″12″.	54° 39.0′ N 5° 51.3′ W	**Fl.(2)R.** period 6s fl. 0.4s, ec. 1s fl. 0.4s, ec. 4.2s		7	PORT (A) R, pile, topmark.	
6832 *A 6004*	-No. ″13″.	54° 38.9′ N 5° 51.6′ W	**Fl.G.** period 3s			STARBOARD (A) G, pile, topmark.	
6836 *A 6005*	-No. ″14″.	54° 38.7′ N 5° 51.7′ W	**Fl.(4)R.** period 6s			PORT (A) R, pile, topmark.	**Horn:** 2 bl. ev. 20s.
6840 *A 6006*	-No. ″15″.	54° 38.6′ N 5° 52.0′ W	**Fl.G.** period 3s			STARBOARD (A) G, pile, topmark.	
6844 *A 6007*	-No. ″16″.	54° 38.4′ N 5° 52.0′ W	**Fl.(2)R.** period 6s fl. 0.4s, ec. 1s fl. 0.4s, ec. 4.2s		8	PORT (A) R, pile, topmark.	
6848 *A 6008*	-No. ″17″.	54° 38.3′ N 5° 52.4′ W	**Fl.G.** period 3s			STARBOARD (A) G, pile, topmark.	
6852 *A 6009*	-No. ″18″.	54° 38.2′ N 5° 52.4′ W	**Fl.(2)R.** period 6s		8	PORT (A) R, pile, topmark.	
6856 *A 6011*	-No. ″19″.	54° 38.1′ N 5° 52.8′ W	**Fl.G.** period 3s			STARBOARD (A) G, pile, topmark.	
6860 *A 6012*	-No. ″20″.	54° 38.0′ N 5° 52.7′ W	**Fl.(4)R.** period 6s			PORT (A) R, pile, topmark.	
6868 *A 6014*	-No. ″22″.	54° 37.6′ N 5° 53.1′ W	**Fl.(2)R.** period 3s			PORT (A) R, pile, topmark.	
6870 *A 6014.5*	-No. ″21″.	54° 37.6′ N 5° 53.4′ W	**Q.G.**			STARBOARD (A) G, pile, topmark.	
6872 *A 6014.7*	-Dolphin.	54° 37.6′ N 5° 53.4′ W	**2 F.G.** (vert.)				

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			IRELAND AND NORTHERN IRELAND-EAST COAST				
6874 *A 6015*	-Daisy Range, front	54° 37.5′ N 5° 53.2′ W	**Fl.R.** period 5s fl. 0.5s, ec. 4.5s			PORT (A) R, pile, topmark.	
6876	-Rear, 120 meters 122° from front.	54° 37.4′ N 5° 53.1′ W	**Fl.(2)R.** period 5s			Pile, red triangular daymark.	
	-Musgrave Channel:						
6888 *A 6017*	--″M2″.	54° 37.4′ N 5° 53.2′ W	**Fl.(4)R.** period 6s			PORT (A) R, pile, topmark.	
6892 *A 6019*	--″M1″.	54° 37.3′ N 5° 53.3′ W	**Q.G.**	7 **2**	2	STARBOARD (A) G, pile, topmark.	
6896 *A 6019.3*	--″M3″.	54° 37.1′ N 5° 53.3′ W	**Fl.G.** period 4s fl. 1.5s, ec. 2.5s	5 **2**	2	STARBOARD (A) G, pile, topmark.	
6900 *A 6019.6*	--E. side.	54° 36.8′ N 5° 53.4′ W	**Fl.(2)R.** period 6s	5 **2**	2	PORT (A) R, pile.	
6904 *A 6019.8*	-East Twin Island, W. side.	54° 37.4′ N 5° 53.5′ W	**Q.(6)R.** period 9s			PORT (A) R, pile, topmark.	**Horn:** (on NW. corner of drydock) 3 bl. ev. 15s (bl. 1s, si. 1s, bl. 1s, si. 1s, bl. 1s, si. 10s). **Reserve Bell.**
6908 *A 6020*	-West Twin Island, off NE. point.	54° 37.3′ N 5° 53.7′ W	**Fl.G.** period 4s fl. 1.5s, ec. 2.5s	33 **10**	2	STARBOARD (A) G, pile, topmark.	
6912 *A 6020.3*	--SE. point, Barnett.	54° 36.8′ N 5° 54.4′ W	**Fl.(2)G.** period 12s	33 **10**	2	STARBOARD (A) G, pile, topmark; 16.	
6916 *A 6020.6*	-Thompson Dock, W. side of entrance.	54° 37.0′ N 5° 54.0′ W	**Fl.R.** period 1.5s fl. 0.4s, ec. 1.1s	25 **8**	1	Metal framework tower; 50.	
6920 *A 6021*	-River Lagan, Barnett Dock entrance, off Ballast Quay.	54° 36.7′ N 5° 54.5′ W	**2 F.R.** (vert.)			Dolphin.	Visible 040°-270°.
6924 *A 6021.3*	--Albert quay, NE. corner.	54° 36.7′ N 5° 54.6′ W	**Q.G.**				
6928 *A 6021.6*	--Queens wharf, N. head.	54° 36.6′ N 5° 54.5′ W	**Fl.R.** period 5s fl. 0.5s, ec. 4.5s	22 **7**	2	PORT (A) R, pile, topmark; 18.	
6932 *A 6021.8*	---S. head.	54° 36.4′ N 5° 54.8′ W	**Q.R.**	22 **7**	2	PORT (A) R, pile, topmark.	
	-Herdman Channel:						
6936 *A 6022*	--″H1″.	54° 37.6′ N 5° 53.4′ W	**Fl.G.** period 2.5s fl. 0.5s, ec. 2s			STARBOARD (A) G, pile, topmark.	**Radar reflector.**
6940 *A 6022.1*	--Richardson wharf, N. head.	54° 37.5′ N 5° 53.6′ W	**2 F.G.** (vert.)				Fl.R. 69 meters on building 360 meters NW.
6944 *A 6022.12*	---S. head.	54° 37.5′ N 5° 53.8′ W	**2 F.G.** (vert.)				
6948 *A 6022.2*	--″H2″.	54° 37.3′ N 5° 53.8′ W	**Oc.R.** period 4s lt. 3.5s, ec. 0.5s			PORT (A) R, pile, topmark.	
6952 *A 6022.4*	--″H3″.	54° 37.4′ N 5° 53.8′ W	**Oc.G.** period 4s lt. 3.5s, ec. 0.5s			STARBOARD (A) G, pile, topmark.	
6956 *A 6023*	--″H4″.	54° 37.2′ N 5° 54.2′ W	**Fl.R.** period 4s fl. 1.5s, ec. 2.5s			PORT (A) R, pile, topmark.	
6960 *A 6022.6*	Container terminal.	54° 37.3′ N 5° 54.1′ W	**Fl.(3)G.** period 6s	33 **10**			

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
	IRELAND AND NORTHERN IRELAND-EAST COAST						
6964 *A 6024*	--"H5".	54° 37.2′ N 5° 54.4′ W	**Fl.G.** period 2s fl. 0.5s, ec. 1.5s			STARBOARD (A) G, pile, topmark.	
6968 *A 6025*	--Power Station.	54° 37.1′ N 5° 54.4′ W	**Q.R.**			Pile.	
6972 *A 6028*	**Black Head.**	54° 46.0′ N 5° 41.3′ W	**Fl.W.** period 3s fl. 0.2s, ec. 2.8s	148 **45**	**27**	White octagonal tower; 51.	
	LOUGH LARNE:						
6976 *A 6030*	-Barr Point FOG SIGNAL.	54° 51.5′ N 5° 46.7′ W				White house; 16.	**Horn:** 1 bl. ev. 30s.
6984 *A 6031*	**-Sandy Point.**	54° 51.3′ N 5° 47.8′ W	**Iso.W.R.** period 5s	75 **23**	**16**	Gray tower.	W. 230°-240°, R.-shore, obsc.-230°.
6988 *A 6033.4*	-N. beacon No. "2".	54° 51.1′ N 5° 47.5′ W	**Fl.R.** period 3s fl. 0.6s, ec. 2.4s	12 **4**	4	Red pile structure.	
6992 *A 6035*	-Beacon No. "4".	54° 50.8′ N 5° 47.5′ W	**Fl.(2)R.** period 6s	12 **4**	4	Red pile structure.	
6996 *A 6034*	-NE. corner of Continental Pier, head.	54° 51.0′ N 5° 47.6′ W	**2 F.G.** (vert.)	23 **7** 17 **5**	1	Dolphin.	Visible 167°-240°. Occasional.
7000 *A 6033*	-Range, front.	54° 49.6′ N 5° 47.7′ W	**Oc.W.** period 4s lt. 3s, ec. 1s	20 **6**	12	Red pile structure, white diamond daymark.	Visible 179°-189°.
7004 *A 6033.1*	--Rear, 610 meters 184° from front.	54° 49.3′ N 5° 47.8′ W	**Oc.W.** period 4s lt. 3s, ec. 1s	45 **14**	12	Round steel tower, red stripe, white diamond daymark.	Visible 179°-189°. Synchronized with front.
7008 *A 6037*	-Ballylumford, jetty, NW. head.	54° 50.5′ N 5° 47.2′ W	**2 F.R.** (vert.)	26 **8**	2	Post on dolphin; 13.	
7012 *A 6037.2*	--SE. side.	54° 50.5′ N 5° 47.1′ W	**2 F.R.** (vert.)	25 **8**		Post on dolphin; 13.	
7016 *A 6042*	**East Maiden.**	54° 55.7′ N 5° 43.6′ W	**Fl.(3)W.** period 20s fl. 0.6s, ec. 2.7s fl. 0.6s, ec. 2.7s fl. 0.6s, ec. 12.8s	95 **29**	**23**	White tower, black band; 76.	
	Auxiliary.		**Fl.R.** period 5s fl. 0.7s, ec. 4.3s	48 **15**	8	Same tower.	Visible 142°-182° over Russel and Highland Rocks.
	RACON		**M(– –)**		11		
7017 *A 6043*	S. Carnlough Harbor, N. pier.	54° 59.6′ N 5° 59.2′ W	**Fl.G.** period 3s fl. 0.5s, ec. 2.5s	12 **4**	5	White concrete tower, black bands; 20.	
7018 *A 6043.2*	S. pier.	54° 59.6′ N 5° 59.2′ W	**Fl.R.** period 3s fl. 0.5s, ec. 2.5s	20 **6**	5	White concrete tower, black bands; 12.	
7020 *A 6044*	Red Bay, pier, head.	55° 03.9′ N 6° 03.1′ W	**Fl.W.** period 3s fl. 0.5s, ec. 2.5s	33 **10**	5	Metal pole; 10.	
	RATHLIN ISLAND:						
7028 *A 6060*	-Rue Point, S. extremity.	55° 15.5′ N 6° 11.3′ W	**Fl.(2)W.** period 5s fl. 0.5s, ec. 1s fl. 0.5s, ec. 3s	52 **16**	14	White octagonal tower, two black bands; 35.	

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
	IRELAND AND NORTHERN IRELAND-EAST COAST						
7032 *A 6062*	**-Rathlin East.**	55° 18.1′ N 6° 10.2′ W	**Fl.(4)W.** period 20s fl. 0.2s, ec. 2.3s fl. 0.2s, ec. 2.3s fl. 0.2s, ec. 2.3s fl. 0.2s, ec. 12.3s	243 **74**	**26**	White round tower, black band under gallery; 88.	Visible 110°-006° and 036°-058°.
	-RACON		**G(– – •)**		**15**		Azimuth coverage 089°-003°.
7036 *A 6064*	**-Rathlin West.**	55° 18.1′ N 6° 16.7′ W	**Fl.R.** period 5s fl. 0.4s, ec. 4.6s	204 **62**	**22**	White tower, lantern at base; 60.	Visible 015°-225°. **Fog detector light**: V.Q.W., visible 119°. Shown by day during low visibility.
7038 *A 6065*	-Manor House pier.	55° 17.5′ N 6° 11.6′ W	**Oc.W.R.G.** period 4s	16 **5**	5	Metal column.	G. 020°-023°, W.-026°, R.-029°.
7040 *A 6071*	Portrush, N. pier, head.	55° 12.4′ N 6° 39.5′ W	**Fl.R.** period 3s	19 **6**	3	Red metal mast, concrete base.	Visible 220°-160°.
7044 *A 6072*	-S. pier, head.	55° 12.3′ N 6° 39.4′ W	**Fl.G.** period 3s	19 **6**	3	Green metal mast, concrete base.	Visible 220°-100°.
7056 *A 6073*	Portstewart Point.	55° 11.3′ N 6° 43.2′ W	**Oc.R.** period 10s lt. 7s, ec. 3s	70 **21**	5	Red square concrete hut; 10.	Visible 040°-220°. Pilot signal station. Red light (occas.) on mast 0.5 mile SSE.
7060 *A 6076*	River Bann, entrance Ballaghran Point.	55° 10.3′ N 6° 46.3′ W	**Fl.R.** period 5s	21 **6**	2	White pyramidal concrete tower; 14.	
7062 *A 6076.5*	Ballyaghran.	55° 09.9′ N 6° 45.9′ W	**Fl.(2)R.** period 5s			Red beacon, white square daymark.	
7064 *A 6074*	Coleraine, front.	55° 09.9′ N 6° 46.2′ W	**Oc.W.** period 5s	20 **6**	2	White pyramidal metal tower; 17.	The river is marked by Fl.G. on starboard side, and Fl.R. on port side.
7068 *A 6074.1*	-Rear, 245 meters 165° from front.	55° 09.9′ N 6° 46.1′ W	**Oc.W.** period 5s	45 **14**	2	White square concrete tower, wind generator.	
7072 *A 6075*	-W. mole.	55° 10.3′ N 6° 46.4′ W	**Fl.G.** period 5s	13 **4**	2	Green metal mast, green triangular daymark; 10.	Visible 170°-000°.
	NORTHERN IRELAND-EAST AND NORTH COASTS						
7076 *A 6084*	**Inishowen Head.**	55° 13.6′ N 6° 55.7′ W	**Fl.(2)W.R.G.** period 10s fl. 1s, ec. 2s fl. 1s, ec. 6s	92 **28**	W. **18** R. 14 G. 14	White tower, 2 black bands; 74.	G. 197°-211°, W.-249°, R.-000°. **Fog detector light**: V.Q.W., visible 270°. **Horn:** 2 bl. ev. 30s.
7080 *A 6088*	-Warren Point.	55° 12.6′ N 6° 57.1′ W	**Fl.W.** period 1.5s fl. 0.2s, ec. 1.3s	30 **9**	10	Green and white round tower; 27.	Visible 232°-061°.
7084 *A 6092*	-Magilligan Point.	55° 11.7′ N 6° 58.0′ W	**Q.R.**	24 **7**	4	Red pile structure.	
7088 *A 6094*	-McKinney's Bank.	55° 11.0′ N 7° 00.5′ W	**Fl.R.** period 5s fl. 0.5s, ec. 4.5s	20 **6**	4	Red pile structure.	
7092 *A 6096*	-Moville, 549 meters from quay.	55° 11.0′ N 7° 02.1′ W	**Fl.W.R.** period 2.5s	37 **11**	4	White house on green piles; 44.	W. 240°-064°, R.-240°.
7096 *A 6098*	-Glenburnie.	55° 10.4′ N 7° 01.5′ W	**Fl.R.** period 2.5s fl. 0.2s, ec. 2.3s	10 **3**	3	Red pile structure.	
7100 *A 6102*	-Saltpans, N. Middle Bank, NE. head.	55° 10.4′ N 7° 03.4′ W	**Fl.R.** period 2.5s fl. 0.2s, ec. 2.3s	20 **6**	5	Red piles, white superstructure; 20.	
7104 *A 6102.5*	-Clare, W. side of N. Middle Bank.	55° 09.9′ N 7° 04.9′ W	**Q.R.**	18 **5**	3	White structure on red piles.	

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
	NORTHERN IRELAND-EAST AND NORTH COASTS						
7108 *A 6104*	-Redcastle, outer edge of Ridge Shoal.	55° 08.9′ N 7° 07.5′ W	**Oc.G.** period 5s	15 **5**	5	White house on green piles; 35.	
	NORTHERN IRELAND AND IRELAND-NORTH COAST						
	LOUGH FOYLE:						
7112 *A 6105*	-Vance.	55° 08.6′ N 7° 07.8′ W	**Fl.R.** period 5s	16 **5**	3	Red piles, white superstructure.	
7116 *A 6106*	-Whitecastle, SE. side of channel.	55° 08.0′ N 7° 09.4′ W	**Q.R.**	24 **7**	3	White house on red piles; 28.	
7120 *A 6107*	-Cabry, NW. side of channel.	55° 07.1′ N 7° 11.2′ W	**Fl.G.** period 2.5s fl. 0.2s, ec. 2.3s	18 **5**	3	White structure on green piles.	
7124 *A 6108*	-Quigleys Point, off point on SE. side of channel.	55° 07.0′ N 7° 11.1′ W	**Fl.R.** period 2s fl. 0.2s, ec. 1.8s	19 **6**	5	White structure on red piles.	Q.W. 16M and R. obstruction lights 4.6 miles SSE.
7128 *A 6110*	-Greenbank, off Aught Point, W. side of channel.	55° 06.5′ N 7° 12.0′ W	**Q.G.**	20 **6**	5	White structure on black piles.	
7132 *A 6112*	-Lepers Point, off Aught Point, E. side of channel.	55° 06.1′ N 7° 12.3′ W	**Q.R.**	18 **5**	3	White structure on red piles.	
7140 *A 6114*	-Ture, on spit, SE. side of channel.	55° 05.8′ N 7° 12.7′ W	**Fl.R.** period 4s	24 **7**	6	White house on red piles; 27.	
7144 *A 6116*	-Aught.	55° 05.8′ N 7° 12.9′ W	**Fl.G.** period 5s	20 **6**	3	Lantern on green pile.	
7148 *A 6117*	-Drumskellan, off Ture Point, W. side of channel.	55° 05.6′ N 7° 13.0′ W	**Fl.G.** period 2.5s fl. 0.2s, ec. 2.3s	18 **5**	3	White structure on green piles.	
7152 *A 6124*	-Kilderry, W. side of channel.	55° 04.1′ N 7° 13.9′ W	**Fl.G.** period 2s fl. 0.2s, ec. 1.8s	21 **6**	3	White structure on black piles.	
7156 *A 6120*	-Crummin Point, off point, W. side of channel.	55° 04.7′ N 7° 13.5′ W	**Q.G.**	19 **6**	3	White structure on black piles.	
7160 *A 6122*	-Willsboro, E. side of channel.	55° 04.7′ N 7° 13.4′ W	**Fl.(2)R.** period 4s	16 **5**	3	White structure on red piles.	
7164 *A 6130*	-Faughan, SE. side of channel.	55° 03.1′ N 7° 14.4′ W	**Fl.R.** period 4s	16 **5**	3	White structure on red piles.	
7168 *A 6127*	-Muff, W. side of channel.	55° 03.6′ N 7° 14.2′ W	**Fl.G.** period 2s	16 **5**	3	Green structure.	
7172 *A 6128*	--Coneyburrow.	55° 03.6′ N 7° 14.2′ W	**Q.G.**	16 **5**	3	Green mast on green piles; 29.	
7176 *A 6132*	-Culmore, on point.	55° 02.8′ N 7° 15.2′ W	**Q.W.**	20 **6**	3	Green round tower, black base; 23.	
7180 *A 6134.5*	-Lisahally Quay, NE. corner.	55° 02.6′ N 7° 15.6′ W	**2 F.R.** (vert.)	14 **4**	3		
7188 *A 6130.2*	-Coolkeeragh wharf, NE. head.	55° 03.0′ N 7° 14.6′ W	**Q.(2)R.** period 2s				
7192 *A 6130.3*	--SW. head.	55° 02.9′ N 7° 14.6′ W	**Fl.R.** period 5s				
7193 *A 6130.5*	--NE. head.	55° 02.9′ N 7° 14.7′ W	**2 F.R.** (vert.)				
7193.2 *A 6130.6*	--SW. head.	55° 02.8′ N 7° 14.8′ W	**Fl.R.** period 2s				

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
			NORTHERN IRELAND AND IRELAND-NORTH COAST				
7193.4 *A 6130.8*	-Jetty.	55° 02.7′ N 7° 15.0′ W	**Fl.R.** period 2s				
7196 *A 6136*	-Ballynagard, W. side of channel.	55° 02.3′ N 7° 16.4′ W	**Fl.W.** period 3s	19 **6**	3	White lantern on green tower structure; 23.	
7200 *A 6138*	-Otter Bank, E. side of channel.	55° 01.9′ N 7° 16.6′ W	**Fl.R.** period 4s	20 **6**	3	White structure on red round tower.	
7204 *A 6142*	-Mountjoy, E. side of channel.	55° 01.3′ N 7° 17.5′ W	**Q.R.**	16 **5**	3	White structure on red piles.	
7208 *A 6140*	-Brook Hall, W. side of channel.	55° 01.7′ N 7° 17.1′ W	**Q.G.**	20 **6**	3	White structure on green base.	
7216 *A 6152*	-Rosse's Bay Channel Range, front.	55° 00.7′ N 7° 17.4′ W	**Oc.R.** period 5s	21 **6**	3	White hut on red piles; 28.	
7220 *A 6154*	- -Rear, 473 meters 085° from front.	55° 00.7′ N 7° 16.9′ W	**Fl.R.** period 5s	54 **16**	2	White hut, red checks; 70.	
7224 *A 6158*	-Clooney.	55° 00.6′ N 7° 18.1′ W	**Fl.R.** period 4s	10 **3**	3	White structure on red piles; 16.	
7228 *A 6162*	-St. Columb's, on Clooney Bank.	55° 00.6′ N 7° 18.6′ W	**Fl.R.** period 5s	16 **5**	3	White structure on red piles.	
7232 *A 6163*	-Aberfoyle, off Columbs Point.	55° 00.3′ N 7° 18.9′ W	**Fl.R.** period 2s	16 **5**	3	White structure on red piles.	
7236 *A 6164*	**Inishtrahull.**	55° 25.9′ N 7° 14.6′ W	**Fl.(3)W.** period 15s fl. 0.2s, ec. 2.3s fl. 0.2s, ec. 2.3s fl. 0.2s, ec. 9.8s	194 **59**	**19**	White tower; 74.	
	RACON		**T(–)**		**24**		Azimuth coverage 060°-310°.
	LOUGH SWILLY:						
7240 *A 6168*	**-Fanad Head.**	55° 16.6′ N 7° 37.9′ W	**Fl.(5)W.R.** period 20s fl. 1s, ec. 1.5s fl. 1s, ec. 1.5s fl. 1s, ec. 1.5s fl. 1s, ec. 1.5s fl. 1s, ec. 9s	127 **39**	W. **18** R. 14	White tower; 73.	R. 100°-110°, W.-313°, R.-345°, W.-100°.
7244 *A 6172*	-Dunree Head.	55° 11.9′ N 7° 33.2′ W	**Fl.(2)W.R.** period 5s fl. 0.5s, ec. 1s fl. 0.5s, ec. 3s	151 **46**	W. 12 R. 9	House; 20.	R. 320°-328°, W.-183°, R.-196°.
7248 *A 6174*	-Buncrana, pier, head.	55° 07.6′ N 7° 27.8′ W	**Iso.W.R.** period 4s	25 **8**	W. 14 R. 11	Column; 18.	R. shore S.-052°, W.-139°, R.-shore N.
7252 *A 6176*	-Rathmullan, pier, head.	55° 05.7′ N 7° 31.6′ W	**Fl.G.** period 3s		5	Green structure.	Visible 206°-345°.
	MULROY BAY AND LOUGH:						
7256 *A 6180*	-Ravedy Island, N. head.	55° 15.1′ N 7° 46.7′ W	**Fl.W.** period 3s fl. 0.3s, ec. 2.7s	30 **9**	3	Concrete tower; 15.	Visible 177°-357°.
7260 *A 6186*	-Dundooan Rocks.	55° 13.0′ N 7° 48.0′ W	**Q.G.**	13 **4**	1	Green concrete tower; 13.	
7264 *A 6190*	-Crannoge Point, W. side of lough.	55° 12.3′ N 7° 48.4′ W	**Fl.G.** period 5s fl. 0.5s, ec. 4.5s	16 **5**	2	Green concrete tower; 13.	

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			IRELAND-WEST COAST				
7268 *A 6196*	-Downings Bay, pier, head.	55° 11.4′ N 7° 50.4′ W	**Fl.R.** period 3s	16 **5**	2	Red post.	Visible 283°-Downings Point.
7272 *A 6198.5*	-Portnablahy Range, front.	55° 10.8′ N 7° 55.8′ W	**Oc.W.** period 6s	23 **7**	2	Black concrete tower, white bands.	
7276 *A 6198.51*	--Rear, 81 meters 125°15′ from front.	55° 10.8′ N 7° 55.6′ W	**Oc.W.** period 6s	39 **12**	2	Black concrete tower, white bands.	
7280 *A 6200*	**Tory Island.**	55° 16.4′ N 8° 14.9′ W	**Fl.(4)W.** period 30s fl. 0.2s, ec. 4.8s fl. 0.2s, ec. 4.8s fl. 0.2s, ec. 4.8s fl. 0.2s, ec. 14.8s	130 **40**	**27**	Black tower, white band; 87.	Obscured 277°-302°. **DGPS Station.**
	RACON		**M(– –)**		**17**		(3 & 10 cm)
7284 *A 6203*	Bloody Foreland.	55° 09.5′ N 8° 17.0′ W	**Fl.W.G.** period 7.5s	47 **14**	W. 6 G. 4	White concrete hut; 12.	W. 062°-232°, G.-062°.
7285 *A 6203.5*	Glassagh, Range, front.	55° 06.8′ N 8° 18.9′ W	**Oc.W.** period 8s lt. 6s, ec. 2s	39 **12**	3	White concrete column, black band; 19.	
7285.1 *A 6203.51*	--Rear, 46 meters 137°25′ from front.	55° 06.8′ N 8° 18.9′ W	**Oc.W.** period 8s lt. 6s, ec. 2s	56 **17**	3	Black concrete column, white band; 16.	Synchronized with front.
7288 *A 6204*	Inishsirrer Island, NW.	55° 07.4′ N 8° 20.9′ W	**Fl.W.** period 3.7s fl. 0.7s, ec. 3s	65 **20**	4	White concrete tower; 13.	Visible 083°-263°.
7288.4 *A 6204.2*	-Gola Island Range, front.	55° 05.1′ N 8° 21.0′ W	**Oc.W.** period 3s	29 **9**	2	White concrete beacon, black band; 20.	
7288.8 *A 6204.21*	--Rear, 86 meters 171°14′ from front.	55° 05.1′ N 8° 21.0′ W	**Oc.W.** period 3s	43 **13**	2	Black concrete beacon, white band; 16.	Synchronized with front.
7289 *A 6204.4*	-Bo Island.	55° 04.8′ N 8° 20.1′ W	**Fl.G.** period 3s	10 **3**		Green concrete beacon.	
7292 *A 6206*	Rinnalea Point.	55° 02.5′ N 8° 23.7′ W	**Fl.W.** period 7.5s fl. 0.3s, ec. 7.2s	62 **19**	9	Square tower; 8.	Visible 132°-167°.
7296 *A 6208*	**Aranmore.**	55° 00.9′ N 8° 33.6′ W	**Fl.(2)W.** period 20s fl. 0.5s, ec. 4s fl. 0.5s, ec. 15s	233 **71**	**29**	White tower; 76.	Obscured 234°-007° and on 013°.
	Auxiliary.		**Fl.R.** period 3s fl. 0.7s, ec. 2.3s	200 **61**	13	Same tower.	Visible 203°-234°.
7297 *A 6214.9*	-Cloghcor Range, front.	54° 58.5′ N 8° 29.7′ W	**Iso.W.** period 8s	46 **14**	2	White concrete beacon, black band; 30.	
7297.1 *A 6214.91*	--Rear, 111 meters 048°30′ from front.	54° 58.5′ N 8° 29.6′ W	**Iso.W.** period 8s	56 **17**	2	Black concrete beacon, white band; 10.	Synchronized with front.
7297.5 *A 6214.95*	-Aphort Range, front.	54° 58.3′ N 8° 31.3′ W	**Oc.W.** period 4s	33 **10**	1	Concrete beacon; 23.	
7297.51 *A 6214.96*	--Rear, 345 meters 308°25′ from front.	54° 58.5′ N 8° 31.6′ W	**Oc.W.** period 4s	39 **12**	1	Black concrete beacon, white band; 23.	
	NORTH SOUND OF ARAN ISLAND:						
7298 *A 6211.2*	-Black Rocks.	54° 59.4′ N 8° 29.6′ W	**Fl.R.** period 3s	10 **3**	1	Red concrete column; 13.	Base of structure submerged at high water.
	SOUTH SOUND OF ARAN ISLAND:						
7300 *A 6213.6*	-Illancrone Island.	54° 56.3′ N 8° 28.5′ W	**Fl.W.** period 5s fl. 0.5s, ec. 4.5s	23 **7**	6	White square concrete tower; 11.	

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
			IRELAND-WEST COAST				
7304 *A 6213.8*	-Wyon (Wine) Point.	54° 56.5′ N 8° 27.6′ W	**Fl.(2)W.R.G.** period 10s	25 **8**	W. 6 R. 3	White square tower; 15.	G. shore-021°, W.-042°, R.-121°, W.-150°, R.-shore.
7308 *A 6214*	-Turk Rocks.	54° 57.3′ N 8° 28.2′ W	**Fl.G.** period 5s fl. 0.5s, ec. 4.5s	20 **6**	2	Green square concrete tower; 19.	
7312 *A 6214.2*	-Aileen Reef.	54° 58.2′ N 8° 28.8′ W	**Q.R.** (neon)	20 **6**	1	Red square concrete beacon on base, with steps; 21.	
7316 *A 6214.4*	-Stream Rock.	54° 58.7′ N 8° 28.6′ W	**Fl.W.** period 5s fl. 1s, ec. 4s	11 **3**	2	Square brickwork tower; 18.	
	RUTLAND ISLAND SOUTH CHANNEL:						
7320 *A 6214.6*	-Corren's Rock.	54° 58.1′ N 8° 26.7′ W	**Fl.R.** period 3s fl. 1s, ec. 2s	12 **4**	2	Red square concrete tower; 19.	
7324 *A 6214.8*	-Teige's Rocks.	54° 58.6′ N 8° 26.8′ W	**Fl.W.** period 3s fl. 0.3s, ec. 2.7s	12 **4**	2	Round concrete tower, square base; 17.	
7328 *A 6215*	Dawros Head.	54° 49.6′ N 8° 33.6′ W	**L.Fl.W.** period 10s fl. 2s, ec. 8s	128 **39**	4	White square column; 10.	
7332 *A 6216*	**Rathlin O'Birne Island.**	54° 40.0′ N 8° 50.0′ W	**Fl.W.R.** period 15s fl. 0.3s, ec. 14.7s	116 **35**	W. **18** R. 14	White tower; 65.	R. 195°-307°, W.-195°.
	RACON		**O(– – –)**		13		Azimuth coverage 284°-203°.
7336 *A 6222*	St. John's Point, Donegal Bay.	54° 34.2′ N 8° 27.6′ W	**Fl.W.** period 6s fl. 1.5s, ec. 4.5s	98 **30**	14	White tower; 47.	
	KILLEYBEGS:						
7340 *A 6224*	**-Rotten Island.**	54° 36.9′ N 8° 26.3′ W	**Fl.W.R.** period 4s fl. 1s, ec. 3s	66 **20**	W. **15** R. 11	White tower; 47.	W. 255°-008°, R.-039°, W.-208°.
7352 *A 6228*	-Black Rock jetty.	54° 38.3′ N 8° 26.5′ W	**2 F.R.** (vert.)	23 **7**		Gray metal column, white base.	
	SLIGO HARBOR:						
7360 *A 6232*	-Blackrock.	54° 18.4′ N 8° 37.0′ W	**Fl.W.** period 5s fl. 0.2s, ec. 4.8s	78 **24**	13	White tower, black band; 83.	
	- -Auxiliary.		**Fl.R.** period 3s fl. 0.3s, ec. 2.7s	41 **12**	5	Same tower.	Visible 107°-130°, over Wheat and Seal Rocks.
7362 *A 6257*	**Sligo** Airport, AVIATION LIGHT.	54° 16.5′ N 8° 36.0′ W	**Al.Fl.W.G.** period 2.5s	39 **12**	**23**	Control tower; 20.	Occasional.
	NEEDLES CHANNEL:						
7364 *A 6236*	-Lower Rosses, N. of point.	54° 19.7′ N 8° 34.4′ W	**Fl.(2)W.R.G.** period 10s fl. 1s, ec. 1s fl. 1s, ec. 7s	25 **8**	W. 10 R. 8 G. 8	White hut on piles.	G. over Bungar Bank-066°, W.-070°, R.-over Drumcliff Bar. Shown throughout 24 hours.
7368 *A 6244*	-Metal Man Rock Range, front.	54° 18.2′ N 8° 34.5′ W	**Fl.W.** period 4s	10 **3**	7	Structure; 16.	Shown throughout 24 hours.
7372 *A 6244.1*	-Rear, near NW. point, 365 meters 125° from front.	54° 18.1′ N 8° 34.2′ W	**Oc.W.** period 4s lt. 3s, ec. 1s	43 **13**	10	Tower; 40.	Shown throughout 24 hours.

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
			IRELAND-WEST COAST				
7376 *A 6260*	Inishcrone, Killala Bay.	54° 13.2′ N 9° 05.8′ W	**Fl.W.R.G.** period 1.5s	25 **8**	2	Concrete column; 10.	W. 098°-116°, G.-136°, R.-187°.
7378 *A 6265*	Killala Bay Bone Rock, NE. end.	54° 15.8′ N 9° 11.2′ W	**Q.W.**	23 **7**		N. CARDINAL BY, pillar, topmark.	
7380 *A 6266*	Broadhaven, Gubacashel Point, W. side of entrance.	54° 16.0′ N 9° 53.3′ W	**Iso.W.R.** period 4s	87 **27**	W. **17** R. 12	White tower; 50.	W. 133°-355°, R.-021°, obsc.-110°, R.-133°. Shown in hours of darkness.
7384 *A 6268*	**Eagle Island.**	54° 17.0′ N 10° 05.5′ W	**Fl.(3)W.** period 15s fl. 0.1s, ec. 2.5s fl. 0.1s, ec. 2.5s fl. 0.1s, ec. 9.7s	220 **67**	**19**	White tower; 36.	Distress answering. Shown in hours of darkness.
7388 *A 6270*	**Blackrock.**	54° 04.0′ N 10° 19.2′ W	**Fl.W.R.** period 12s fl. 0.3s, ec. 11.7s	282 **86**	W. **20** R. **16**	White tower; 50.	W. 276°-212°, R.-276°. Shown in hours of darkness.
7392 *A 6272*	Blacksod Point.	54° 05.9′ N 10° 03.6′ W	**Fl.(2)W.R.** period 7.5s fl. 0.5s, ec. 1s fl. 0.5s, ec. 5.5s	42 **13**	W. 12 R. 9	White tower on dwelling; 40.	R. 189°-210°, W.-018°, obsc.-189°.
7396 *A 6272.5*	Achill Island, Ridge Point.	54° 01.8′ N 9° 58.5′ W	**Fl.W.** period 5s fl. 0.5s, ec. 4.5s	69 **21**	5	Mast; 16.	
7400 *A 6273.3*	-Saulia, pier.	53° 57.1′ N 9° 55.5′ W	**Fl.G.** period 3s fl. 0.5s, ec. 2.5s	39 **12**		Green concrete column; 10.	
7402 *A 6273.8*	-Beacon	53° 52.1′ N 9° 56.5′ W	**Fl.R.** period 2s fl. 0.2s, ec. 1.8s	16 **5**		Red square concrete tower.	
7404 *A 6274*	-Carrigin-a-tShrutha.	53° 52.3′ N 9° 56.7′ W	**Q.(2)R.** period 5s			Red concrete beacon on rock.	
7408 *A 6279*	Roonagh Quay Range, front.	53° 45.7′ N 9° 54.2′ W	**Iso.W.** period 10s	29 **9**			
7412 *A 6279.1*	- -Rear, 54 meters 144° from front.	53° 45.7′ N 9° 54.2′ W	**Iso.W.** period 10s	49 **15**			
7416 *A 6276*	**-Achillbeg Island.**	53° 51.5′ N 9° 56.8′ W	**Fl.W.R.** period 5s fl. 1s, ec. 4s	184 **56**	W. **18** R. **18** R. **15**	White round tower on square building; 28.	R. 262°-281°, W.-342°, R.-060°, W.-092°, R.(intensified)-099°, W.-118°. Obscured by Clare Island and the Bills.
7420	-Purteen, pier, head.	53° 57.8′ N 10° 06.0′ W	**Q.R.**				
7424 *A 6277.5*	Clare Island, E. pier.	53° 48.0′ N 9° 57.0′ W	**Fl.R.** period 3s	15 **5**	3		
7428 *A 6278*	-Inishgort, island, S. point.	53° 49.6′ N 9° 40.2′ W	**L.Fl.W.** period 10s fl. 2s, ec. 8s	36 **11**	10	White tower; 26.	Shown in hours of darkness.
7432 *A 6280*	Inishbofin, Lyon Head.	53° 36.7′ N 10° 09.6′ W	**Fl.W.R.** period 7.5s fl. 0.7s, ec. 6.8s	44 **13**	W. 7 R. 4	White post on concrete structure; 16.	W. 036°-058°, R.-184°, W.-325°, R.-036°.
7436 *A 6282*	Gun Rock, off S. side of Inishbofin.	53° 36.6′ N 10° 13.4′ W	**Fl.(2)W.** period 6s fl. 0.6s, ec. 1.4s fl. 0.6s, ec. 3.4s	27 **8**	4	White column on white hut; 15.	Visible 296°-253° except where obscured by islands.
7440 *A 6284*	Cleggan Point.	53° 34.5′ N 10° 07.7′ W	**Fl.(3)W.R.G.** period 15s fl. 0.5s, ec. 3.5s fl. 0.5s, ec. 3.5s fl. 0.5s, ec. 6.5s	66 **20**	W. 6 R. 3 G. 3	White post on white hut; 15.	W. shore-091°, R.-124°, G.-221°, obscured elsewhere.

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
			IRELAND-WEST COAST				
7444 *A 6288*	**Slyne Head.**	53° 24.0′ N 10° 14.0′ W	**Fl.(2)W.** period 15s fl. 0.1s, ec. 2.4s fl. 0.1s, ec. 12.4s	115 **35**	**19**	Black tower; 79.	
	RACON		**T(–)**				(3 & 10 cm)
7448 *A 6290*	Inishnee.	53° 22.7′ N 9° 54.4′ W	**Fl.(2)W.R.G.** period 10s fl. 0.5s, ec. 1s fl. 0.5s, ec. 8s	30 **9**	W. 5 R. 3 G. 3	White column on white square concrete base; 14.	G. 314°-017°, W.-030°, R.-080°, W.-194°, obsc.-314°.
7452 *A 6292*	Croaghnakeela Island.	53° 19.4′ N 9° 58.3′ W	**Fl.W.** period 3.7s fl. 0.7s, ec. 3s	22 **7**	5	White concrete pillar; 14.	Visible 034°-045°, 218°-286°, 311°-325°.
	GALWAY BAY:						
7456 *A 6302*	-Kiggaul Bay, head.	53° 14.0′ N 9° 42.9′ W	**Fl.W.R.** period 3s fl. 0.6s, ec. 2.4s	15 **5**	W. 5 R. 3	Metal column on stone beacon; 11.	W. 329°-359°, R.-059° except where obscured by W. shore of bay.
7460 *A 6304*	-Cashla Bay, W. side of entrance.	53° 14.2′ N 9° 35.2′ W	**Fl.(3)W.R.** period 10s fl. 0.6s, ec. 1s fl. 0.6s, ec. 1s fl. 0.6s, ec. 6.2s	25 **8**	W. 6 R. 3	White metal column on concrete structure; 49.	W. 216°-000°, R.-069°, obsc.-216°.
7462 *A 6304.5*	-Lion Point.	53° 15.8′ N 9° 33.9′ W	**Dir.Iso.W.R.G.** period 4s	20 **6**	W. 8 R. 6 G. 6	White square concrete structure on column; 12.	G. 357°30′-008°30′, W.-011°30′, R.-017°30′.
7464 *A 6305*	-Rossaveel pier range, front.	53° 16.0′ N 9° 33.4′ W	**Oc.W.** period 3s lt. 2s, ec. 1s	23 **7**		White concrete column, red stripe.	
7468 *A 6305.1*	--Rear, 116° from front.	53° 16.0′ N 9° 33.0′ W	**Oc.W.** period 3s lt. 2s, ec. 1s	26 **8**		White concrete column, red stripe.	
	-Aran Islands:						
7472 *A 6296*	**--Eeragh Island.**	53° 08.9′ N 9° 51.4′ W	**Fl.W.** period 15s fl. 0.2s, ec. 14.8s	115 **35**	**23**	White tower, 2 black bands; 101.	Visible 297°-262°.
7480 *A 6298*	**--Straw Island.**	53° 07.0′ N 9° 37.9′ W	**Fl.(2)W.** period 5s fl. 0.2s, ec. 1.5s fl. 0.2s, ec. 3.1s	37 **11**	**17**	White tower; 35.	
7484 *A 6299*	--Killeany Bay Range, front.	53° 06.3′ N 9° 39.7′ W	**Oc.W.** period 5s	21 **6**	3	White column on white square base; 13.	Visible 142°-197°.
7488 *A 6299.1*	---Rear, 43 meters 192° from front.	53° 06.3′ N 9° 39.7′ W	**Oc.W.** period 5s	26 **8**	2	White column on white square base; 13.	Visible 142°-197°.
7492 *A 6300*	-Kilronan, pier, head.	53° 07.1′ N 9° 40.0′ W	**Fl.W.G.** period 1.5s fl. 0.3s, ec. 1.2s	16 **5**	3	White column; 10.	G. 240°-326°, W.-000°, obscured elsewhere.
7496 *A 6334*	**--Inisheer.**	53° 02.8′ N 9° 31.5′ W	**Iso.W.R.** period 12s	112 **34**	W. **20** R. **16**	White tower, black bands; 112.	W. (partially vis. beyond 7M) 225°-231°, W.-245°, R.-269°, W.-115°, obsc.-231°.
	--RACON		**K(– • –)**		13		Azimuth coverage 216°-144°.
7500 *A 6332*	-Black Head.	53° 09.2′ N 9° 16.0′ W	**Fl.W.R.** period 5s fl. 1s, ec. 4s	67 **20**	W. 11 R. 8	White square concrete tower; 28.	W. 045°-268°, R.-276°. Shown in hours of darkness.
7504 *A 6308*	-Spiddle, pier, E. head.	53° 14.3′ N 9° 18.5′ W	**Fl.W.R.G.** period 3.5s	35 **11**	W. 6 R. 4 G. 4	Yellow metal column; 10.	G. 102°-282°, W.-024°, R.-066°.
7508 *A 6317*	-Galway Harbor, Leverets.	53° 15.2′ N 9° 02.0′ W	**Q.W.R.G.**	31 **9**	10	Black round concrete tower, white bands.	G. 015°-058°, W.-065°, R.-103°, G.-143°30′, W.-146°30′, R.-015°.

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
			IRELAND-WEST COAST				
7512 *A 6318*	- -Rinmore.	53° 16.1′ N 9° 02.0′ W	**Iso.W.R.G.** period 4s	24 **7**	5	White square tower.	G. 359°-008°, W.-018°, R.-027°.
7516 *A 6320*	- -Approach channel, port entry.	53° 16.1′ N 9° 02.8′ W	**Dir.W.R.G.**	23 **7**	3		F.G. 322°15′-323°45′, Al.G.W. 3s-324°45′, F.W.-325°15′, Al.R.W. 3s-326°15′, F.R.-331°15′, Fl.R. 3s-332°15′.
7524 *A 6322*	-Nimmo, pier, head.	53° 16.0′ N 9° 02.8′ W	**Fl.Y.** period 2s	24 **7**	7	Mast; 20.	
7528 *A 6338*	**Loop Head.**	52° 33.7′ N 9° 55.9′ W	**Fl.(4)W.** period 20s fl. 0.1s, ec. 2.4s fl. 0.1s, ec. 2.4s fl. 0.1s, ec. 2.4s fl. 0.1s, ec. 12.4s	277 **84**	**23**	White tower; 75.	Visible 280°-218°. **DGPS Station.**
7530	*Ballybunnion Buoy.*	52° 32.5′ N 9° 46.9′ W	**V.Q.W.**			N. CARDINAL BY, pillar.	
	RACON		**M(– –)**				
	RIVER SHANNON:						
7532 *A 6340*	-Kilcredaun Point.	52° 34.8′ N 9° 42.5′ W	**Fl.W.** period 6s fl. 0.7s, ec. 5.3s	133 **41**	13	White tower; 43.	Obscured within 1 mile 224°-247°.
7533 *A 6340.5*	-Corlis Pt. Range, front.	52° 37.1′ N 9° 36.3′ W	**Oc. W.** period 5s lt. 4s, ec. 1s	30 **9**	10	Concrete hut.	
7534 *A 6340.51*	- -Querrin Quay, rear, 046°42′ from front.	52° 37.7′ N 9° 35.3′ W	**Oc.W.** period 5s lt. 4s, ec. 1s	92 **28**	10	Lattice mast.	F.R. on top of mast.
7536 *A 6342*	-Scattery Island.	52° 36.3′ N 9° 31.0′ W	**Fl.(2)W.** period 8s fl. 0.5s, ec. 1s fl. 0.5s, ec. 6s	50 **15**	10	White tower; 41.	Visible 208°-092°. Shown in hours of darkness.
7540 *A 6343*	-Tarbert Island.	52° 35.5′ N 9° 21.8′ W	**Iso.W.R.** period 4s	58 **18**	W. 14 R. 10	White tower; 85.	W. 069°-277°, R.-287°, W.-339°.
7544 *A 6344.6*	-Tarbert Range, front.	52° 34.3′ N 9° 18.7′ W	**Iso.W.** period 2s	42 **13**	3	White framework tower, triangular daymark, point up.	Visible 123°12′-133°12′.
7548 *A 6344.61*	- -Rear, 400 meters 128°15′ from front.	52° 34.2′ N 9° 18.5′ W	**Iso.W.** period 5s	59 **18**	3	White beacon, green stripe.	
7552 *A 6345*	-Garraunbaun Point.	52° 35.6′ N 9° 13.9′ W	**Fl.(3)W.R.** period 10s fl. 0.3s, ec. 1s fl. 0.3s, ec. 1s fl. 0.3s, ec. 7.1s	52 **16**	W. 8 R. 5	White square column; 11.	R. shore-072°, W.-242°, R.-shore.
7556 *A 6346*	-Rinealon Point.	52° 37.1′ N 9° 09.8′ W	**Fl.W.** period 2.5s fl. 0.2s, ec. 2.3s	13 **4**	7	Black metal column, white bands; 23.	Visible 234°-088°.
7560 *A 6347*	-Foynes Harbor, W. channel Range, front.	52° 36.9′ N 9° 06.5′ W	**Iso.W.R.G.** period 4s	11 **3**	W. 4 R. 3 G. 3	White metal column, black bands, black triangular daymark, point up, white stripe.	W. 273°12′-038°12′, R.-094°12′, G.-104°12′, W.-108°12′, R.-114°12′. Moved to meet changes in the channel.
7564 *A 6347.1*	- -E. jetty, rear, 540 meters 107°38′ from front.	52° 36.8′ N 9° 06.1′ W	**Oc.W.** period 4s lt. 3s, ec. 1s	53 **16**	10	Post, orange triangular daymark, point up.	
7568 *A 6347.4*	-Colleen Point.	52° 36.9′ N 9° 06.9′ W	**Q.G.**	8 **2**	2	White metal column, black bands.	

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
			IRELAND-WEST COAST				
7572 *A 6347.6*	-Weir Point.	52° 37.0′ N 9° 07.0′ W	**V.Q.(4)R.** period 10s fl. 0.2s, ec. 0.5s fl. 0.2s, ec. 0.5s fl. 0.2s, ec. 0.5s fl. 0.2s, ec. 7.7s	8 **2**	2	White metal column, black bands.	
7576 *A 6348*	-Beeves Rocks.	52° 39.0′ N 9° 01.3′ W	**Fl.W.R.** period 5s fl. 1s, ec. 4s	40 **12**	W. 12 R. 9	Dark stone tower; 60.	W. 064°30′-091°, R.-238°, W.-265°, W. (unintensified) 265°-064°30′.
7580 *A 6350*	-Shannon Airport, AVIATION LIGHT.	52° 41.7′ N 8° 55.6′ W	**Al.Fl.W.G.** period 7.5s	130 **40**		Control tower.	
	TRALEE BAY:						
7584 *A 6392*	**-Little Samphire Island.**	52° 16.2′ N 9° 52.9′ W	**Fl.W.R.G.** period 5s fl. 1s, ec. 4s	56 **17**	W. **16** R. 13 G. 13	Blue round stone tower.	R. 262°-275°, obsc.-280°, R.-090°, G.-140°, W.-152°, R.-172°, obsc.-262°.
7588 *A 6394*	-Great Samphire Island.	52° 16.1′ N 9° 52.2′ W	**Q.R.**	49 **15**	3		Visible 242°-097°.
7592 *A 6396*	-Fenit, pier, head.	52° 16.2′ N 9° 51.8′ W	**2 F.R.** (vert.)	39 **12**	3	Mast; 24.	Obscured 058°-148°.
7596 *A 6406*	Brandon pier, head.	52° 16.0′ N 10° 09.6′ W	**2 F.G.** (vert.)	15 **5**	4	Column; 10.	
7600 *A 6408*	**Inishtearaght Island.**	52° 04.5′ N 10° 39.7′ W	**Fl.(2)W.** period 20s fl. 0.8s, ec. 4.2s fl. 0.8s, ec. 14.2s	275 **84**	**27**	White tower; 57.	Visible 318°-221°. Also shown by day in poor visibility.
	RACON		**O(– – –)**		**18**		Azimuth coverage 133°-041°.
7604 *A 6410*	Dingle Harbor.	52° 07.3′ N 10° 15.5′ W	**Fl.G.** period 3s	64 **20**	6	Metal tower; 24.	
	VALENTIA HARBOUR:						
7612 *A 6416*	**-Cromwell (Fort) Point.**	51° 56.0′ N 10° 19.3′ W	**Fl.W.R.** period 2s fl. 0.5s, ec. 1.5s	54 **16**	W. **17** R. **15**	White tower; 48.	W. 104°-304°, R.-351°. F.R. lights mark 4 radio masts 1.25 miles WSW.
7616 *A 6417*	-Range, front.	51° 55.5′ N 10° 18.3′ W	**Oc.W.R.G.** period 4s lt. 3s, ec. 1s	82 **25**	W. 11 R. 8 G. 8	White conical tower, red stripe.	G. 134°-140°, W.-142°, R.-148°.
7620 *A 6417.1*	- -Rear, 122 meters 141° from front.	51° 55.4′ N 10° 18.3′ W	**Oc.W.** period 4s lt. 3s, ec. 1s	141 **43**	5		Visible 133°-233°. Synchronized with front.
7622 *A 6417.5*	-Harbor Rock.	51° 55.8′ N 10° 18.9′ W	**Q.(3)W.** period 10s	15 **5**	5	E. CARDINAL YBY, mast, topmark.	Visible 080°-040°.
7624 *A 6422*	**Skelligs Rock.**	51° 46.2′ N 10° 32.5′ W	**Fl.(3)W.** period 15s fl. 0.1s, ec. 2.5s fl. 0.1s, ec. 2.5s fl. 0.1s, ec. 9.7s	175 **53**	**19**	White tower; 39.	Visible 262°-115°. Partially obscured within 6 miles 110°-115°.
7628 *A 6426*	Darrynane Bay Range, front.	51° 45.9′ N 10° 09.2′ W	**Oc.W.** period 3s	34 **10**	4	Beacon; 14.	
7632 *A 6426.1*	-Rear, 034° from front.	51° 46.0′ N 10° 08.9′ W	**Oc.W.** period 3s	52 **16**	4	Beacon; 17.	
7636 *A 6430*	**Bull Rock.**	51° 35.5′ N 10° 18.1′ W	**Fl.W.** period 15s fl. 0.2s, ec. 14.8s	271 **83**	**21**	White tower; 49.	Visible 220°-186°.
	RACON		**N(-•)**				(3 & 10 cm)

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
	BANTRY HEAD:						
7640 *A 6434*	**-Bearhaven.**	51° 37.1′ N 9° 55.0′ W	**Fl.(2)W.R.** period 10s fl. 1s, ec. 2s fl. 1s, ec. 6s	202 **62**	W. **17** R. 14	White round tower; 66.	R. 319°-348°, W.-066°, R.-shore. F.R. on radio tower 3.45 miles 295°.
7644 *A 6436*	--Castletown.	51° 38.8′ N 9° 54.3′ W	**Dir.Oc.W.R.G.** period 5s lt. 4s, ec. 1s	13 **4**	W. 14 R. 11 G. 11	White concrete hut, red stripe; 19.	G. 020°30′-024°, W.-024°30′, R.-027°30′.
7648 *A 6438*	--Castletownbere harbor, Perch rock.	51° 38.8′ N 9° 54.5′ W	**Q.G.**	13 **4**	1	Green concrete column.	
7650 *A 6438.5*	--Cametringane Spit.	51° 38.9′ N 9° 54.4′ W	**Q.R.**			Red structure.	
7652 *A 6439*	---Range, front.	51° 39.1′ N 9° 54.4′ W	**Oc.W.** period 3s	13 **4**	1	White column, red stripe; 10.	Visible 005°-015°.
7656 *A 6439.1*	---Range, rear 80 meters 010° from front.	51° 39.2′ N 9° 54.3′ W	**Oc.W.** period 3s	22 **7**	1	White column, red stripe; 13.	Visible 005°-015°.
7658 *A 6440*	-Oilean na gCadrach.	51° 38.3′ N 9° 53.8′ W	**Q.W.**	10 **3**	3	N. CARDINAL BY, beacon; 16.	
7660 *A 6442*	**-Roancarrigmore.**	51° 39.1′ N 9° 44.8′ W	**Fl.W.R.** period 3s fl. 1s, ec. 2s	59 **18**	W. **18** R. 14	White round tower, black band.	W. 312°-050°, R.-312°.
7672 *A 6445*	---SW. Dolphin.	51° 41.1′ N 9° 32.1′ W	**Q.Y.**	33 **10**	2	Metal mast on dolphin.	**Horn:** 1 bl. ev. 20s.
7676 *A 6445.2*	---NE. Dolphin.	51° 41.3′ N 9° 31.7′ W	**Q.Y.**	33 **10**	2	Metal mast on dolphin.	
7678 *A 6445.7*	---W. Battery.	51° 40.9′ N 9° 31.7′ W	**Fl.(3)G.** period 15s	10 **3**	2	STARBOARD (A) G, beacon, topmark; 10.	
7680 *A 6432*	**-Sheep's (Sheep) Head.**	51° 32.5′ N 9° 50.8′ W	**Fl.(3)W.R.** period 15s fl. 1s, ec. 1.5s fl. 1s, ec. 1.5s fl. 1s, ec. 9s	272 **83**	W. **18** R. **15**	White building; 23.	R. 007°-017°, W.-212°.
7684 *A 6448*	**Mizen Head.**	51° 26.9′ N 9° 49.1′ W	**Iso.W.** period 4s	180 **55**	**15**	Concrete platform and lantern.	Visible 313°-133°. **DGPS Station.**
7688 *A 6450*	Crookhaven, Rock Island Point.	51° 28.6′ N 9° 42.2′ W	**L.Fl.W.R.** period 8s fl. 2s, ec. 6s	67 **20**	W. 13 R. 11	White tower; 45.	Outside harbor, W. over Long Island Bay to 281°, R.-340°. Inside harbor, R. 281°-348°, W.-toward N. shore.

Section 7

North Coast of France and Channel Islands

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
			FRANCE-NORTH COAST				
7692 *A 1836*	Corn-Carhai, Roches de Portsall.	48° 35.2′ N 4° 43.9′ W	**Fl.(3)W.** period 12s fl. 1s, ec. 1.5s fl. 1s, ec. 1.5s fl. 1s, ec. 6s	62 **19**	9	White octagonal tower, black top; 65.	
7696 *A 1837*	*Grande Basse de Portsall Buoy.*	48° 36.7′ N 4° 46.2′ W	**V.Q.(9)W.** period 10s			W. CARDINAL YBY, pillar.	**Whistle.** **Radar reflector.**
7700 *A 1838*	**Portsall.**	48° 33.9′ N 4° 42.3′ W	**Oc.(4)W.R.G.** period 12s lt. 1s, ec. 1s lt. 1s, ec. 1s lt. 1s, ec. 1s lt. 5s, ec. 1s	30 **9**	W. 13 R. 10 G. 10	Metal column, red top; 21.	G. 058°-084°, W.-088°, R.-058°.
	L'ABERWRAC'H:						
7704 *A 1826*	-Grand Chenal First Range, front, Ile Vrac'h, N. side of entrance.	48° 36.9′ N 4° 34.6′ W	**Q.R.**	66 **20**	7	White square tower, orange top, white dwelling; 49.	
7708 *A 1826.1*	- -Rear, Lanvaon, 3 km. 100°06′ from front.	48° 36.6′ N 4° 32.2′ W	**Dir.Q.W.**	180 **55**	12	White square tower, orange triangular daymark; 90.	Intensified 090°-110°.
7712 *A 1831*	-Leading light.	48° 35.9′ N 4° 33.9′ W	**Dir.Oc.(2)W.R.G.** period 6s lt. 1s, ec. 1s lt. 3s, ec. 1s	17 **5**	W. 13 R. 11 G. 11	White concrete tower.	G. 125°42′-127°12′, W.-128°42′, R.-130°12′.
7716 *A 1822*	**Ile Vierge.**	48° 38.4′ N 4° 34.1′ W	**Fl.W.** period 5s fl. 0.3s, ec. 4.7s	253 **77**	**27**	Gray tower; 271.	Visible 337°-325°. **Horn:** 1 bl. ev. 60s (bl. 3s, si. 57s). **Radiobeacon.**
7720 *A 1820*	Pontusval Pointe de Beg-Pol.	48° 40.7′ N 4° 20.8′ W	**Oc.(3)W.R.** period 12s lt. 1.5s, ec. 1.5s lt. 1.5s, ec. 1.5s lt. 4.5s, ec. 1.5s	52 **16**	W. 10 R. 7	White and black tower, dwelling; 49.	W. 096°-056°, R.-096°.
7724 *A 1818*	Mogueriec Range, front.	48° 41.4′ N 4° 04.5′ W	**Iso.W.G.** period 4s	30 **9**	W. 11 G. 6	White tower, green top; 33.	W. 158°-166°, G.-158°.
7728 *A 1818.1*	-Rear, 440 meters 162° from front.	48° 41.1′ N 4° 04.5′ W	**F.G.**	72 **22**	7	White tower, green top; 36.	Visible 142°-182°.
7732 *A 1816*	**Ile de Batz.**	48° 44.8′ N 4° 01.6′ W	**Fl.(4)W.** period 25s fl. 0.5s, ec. 3.6s fl. 0.5s, ec. 3.6s fl. 0.5s, ec. 3.6s fl. 0.5s, ec. 12.2s	226 **69**	**23**	Gray round tower, black lantern; 141.	
	Auxiliary light.		**F.R.**	214 **65**	7	Same tower.	Visible 024°-059°.
7736	*Banc Astan, Buoy.*	48° 44.9′ N 3° 57.7′ W	**V.Q.(3)W.** period 5s			E. CARDINAL BYB, pillar.	**Whistle.** **Radar reflector.**
	BAIE DE MORLAIX:						
7740 *A 1808*	-Ar Chaden, on Pighet Islet.	48° 44.0′ N 3° 58.3′ W	**Q.(6)+L.Fl.W.R.** period 15s	46 **14**	W. 8 R. 6	S. CARDINAL YB, tower, topmark; 72.	R. 262°-289°30′, W.-293°, R.-326°, W.-110°, obsc.-262°.
7744 *A 1810*	-Men-Guen-Bras.	48° 43.8′ N 3° 58.1′ W	**Q.W.R.G.**	46 **14**	W. 9 R. 6 G. 6	N. CARDINAL BY, tower, topmark; 65.	W. 068°-073°, R.-197°, W.-257°, G.-068°.

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
			FRANCE-NORTH COAST				
7748 *A 1812*	-Roscoff, Range, front.	48° 43.6′ N 3° 58.6′ W	**Oc.(2+1)G.** period 12s lt. 4s, ec. 1s lt. 1s, ec. 1s lt. 4s, ec. 1s	22 **7**	7	White column, green top, white square daymark, black stripe; 23.	Visible 078°-318°. Synchronized with rear.
7752 *A 1812.1*	- -Rear, 430 meters 209° from front.	48° 43.3′ N 3° 58.9′ W	**Oc.(2+1)W.** period 12s lt. 4s, ec. 1s lt. 1s, ec. 1s lt. 4s, ec. 1s	79 **24**	**15**	Gray square masonry tower, white on range line; 79.	Visible 062°-242°.
7756 *A 1805*	-Bloscon, jetty, head.	48° 43.2′ N 3° 57.7′ W	**Fl.W.G.** period 4s fl. 1s, ec. 3s	30 **9**	W. 10 G. 7	White round tower, green top; 20.	W. 200°-210°, G.-200°.
7758 *A 1804*	-Le Menk.	48° 43.3′ N 3° 56.6′ W	**Q.(9)W.R.** period 15s	20 **6**	W. 5 R. 3	W. CARDINAL YBY, tower, topmark.	R. 188°-160°, W.-188°.
7760 *A 1800.1*	**-Ile Louet,** Range, front in line 176°24′ with La Lande.	48° 40.5′ N 3° 53.4′ W	**Oc.(3)W.G.** period 12s lt. 1.5s, ec. 1.5s lt. 1.5s, ec. 1.5s lt. 4.5s, ec. 1.5s	56 **17**	W. **15** G. 10	White square tower with black top; 40.	G. 244°-305°, W.-244°.
7764 *A 1800*	**-La Lande,** common rear.	48° 38.2′ N 3° 53.1′ W	**Fl.W.** period 5s fl. 0.3s, ec. 4.7s	279 **85**	**23**	White square tower, black top and corners; 62.	
7768 *A 1799.9*	-Ile Noire, E. side of entrance, front, in line 190°30′ with La Lande.	48° 40.4′ N 3° 52.6′ W	**Oc.(2)W.R.G.** period 6s lt. 3s, ec. 1s lt. 1s, ec. 1s	49 **15**	W. 11 R. 8 G. 8	Square tower, white seaward red lantern; 43.	G. 051°-135°, R.-211° W.-051°.
7772 *A 1796*	-Anse de Primel Range, front.	48° 42.5′ N 3° 49.2′ W	**F.R.**	115 **35**	6	White pylon, white square daymark, red stripe; 23.	Visible 134°-168°.
7776 *A 1796.1*	- -Rear, 202 meters 152° from front.	48° 42.5′ N 3° 49.0′ W	**F.R.**	184 **56**	6	Wall, white square daymark, red stripe; 13.	
	BAIE DE LANNION:						
7780 *A 1792*	-Bec-Lequer.	48° 44.4′ N 3° 32.9′ W	**Oc.(4)W.R.G.** period 12s lt. 1s, ec. 1s lt. 1s, ec. 1s lt. 1s, ec. 1s lt. 5s, ec. 1s	197 **60**	W. 13 R. 10 G. 10	West face of white house, red lantern; 26.	G. 007°-084°, W.-098°, R.-129°.
7784 *A 1794*	-Locquemeau Range, front.	48° 43.4′ N 3° 34.5′ W	**F.R.**	69 **21**	6	White pylon, red top; 62.	Visible 068°-228°.
7788 *A 1794.1*	- -Rear, 484 meters 121° from front.	48° 43.3′ N 3° 34.0′ W	**Oc.(2+1)R.** period 12s lt. 1s, ec. 1s lt. 4s, ec. 1s lt. 4s, ec. 1s	128 **39**	7	White house, red lantern; 19.	Visible 016°-232°.
7790 *A 1791*	Pointe de Lan Kerellec.	48° 46.8′ N 3° 35.0′ W	**Iso.W.R.G.** period 4s		W. 8 R. 5 G. 5	Gray tower.	G. 058°-064°, W.-069°, R.-130°.
7792 *A 1790*	**Les Triagoz.**	48° 52.3′ N 3° 38.8′ W	**Oc.(2)W.R.** period 6s lt. 1s, ec. 1s lt. 3s, ec. 1s	102 **31**	W. **15** R. 11	Square granite tower on concrete base, red lantern; 98.	W. 010°-339°, R.-010°.
7796 *A 1786*	**Les Sept Iles.**	48° 52.8′ N 3° 29.5′ W	**Fl.(3)W.** period 15s fl. 0.1s, ec. 2.9s fl. 0.1s, ec. 2.9s fl. 0.1s, ec. 8.9s	194 **59**	**24**	Gray tower, dwelling; 65.	Obscured 237°-241°.
7800 *A 1784*	Mean Ruz.	48° 50.3′ N 3° 29.0′ W	**Oc.W.R.** period 4s lt. 3s, ec. 1s	85 **26**	W. 13 R. 10	Pink square tower; 49.	W. 226°-242°, R.-226°.

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
			FRANCE-NORTH COAST				
	PERROS-GUIREC:						
7804 *A 1782*	-Mole Ouest.	48° 48.2′ N 3° 26.6′ W	**Fl.(2)R.** period 6s fl. 1s, ec. 1s fl. 1s, ec. 3s	12 **4**	9	White pile, red top; 13.	
7808 *A 1774*	**-Passe de l'Est** Range, front.	48° 47.9′ N 3° 26.7′ W	**Dir.Oc.(4)W.** period 12s lt. 1s, ec. 1s lt. 1s, ec. 1s lt. 1s, ec. 1s lt. 5s, ec. 1s	92 **28**	**18**	White house; 23.	Intensified 214°30′-234°30′.
7812 *A 1774.1*	**- -Kerprigent,** rear, 2.9 km. 224°30′ from front.	48° 46.9′ N 3° 28.1′ W	**Dir.Q.W.**	259 **79**	**22**	White tower; 46.	Intensified 221°-228°.
7816 *A 1780*	-Jetee Est (Linkin), head.	48° 48.3′ N 3° 26.3′ W	**Fl.(2)G.** period 6s fl. 1s, ec. 1s fl. 1s, ec. 3s	13 **4**	9	White tower, green top; 13.	
7820 *A 1770*	**-Passe del'Ouest Kerjean.**	48° 47.8′ N 3° 23.4′ W	**Dir.Oc.(2+1)W.R.G.** period 12s lt. 4s, ec. 1s lt. 4s, ec. 1s lt. 1s, ec. 1s	256 **78**	W. **15** R. 13 G. 13	White tower with black top; 52.	G. 133°42′-143°12′, W.-144°48′, R.-154°18′.
7824 *A 1768*	Port Blanc, on Tourelle du Voleur.	48° 50.2′ N 3° 18.5′ W	**Dir.Fl.W.R.G.** period 4s fl. 1s, ec. 3s	56 **17**	W. 14 R. 11 G. 11	White tower; 40.	G. 140°-148°, W.-152°, R.-160°.
	RIVIERE DE TREGUIER:						
7828	*-La Jument Buoy.*	48° 55.4′ N 3° 08.1′ W	**V.Q.W.**			N. CARDINAL BY, pillar.	**Bell.**
7832 *A 1760*	-La Corne.	48° 51.4′ N 3° 10.7′ W	**Fl.(3)W.R.G.** period 12s fl. 1s, ec. 1.5s fl. 1s, ec. 1.5s fl. 1s, ec. 6s	46 **14**	W. 11 R. 8 G. 8	White tower, red base; 75.	W. 052°-059°, R.-173°, G.-213°, W.-220°, R.-052°.
7836 *A 1762*	-Grande Passe Range, front, Port de la Chaine.	48° 51.6′ N 3° 07.9′ W	**Oc.W.** period 4s lt. 3s, ec. 1s	39 **12**	12	White house; 16.	Visible 042°-232°. Synchronized with rear.
7840 *A 1762.1*	**- -Saint Antonie,** rear, 1.4 km. 137° from front.	48° 51.0′ N 3° 07.0′ W	**Dir.Oc.R.** period 4s lt. 3s, ec. 1s	112 **34**	**15**	White house, red roof; 20.	Intensified 134°-140°.
7844 *A 1738*	**Les Heaux-de-Brehat.**	48° 54.5′ N 3° 05.2′ W	**Oc.(3)W.R.G.** period 12s lt. 1.5s, ec. 1.5s lt. 1.5s, ec. 1.5s lt. 4.5s, ec. 1.5s	157 **48**	W. **15** R. 11 G. 11	Gray round tower; 187.	R. 227°-247°, W.-270°, G.-302°, W.-227°.
7848 *A 1734*	**Roches-Douvres.**	49° 06.5′ N 2° 48.8′ W	**Fl.W.** period 5s fl. 0.1s, ec. 4.9s	197 **60**	**28**	Pink tower on dwelling, green roof; 197.	**Siren.**
	PLATEAU DE BARNOUIC:						
7852 *A 1730*	-Roche Barnouic, NE. of plateau.	49° 01.7′ N 2° 48.4′ W	**V.Q.(3)W.** period 5s	49 **15**	7	E. CARDINAL BYB, tower, topmark; 62.	
7856 *A 1726*	La Horaine.	48° 53.5′ N 2° 55.3′ W	**Fl.(3)W.** period 12s fl. 1s, ec. 1.5s fl. 1s, ec. 1.5s fl. 1s, ec. 6s	43 **13**	11	Gray octagonal tower, black diagonal bands; 65.	
7860 *A 1740*	Ile de Brehat, Le Paon, N. side of island.	48° 52.0′ N 2° 59.2′ W	**F.W.R.G.**	72 **22**	W. 12 R. 9 G. 9	Yellow round tower; 40.	W. 033°-078°, G.-181°, W.-196°, R.-307°, W.-316°, R.-348°.

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
			FRANCE-NORTH COAST				
7864 *A 1742*	**-Rosedo.**	48° 51.5′ N 3° 00.3′ W	**Fl.W.** period 5s fl. 0.1s, ec. 4.9s	95 **29**	**20**	White tower, green lantern; 43.	
7868 *A 1744*	-Men Joliguet.	48° 50.2′ N 3° 00.2′ W	**Iso.W.R.G.** period 4s	20 **6**	W. 13 R. 10 G. 10	W. CARDINAL YBY, tower, topmark; 26.	R. 255°-279°, W.-283°, G.-175°.
	TRIEUX:						
7872 *A 1746*	-Rocher Men Grenn, in Baiede Lanneros.	48° 51.3′ N 3° 03.9′ W	**Q.(9)W.** period 15s	22 **7**	8	W. CARDINAL YBY, tower; 30.	
7876 *A 1748*	**-La Croix** Range, front.	48° 50.3′ N 3° 03.3′ W	**Oc.W.** period 4s lt. 3s, ec. 1s	49 **15**	**19**	Two gray towers, white on NE. side, red top; 59.	Intensified 215°-235°.
7880 *A 1748.1*	**--Bodic**, rear, W. bank of river, 3.8 km. 224°42′ from front.	48° 43.9′ N 3° 05.4′ W	**Dir.Q.W.**	180 **55**	**22**	White house with green gable; 75.	Intensified 221°-229°.
7884 *A 1745*	-Chenal du Ferlas, Roche Quinonec.	48° 49.4′ N 3° 03.7′ W	**Dir.Q.W.R.G.**	36 **11**	W. 10 R. 8 G. 8	Gray column; 20.	G. 254°-257°, W.-257°42′, R.-260°42′.
7888 *A 1745.4*	--Kermouster, mouth of the Trieux.	48° 49.6′ N 3° 05.2′ W	**Dir.Fl.W.R.G.** period 2s fl. 0.4s, ec. 1.6s	54 **16**	W. 10 R. 8 G. 8	White tower; 7.	G. 267°-270°, W.-272°, R.-274°.
7892 *A 1752*	-Coatmer Range, front.	48° 48.3′ N 3° 05.8′ W	**F.R.G.**	52 **16**	G. 9	White gable; 36.	R. 200°-250°, G.-053°.
7896 *A 1752.1*	--Rear, 660 meters 218°42′ from front.	48° 48.0′ N 3° 06.0′ W	**F.R.**	164 **50**	9	White gable; 26.	Visible 197°-242°.
7900 *A 1758*	-Les Perdrix.	48° 47.8′ N 3° 05.8′ W	**Fl.(2)W.G.** period 6s	16 **5**	W. 6 G. 3	Green tower; 36.	G. 165°-197°, W.-202°30′ G.-040°, obsc.-165°.
	PAIMPOL:						
7904 *A 1722*	**-Pointe de Porz-Don.**	48° 47.5′ N 3° 01.6′ W	**Oc.(2)W.R.** period 6s lt. 3s, ec. 1s lt. 1s, ec. 1s	43 **13**	W. **15** R. 11	White house; 26.	W. 269°-272°, R.-279°, obsc.-269°.
7908 *A 1724*	-Jetee de Kernoa Range, front.	48° 47.1′ N 3° 02.4′ W	**F.R.**	16 **5**	7	White hut, red top; 13.	Visible on range line only.
7912 *A 1724.1*	--Rear, 360 meters 262°12′ from front.	48° 47.1′ N 3° 02.6′ W	**Dir.F.R.**	39 **12**	14	White post, red top; 33.	Intensified 260°12′-264°12′.
7916 *A 1720*	-L'Ost-Pic (Lost Pic), on detached rock E. of Mets de Goelo.	48° 46.8′ N 2° 56.5′ W	**Oc.W.R.** period 4s lt. 3s, ec. 1s	66 **20**	W. 11 R. 8	White square tower, red top; 49.	W. 105°-116°, R.-221°, W.-253°, R.-291°, W.-329°.
7920 *A 1716*	**Le Grand Lejon.**	48° 44.9′ N 2° 39.9′ W	**Fl.(5)W.R.** period 20s fl. 0.1s, ec. 2.7s fl. 0.1s, ec. 2.7s fl. 0.1s, ec. 2.7s fl. 0.1s, ec. 2.7s fl. 0.1s, ec. 8.7s	56 **17**	W. **18** R. 14	Red round tower, white bands; 82.	R. 015°-058°, W.-283°, R.-350°, W.-015°
7924 *A 1714*	Ile Harbor Roches de St. Quay.	48° 40.0′ N 2° 48.5′ W	**Oc.(2)W.R.G.** period 6s lt. 1s, ec. 1s lt. 3s, ec. 1s	52 **16**	W. 11 R. 8 G. 8	White house and tower, red top; 43.	R. 011°-133°, G.-270°, R.-306°, G.-358°, W.-011°.
7926 *A 1713.55*	**Saint-Quay-Portrieux.**	48° 39.0′ N 2° 49.1′ W	**Dir.Iso.W.R.G.** period 4s	52 **16**	W. **15** R. 11 G. 11	Concrete tower; 39.	W. 159°-179°, G.-316°, W.-320°30′, R.-159°. Reserve light range 12-9M.
7928 *A 1712*	-N. mole, head.	48° 38.7′ N 2° 49.4′ W	**Fl.G.** period 2.5s fl. 0.5s, ec. 2s	35 **11**	2	White octagonal tower, green top; 40.	Visible 265°-155°.

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
			FRANCE-NORTH COAST				
7932 *A 1713*	-S. mole, head.	48° 38.7′ N 2° 49.4′ W	**Fl.R.** period 2.5s fl. 0.5s, ec. 2s	26 **8**	2	White mast, red top; 25.	
7936 *A 1710*	Binic, Penthievre Mole, head.	48° 36.1′ N 2° 49.0′ W	**Oc.(3)W.** period 12s lt. 1.5s, ec. 1.5s lt. 1.5s, ec. 1.5s lt. 4.5s, ec. 1.5s	39 **12**	12	White tower, green lantern; 40.	Unintensified 020°-110°.
7940 *A 1708*	Le Legue, Point a l'Aigle, jetty.	48° 32.2′ N 2° 43.1′ W	**V.Q.G.**	43 **13**	8	White round tower, green top; 39.	Visible 160°-070°.
7944	*-Le Legue Approach Buoy.*	48° 34.3′ N 2° 41.2′ W	**Mo.(A)W.** period 10s			SAFE WATER RW, pillar, topmark.	**Whistle.** **Radar reflector.**
7948 *A 1704*	Dahouet, Petite Muette Tower.	48° 34.9′ N 2° 34.3′ W	**Fl.W.R.G.** period 4s fl. 1s, ec. 3s	33 **10**	W. 9 R. 6 G. 6	Green and white tower; 56.	G. 055°-114°, W.-146°, R.-196°.
7952 *A 1703*	Le Rohein.	48° 38.9′ N 2° 37.8′ W	**V.Q.(9)W.R.G.** period 10s	43 **13**	W. 10 R. 7 G. 7	W. CARDINAL YBY, tower; 49.	R. 072°-105°, W.-180°, G.-193°, W.-237°, G.-282°, W.-301°, G.-330°, W.-072°.
7954 *A 1701*	-Erquy, jetty, head.	48° 38.1′ N 2° 28.8′ W	**Oc.(2+1)W.R.G.** period 12s lt. 4s, ec. 1s lt. 4s, ec. 1s lt. 1s, ec. 1s	36 **11**	W. 11 R. 8 G. 8	White round tower, red top; 33.	R. 055°-081°, W.-094°, G.-111°, W.-120°, R.-134°.
7956 *A 1702*	Inside jetty extremity.	48° 38.1′ N 2° 28.4′ W	**Fl.R.** period 2.5s	33 **10**	3	Red and white tower; 33.	
7960 *A 1698*	**Cap Frehel.**	48° 41.1′ N 2° 19.2′ W	**Fl.(2)W.** period 10s fl. 0.3s, ec. 2.2s fl. 0.3s, ec. 7.2s	279 **85**	**29**	Gray square tower; 108.	Reserve light range 15M. **Horn:** (about 400 meters NNE.) 2 bl. ev. 60s.
7964 *A 1697*	St. Cast, mole, head.	48° 38.4′ N 2° 14.6′ W	**Iso.W.G.** period 4s	36 **11**	W. 11 G. 8	Green and white post; 29.	W. 204°-217°, G.-233°, W.-245°, G.-204°.
	ST. MALO:						
7968	*-Atterage Saint Malo Approach Buoy.*	48° 41.4′ N 2° 07.3′ W	**L.Fl.W.** period 10s			SAFE WATER RW, pillar, topmark.	**Whistle.**
7972 *A 1680*	-Le Buron.	48° 39.4′ N 2° 03.7′ W	**Fl.(2)G.** period 6s fl. 1s, ec. 1s fl. 1s, ec. 3s	49 **15**	8	Green tower; 75.	
7976 *A 1674*	-Les Courtis.	48° 40.5′ N 2° 05.8′ W	**Fl.(3)G.** period 12s fl. 1s, ec. 1.5s fl. 1s, ec. 1.5s fl. 1s, ec. 6s	46 **14**	8	Green tower; 69.	
7980 *A 1676*	**-Grand Jardin** Range, front.	48° 40.2′ N 2° 05.0′ W	**Fl.(2)R.** period 10s fl. 0.3s, ec. 2.2s fl. 0.3s, ec. 7.2s	79 **24**	**15**	Gray tower, red top; 125.	Forms range 129°42′ with LaBallue for Chenal de la Petite Ponte.
7984 *A 1676.1*	- -**Rochebonne**, rear 7.7 km. 089° from from front.	48° 40.3′ N 1° 58.7′ W	**Dir.F.R.**	131 **40**	**24**	Gray square tower, red top; 65.	Intensified 088°12′-089°42′.
7988 *A 1675*	-La Plate.	48° 40.8′ N 2° 01.9′ W	**Fl.W.R.G.** period 4s fl. 1s, ec. 3s	36 **11**	W. 10 R. 7 G. 7	N. CARDINAL BY, tower, topmark; 72.	W. 140°-203°, R.-210°, W.-225°, G.-140°.
7996 *A 1695*	-Saint Briac, mouth of Le Fremur.	48° 37.1′ N 2° 08.2′ W	**Dir.Iso.W.R.G.** period 4s	33 **10**	W. 13 R. 11 G. 11	Metal pipe on metal hut; 19.	G. 121°30′-124°30′, W.-125°30′, R.-129°30′.
8000 *A 1686*	**-Les Bas Sablons** Range, front.	48° 38.2′ N 2° 01.3′ W	**Dir.F.G.**	66 **20**	**22**	Square white tower, upper part black; 65.	Intensified 127°12′-130°12′.
8004 *A 1686.1*	**- -La Ballue,** rear, 1.65 km. 128°42′ from front.	48° 37.6′ N 2° 00.1′ W	**Dir.F.G.**	226 **69**	**24**	Gray square tower; 121.	Intensified 128°-129°30′. Rear range 129°42′ with Grand Jardin.

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
			FRANCE-NORTH COAST				
8006 *A 1673*	-Saint Enogat Range, front.	48° 38.2′ N 2° 04.1′ W	**Iso.W.** period 4s	10 **3**	6	White metal mast; 10.	Visible 126°-236°.
8006.1 *A 1673.1*	- -Dinard, rear 158.2° from front.	48° 37.0′ N 2° 03.3′ W	**Iso.W.** period 4s	279 **85**	8	White tower; 115.	Visible 143°-210°. Synchronized with front.
8008 *A 1682*	-Mole des Noires, head.	48° 38.6′ N 2° 01.9′ W	**Fl.R.** period 5s fl. 0.2s, ec. 4.8s	36 **11**	13	White tower, red top; 33.	**Horn:** 2 bl. ev. 20s.
	BAIE DU MONT SAINT MICHEL:						
8012 *A 1670*	**-Pierre de Herpin.**	48° 43.8′ N 1° 48.9′ W	**Oc.(2)W.** period 6s lt. 3s, ec. 1s lt. 1s, ec. 1s	66 **20**	**17**	White round tower, upper part and base black; 79.	**Siren:** Mo.(N) ev. 60s.
8016 *A 1672*	-La Houle-sous-Cancale, pier, head.	48° 40.1′ N 1° 51.1′ W	**Oc.(3)G.** period 12s lt. 1.5s, ec. 1.5s lt. 1.5s, ec. 1.5s lt. 4.5s, ec. 1.5s	39 **12**	7	White pylon, upper part green; 36.	
8020 *A 1654*	**Iles Chausey.**	48° 52.2′ N 1° 49.3′ W	**Fl.W.** period 5s fl. 0.3s, ec. 4.7s	128 **39**	**23**	Gray square tower; 62.	**Horn:** (about 80 meters SE.) 1 bl. ev. 30s.
8024 *A 1655*	-La Crabiere E.	48° 52.5′ N 1° 49.4′ W	**Oc.W.R.G.** period 4s lt. 3s, ec. 1s	16 **5**	W. 9 R. 6 G. 6	Yellow and black pylon; 36.	W. 079°-291°, G.-329°, W.-335°, R.-079°.
8028 *A 1656*	Le Pignon.	48° 53.5′ N 1° 43.4′ W	**Oc.(2)W.R.** period 6s lt. 1s, ec. 1s lt. 3s, ec. 1s	33 **10**	W. 11 R. 8	E. CARDINAL BYB, tower, topmark; 65.	R. 005°-150°, W.-005°.
	GRANVILLE:						
8032	*-Le Videcoq Whistle Buoy.*	48° 49.7′ N 1° 42.1′ W	**V.Q.(9)W.** period 10s			W. CARDINAL YBY, pillar, topmark.	**Whistle.** **Radar reflector.**
8036 *A 1660*	**-Pointe du Roc.**	48° 50.1′ N 1° 36.7′ W	**Fl.(4)W.** period 15s fl. 0.2s, ec. 2.3s fl. 0.2s, ec. 2.3s fl. 0.2s, ec. 2.3s fl. 0.2s, ec. 7.3s	161 **49**	**23**	Gray tower, red top; 52.	
8040 *A 1666*	-Le Loup.	48° 49.6′ N 1° 36.2′ W	**Fl.(2)W.** period 6s	27 **8**	11	ISOLATED DANGER BRB; 79.	**Radar reflector.**
8044 *A 1662*	-W. jetty.	48° 49.9′ N 1° 36.3′ W	**Iso.R.** period 4s	39 **12**	6	Red pylon.	
8048 *A 1664*	-E. jetty.	48° 50.0′ N 1° 36.2′ W	**Iso.G.** period 4s	36 **11**	6	White pylon, green top, on hut; 26.	
8052 *A 1668*	-Herel marina, jetty, head.	48° 49.9′ N 1° 35.9′ W	**Fl.R.** period 4s fl. 1s, ec. 3s	39 **12**	8	White round pylon, red top; 29.	Fl.G. 4s shown on inner jetty. **Horn:** 2 bl. ev. 40s.
8054 *A 1649*	Le Ronquet.	49° 00.1′ N 1° 38.0′ W	**Fl.(2)W.R.** period 6s fl. 1s, ec. 1s fl. 1s, ec. 3s	36 **11**	W. 6 R. 4	ISOLATED DANGER BRB, beacon, topmark.	W. 293°-100°, R.-293°.
8056 *A 1650*	Regneville, Pointe d'Agon.	49° 00.2′ N 1° 34.6′ W	**Oc.(2)W.R.** period 6s lt. 1s, ec. 1s lt. 3s, ec. 1s	39 **12**	W. 10 R. 7	White tower, red top; 40.	R. 063°-110°, W.-063°.
8060 *A 1651*	-028°.	49° 00.7′ N 1° 33.4′ W	**Dir.Oc.W.R.G.** period 4s lt. 3s, ec. 1s	30 **9**	W. 13 R. 9 G. 9	House; 20.	G. 024°-027°, W.-029°, R.-033°.

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
			FRANCE-NORTH COAST				
8064 *A 1648*	Le Senequet.	49° 05.5′ N 1° 39.7′ W	**Fl.(3)W.R.** period 12s fl. 1s, ec. 1.5s fl. 1s, ec. 1.5s fl. 1s, ec. 6s	59 **18**	W. 13 R. 10	White tower; 85.	R. 083°30′-116°30′, W.-083°30′.
8068 *A 1644*	Portbail, Entrance Range, front.	49° 19.8′ N 1° 42.5′ W	**Q.W.**	46 **14**	11	White pylon, red top; 26.	
8072 *A 1644.1*	-Rear, 870 meters 042° from front.	49° 20.2′ N 1° 42.0′ W	**Oc.W.** period 4s lt. 3s, ec. 1s	65 **20**	9	Belfry; 115.	
8076 *A 1646*	-Digue, submersible.	49° 19.5′ N 1° 43.0′ W	**Q.(2)R.** period 5s fl. 0.2s, ec. 0.8s fl. 0.2s, ec. 3.8s	16 **5**	2	White metal mast, red top; 23.	
8080 *A 1638*	**Cap de Carteret.**	49° 22.4′ N 1° 48.4′ W	**Fl.(2+1)W.** period 15s fl. 0.3s, ec. 2.3s fl. 0.3s, ec. 5.9s fl. 0.3s, ec. 5.9s	265 **81**	**26**	Square gray tower, green top; 59.	Signal Station. **Horn:** (about 0.1M SW.) 3 bl. ev. 60s (bl. 2s, si. 3s, bl. 2s, si. 3s, bl. 2s, si. 48s).
8084 *A 1640*	-Carteret, W. jetty, head.	49° 22.2′ N 1° 47.4′ W	**Oc.R.** period 4s lt. 3s, ec. 1s	23 **7**	7	White metal post, red top; 10.	
8088 *A 1641*	-Submerged breakwater, head.	49° 22.2′ N 1° 47.2′ W	**Fl.G.** period 2.5s fl. 0.5s, ec. 2s	13 **4**	1	White metal mast, green top; 10.	
8092 *A 1632*	Dielette.	49° 33.2′ N 1° 51.8′ W	**Iso.W.R.G.** period 4s	39 **12**	W. 10 R. 7 G. 7	White tower, green top; 36.	G. 070°-135°, W.-145°, R.-180°.
			Fl.G. period 4s fl. 1s, ec. 3s	20 **6**	2		
			CHANNEL ISLANDS (U.K.)				
	JERSEY:						
8100 *A 1620*	**-La Corbiere.**	49° 10.8′ N 2° 14.9′ W	**Iso.W.R.** period 10s	119 **36**	W. **18** R. **16**	Round stone tower; 62.	W. shore-294°, R.-328°, W.-148°, R.-shore. **Horn:** Mo.(C) ev. 60s.
8104 *A 1621*	-Beacon, about 815 meters 071° from Point Corbiere.	49° 10.9′ N 2° 14.3′ W	**F.R.**				Visible 331°-151°.
	-St. Aubins Bay:						
8108 *A 1616*	- -Noirmont Point.	49° 10.0′ N 2° 10.0′ W	**Fl.(4)W.** period 12s fl. 0.7s, ec. 1.5s fl. 0.7s, ec. 1.5s fl. 0.7s, ec. 1.5s fl. 0.7s, ec. 4.7s	59 **18**	13	Black tower, white band; 32.	
8112 *A 1614*	- -St. Aubin, N. pier, head.	49° 11.2′ N 2° 09.9′ W	**Iso.R.** period 4s	41 **12**	10	Column.	
			Dir.F.W.R.G.	16 **5**			G. 248°-253°, W.-255°, R.-260°.
8116 *A 1614.2*	- -Fort, pier, head.	49° 11.2′ N 2° 09.5′ W	**Fl.R.** period 4s fl. 0.5s, ec. 3.5s	26 **8**	1		
8120 *A 1604*	- -Elizabeth Post Range, front.	49° 10.8′ N 2° 06.8′ W	**Oc.G.** period 5s lt. 4s, ec. 1s	33 **10**	11	Pylon, red rectangular daymark.	

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			CHANNEL ISLANDS (U.K.)				
8124 *A 1604.1*	---Albert pier, rear, 230 meters 022°42′ from front.	49° 10.8′ N 2° 06.8′ W	**Oc.R.** period 5s lt. 4s, ec. 1s	59 **18**	12	Pylon, red rectangular daymark; 49.	Synchronized with front.
8128 *A 1606*	--Platte Rock.	49° 10.2′ N 2° 07.3′ W	**Fl.R.** period 1.5s fl. 0.3s, ec. 1.2s	20 **6**	5	Red metal framework structure.	
8132 *A 1609*	--S. end of old harbor Range, front.	49° 10.7′ N 2° 06.7′ W	**F.G.**			White column.	
8136 *A 1609.1*	---Rear, 90 meters 078° from front.	49° 10.7′ N 2° 06.5′ W	**F.G.**			White column.	
8140 *A 1598*	-Demie de Pas.	49° 09.1′ N 2° 06.2′ W	**Mo.(D)W.R.** period 12s fl. 3s, ec. 1s fl. 1s, ec. 1s fl. 1s, ec. 5s	36 **11**	W. 14 R. 10	Black tower, upper portion yellow.	R. 130°-303°, W.-130°. **Horn:** 3 bl. ev. 60s.
	-RACON		**T(–)** period 120s		10		
8144 *A 1594*	-La Greve d'Azette Range, front.	49° 10.2′ N 2° 05.0′ W	**Oc.W.** period 5s lt. 4s, ec. 1s	75 **23**	14	White metal framework structure, red rectangular daymark; 64.	Visible 034°-129°.
8148 *A 1594.1*	-Mont Ube, rear, 1.9 km. 082° from front.	49° 10.3′ N 2° 03.5′ W	**Oc.R.** period 5s lt. 4s, ec. 1s	150 **46**	12	White metal framework structure; 45.	Visible 250°-095°. Reserve light of low power.
8152 *A 1588*	-Gorey Range, front.	49° 11.9′ N 2° 01.3′ W	**Oc.R.G.** period 5s lt. 4s, ec. 1s	27 **8**	12	White metal framework tower; 17.	R. 304°-352°, G.-304°.
8156 *A 1588.1*	--Rear, 490 meters 298° from front.	49° 12.0′ N 2° 01.7′ W	**Oc.R.** period 5s lt. 4s, ec. 1s	80 **24**	8	Stone wall; 4.	
8160 *A 1586*	-St. Catherine Bay, Verclut, breakwater, head.	49° 13.4′ N 2° 00.5′ W	**Fl.W.** period 1.5s fl. 0.2s, ec. 1.3s	60 **18**	13	Framework tower; 30.	
8164 *A 1584*	**-Sorel Point.**	49° 15.7′ N 2° 09.4′ W	**L.Fl.W.R.** period 7.5s fl. 2s, ec. 5.5s	163 **50**	**15**	Round concrete tower, black and white checkers; 10.	W. 095°-112°, R.-173°, W.-230°, R.-269°, W.-273°, obsc.-095°.
8168 *A 1585*	-Bonne Nuit Bay, Range, front.	49° 15.1′ N 2° 07.0′ W	**F.G.**	23 **7**	6		
8172 *A 1585.1*	--Rear, 170 meters 223° from front.	49° 15.1′ N 2° 07.2′ W	**F.G.**	112 **34**	6		
8176 *A 1622*	**-Grosnez Point.**	49° 15.5′ N 2° 14.7′ W	**Fl.(2)W.R.** period 15s fl. 0.7s, ec. 1.5s fl. 0.8s, ec. 12s	164 **50**	W. **19** R. **17**	White concrete hut.	W. 081°-188°, R.-241°, obsc.-081°.
	GUERNSEY:						
8180 *A 1580*	**-Les Hanois.**	49° 26.2′ N 2° 42.1′ W	**Fl.(2)W.** period 13s fl. 0.1s, ec. 3.1s fl. 0.1s, ec. 9.7s	110 **34**	**20**	Gray round granite tower, black lantern; 117. Helicopter platform.	Obscured 237°-294°. 4 F.R. on masts 1.27 miles 104°. **Horn:** 2 bl. ev. 60s.
8184 *A 1548*	**-Platte Fougere.**	49° 30.9′ N 2° 29.2′ W	**Fl.W.R.** period 10s fl. 1.3s, ec. 8.7s	50 **15**	**16**	White octagonal tower, black band; 82.	W. 155°-085°, R.-155°. **Horn:** 1 bl. ev. 45s.
	-RACON		**P(• – – •)**				
8188 *A 1548.5*	-Tautenay.	49° 30.2′ N 2° 26.7′ W	**Q.(3)W.R.** period 6s	23 **7**	W. 7 R. 6	Beacon, black and white stripes.	W. 050°-215°, R.-050°.
8192 *A 1552*	-Roustel, S. head.	49° 29.3′ N 2° 28.9′ W	**Q.W.**	33 **10**	7	Black and white checkered tower; 27.	

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			CHANNEL ISLANDS (U.K.)				
8196 *A 1550*	-Platte.	49° 29.1′ N 2° 29.5′ W	**Fl.W.R.** period 3s fl. 0.3s, ec. 2.7s	21 **6**	W. 7 R. 5	Green stone round tower; 30.	R. 024°-219°, W.-024°.
	HERM:						
8200 *A 1546.4*	-Epec ″E″.	49° 28.0′ N 2° 27.9′ W	**Fl.G.** period 3s			Green mast.	
8204 *A 1546.6*	-Vermerette ″V″.	49° 28.3′ N 2° 27.8′ W	**Fl.(2)Y.** period 5s			Beacon.	
8205 *A 1546.7*	-Gate Rock.	49° 27.9′ N 2° 27.4′ W	**Q.(9)W.** period 15s			W. CARDINAL YBY.	
8208 *A 1546*	-Alligande ″A″.	49° 27.9′ N 2° 28.8′ W	**Fl.(3)G.** period 5s			Black mast.	**Radar reflector.**
8212 *A 1559*	-Brehon.	49° 28.3′ N 2° 29.2′ W	**Iso.W.** period 4s	62 **19**	9	Beacon.	
8216 *A 1557*	-St. Sampson Harbor, N. pier, head.	49° 29.0′ N 2° 30.7′ W	**F.G.**	10 **3**	5	Post; 8.	Visible 230°-340°.
8220 *A 1558*	--S. pier Range, front.	49° 28.9′ N 2° 30.8′ W	**F.R.**	10 **3**	5	Post; 8.	Visible 230°-340°.
8224 *A 1558.1*	---Rear, 390 meters 286° from front.	49° 29.0′ N 2° 31.0′ W	**F.G.**	42 **13**		Clock tower; 39.	2 F.R. (vert.) on 2 chimneys 300 meters N.
8228 *A 1554*	-St. Sampson Harbor, Crocq Pier, head.	49° 29.0′ N 2° 31.1′ W	**F.R.**	36 **11**	5	Red column; 20.	Visible 250°-340°. Traffic signals.
	-St. Peter Port:						
8232 *A 1560*	**--New Harbor** Range, front.	49° 27.4′ N 2° 31.4′ W	**Al.W.R.** period 10s W. lt. 7.5s R. lt. 2.5s	46 **14**	**16**	Dark round granite tower, white on NE. face; 40.	Visible 187°-007°, unintensified landward. **Horn:** 1 bl. ev. 15s. **Radiobeacon** synchronized with fog signal.
8236 *A 1560.1*	---Belvedere, rear, 990 meters 220° from front.	49° 26.9′ N 2° 31.9′ W	**Oc.W.** period 10s lt. 7.5s, ec. 2.5s	200 **61**	14	White metal tower, white square daymark, orange stripe; 13.	Visible 179°-269°. Intensified 217°-223°.
8244 *A 1566*	---Saint Julians emplacement, head.	49° 27.5′ N 2° 31.8′ W	**F.G.**	15 **5**	1	Column; 10.	
8246 *A 1567*	---Fish quay, NW. head.	49° 27.3′ N 2° 31.8′ W	**F.R.**	6 **2**			
8246.5 *A 1567.2*	---SW. head.	49° 27.3′ N 2° 31.9′ W	**F.R.**	6 **2**			
8248 *A 1569*	---Range, front.	49° 27.4′ N 2° 31.9′ W	**Oc.R.** period 5s lt. 4s, ec. 1s	34 **10**	14	White framework tower, red lantern; 23.	
8248.5 *A 1569.1*	----Rear, 160 meters 265° from front.	49° 27.4′ N 2° 32.1′ W	**Iso.R.** period 2s	72 **22**	3		Visible 260°-270°.
8249 *A 1570*	--Queen Elizabeth II Marina.	49° 27.8′ N 2° 31.8′ W	**Dir.Oc.W.R.G.** period 3s	16 **5**	6		G. 258°-268°, W.-272°, R.-282°.
8252 *A 1562*	--White Rock Pier, head.	49° 27.4′ N 2° 31.6′ W	**Oc.G.** period 5s lt. 4s, ec. 1s	36 **11**	14	Round stone tower; 32.	Intensified 174°-354°. Traffic signals.
8256 *A 1574*	-St. Martins Point.	49° 25.3′ N 2° 31.7′ W	**Fl.(3)W.R.** period 10s fl. 1s, ec. 1.5s fl. 1s, ec. 1.5s fl. 1s, ec. 4s	50 **15**	14	White concrete flat-roofed building; 16.	R. 185°-191°, W.-011°, R.-081°, obsc.-185°. **Horn:** 3 bl. ev. 30s.

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	CHANNEL ISLANDS (U.K.)						
	SARK:						
8260 *A 1544*	**-Point Robert**.	49° 26.2′ N 2° 20.7′ W	**Fl.W.** period 15s fl. 0.4s, ec. 14.6s	213 **65**	**20**	White octagonal tower; 55.	Visible 138°-353°. Distress signals. **Horn:** 2 bl. ev. 30s.
8261 *A 1545*	-Corbet du Nez.	49° 27.1′ N 2° 22.1′ W	**Fl.(4)W.R.** period 15s	46 **14**	8	White wooden structure on rock; 3.	W. 057°-230° R.-057°. Wind generator close by.
8262 *A 1545.5*	Big Russel, Noire Pute.	49° 28.3′ N 2° 24.9′ W	**Fl.(2)W.R.** period 15s	26 **8**	6	On rock.	W. 220°-040°, R.-220°.
8264 *A 1532*	**Casquets.**	49° 43.3′ N 2° 22.6′ W	**Fl.(5)W.** period 30s fl. 0.1s, ec. 3.6s fl. 0.1s, ec. 3.6s fl. 0.1s, ec. 3.6s fl. 0.1s, ec. 3.6s fl. 0.1s, ec. 15.1s	120 **37**	**24**	Tower, red and white bands, red lantern; 75.	Shown 24 hours. **Horn:** (on E. tower) 2 bl. ev. 60s.
	RACON		**T(–)**		**25**		
8268 *A 1520*	*CHANNEL LIGHTSHIP,* W. end of Casquets traffic separation scheme.	49° 54.4′ N 2° 53.7′ W	**Fl.W.** period 15s	39 **12**	**25**	Red hull, light tower amidships.	**Nautophone:** 1 bl. ev. 20s.
	RACON		**O(– – –)**		**15**		
8272 *A 1521*	*East Channel Buoy,* E. end of Casquets traffic separation scheme.	49° 58.7′ N 2° 28.9′ W	**Fl.Y.** period 5s			SPECIAL Y, pillar, topmark.	**Whistle.**
	RACON		**T(–)** period 30s		10		
8280 *A 1523*	*"EC2" Buoy.*	50° 12.1′ N 1° 12.4′ W	**Fl.(4)Y.** period 15s			SPECIAL Y, pillar, topmark.	**Whistle.**
	RACON		**T(–)** period 30s		10		
	ALDERNEY:						
8288 *A 1538*	-Braye Harbor Range, front.	49° 43.4′ N 2° 11.8′ W	**Q.W.**	25 **8**	**17**	White column on concrete base; 7.	Visible 210°-220°.
8292 *A 1538.1*	- -Rear, 335 meters 215° from front.	49° 43.3′ N 2° 12.0′ W	**Q.W.**	55 **17**	**18**	White column on brickwork base; 16.	Visible 210°-220°.
8292.5 *A 1538.5*	- -Breakwater, head.	49° 43.8′ N 2° 11.5′ W	**L.Fl.W.** period 10s fl. 2s, ec. 8s	23 **7**	5		
8293 *A 1539*	- -Quay, head.	49° 43.6′ N 2° 11.9′ W	**2 F.R.** (vert.)	26 **8**	5		
8296 *A 1537*	-Chateau a l'Etoc Point.	49° 44.0′ N 2° 10.6′ W	**Iso.W.R.** period 4s	65 **20**	W. 10 R. 7	White column; 65.	R. 071°06′-111°06′, W.-151°06′.
8300 *A 1536*	**-Alderney.**	49° 43.8′ N 2° 09.8′ W	**Fl.(4)W.** period 15s fl. 0.1s, ec. 2.2s fl. 0.1s, ec. 2.2s fl. 0.1s, ec. 2.2s fl. 0.1s, ec. 8s	121 **37**	**23**	White tower, black band; 106.	Visible 085°-027°. **Horn:** 1 bl. ev. 30s.
	FRANCE-NORTH COAST						
8304 *A 1512*	**Cap de la Hague.**	49° 43.4′ N 1° 57.3′ W	**Fl.W.** period 5s fl. 0.1s, ec. 4.9s	157 **48**	**23**	Gray tower, white top; 167.	**Horn:** 1 bl. ev. 30s.

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			FRANCE-NORTH COAST				
8308 *A 1508*	Omonville-La Rogue.	49° 42.3′ N 1° 50.2′ W	**Iso.W.R.G.** period 4s	42 **13**	W. 11 R. 8 G. 8	White pylon, red top; 26.	G. 180°-252°, W.-262°, R.-287°, obsc.-180°.
8312 *A 1514*	La Plate (Ronde), about 3 km. 057° from Cap de la Hague Light.	49° 44.0′ N 1° 55.7′ W	**Fl.(2+1)W.R.** period 10s fl. 0.6s, ec. 0.6s fl. 0.6s, ec. 1.8s fl. 0.6s, ec. 5.8s	36 **11**	W. 9 R. 6	Yellow octagonal tower, black top; 62.	W. 115°-272°, R.-115°.
	CHERBOURG:						
	-Passe Ouest:						
8316 *A 1469*	--*Approach Whistle Buoy "CH1".*	49° 43.3′ N 1° 42.0′ W	**L.Fl.W.** period 10s fl. 3s, ec. 7s	26 **8**	4	SAFE WATER RW, pillar, topmark.	**Whistle.** **Radar reflector.**
8320 *A 1482*	--Dique Ouest (Querqueville).	49° 40.3′ N 1° 39.8′ W	**Fl.(4)G.** period 15s fl. 0.5s, ec. 2s fl. 0.5s, ec. 2s fl. 0.5s, ec. 2s fl. 0.5s, ec. 7s	26 **8**	4	White column, green top; 23.	
8324 *A 1484*	**--Fort Du Homet** Range, front.	49° 39.6′ N 1° 37.9′ W	**2 Dir.Q.W.** (horiz.)	17 **5**	**17**	White triangular daymark on parapet of jetty; 14.	Intensified 137°18′-143°18′ and 139°12′-145°12′. Lights 63 meters apart.
8328 *A 1484.1*	**---Gare Maritime,** rear, about 1.8 km. 140°18′ and 142°12′ from front.	49° 38.2′ N 1° 36.9′ W	**Dir.Q.W.**	114 **35**	**19**	Gray tower, white triangular daymark, point up; 115.	Intensified 140°-142°30′.
	-Cherbourg (Digue Centrale):						
8332 *A 1480*	**--Fort de l'Ouest.**	49° 40.5′ N 1° 38.9′ W	**Fl.(3)W.R.** period 15s fl. 0.2s, ec. 2.8s fl. 0.2s, ec. 2.8s fl. 0.2s, ec. 8.8s	62 **19**	W. **24** R. **20**	Gray round tower, red top; 30.	W. 122°-355°, R.-122°. **Horn:** 3 bl. ev. 60s.
8336 *A 1478*	--Fort Central.	49° 40.5′ N 1° 37.0′ W	**V.Q.(6)+L.Fl.W.** period 10s	16 **5**	4	S. CARDINAL YB, pillar; 9.	Visible 322°-032°.
8340 *A 1476*	--Fort de l'Est.	49° 40.3′ N 1° 35.9′ W	**Iso.G.** period 4s	62 **19**	9	White pylon, green top; 30.	
8344 *A 1470*	--Ile Pelee.	49° 40.2′ N 1° 35.1′ W	**Oc.(2)W.R.** period 6s lt. 1s, ec. 1s lt. 3s, ec. 1s	62 **19**	W. 10 R. 7	Red and white tower; 26.	R. 120°-055°, W.-120°.
8348 *A 1472*	-S. side of Passe Collignon.	49° 39.6′ N 1° 34.2′ W	**Fl.(2)R.** period 6s	15 **5**	4	White pylon, red top; 10.	
8352 *A 1486*	-Jetee du Homet Range, front, about 1397 meters from rear.	49° 39.5′ N 1° 37.0′ W	**F.G.**	32 **10**	9	White column, green top on block house; 30.	Forms range 124°18′ with common rear.
8356 *A 1486.1*	--Common rear, Terre-plein du Mielles.	49° 39.1′ N 1° 36.0′ W	**Dir.Iso.G.** period 4s	53 **16**	7	Pylon, black and white bands; 49.	Intensified 114°30′-134°30′.
			Q.W.	52 **16**	13	Same structure.	International number A1471.51. Emergency light.
8356.1 *A 1471.5*	---Jetee des Flamands E., front, 520 meters from common rear.	49° 39.3′ N 1° 35.9′ W	**Q.W.**	30 **9**	13	White pylon; 26.	Forms range 189° with common rear.
8364 *A 1488*	-Anchorage Range, front.	49° 39.6′ N 1° 38.5′ W	**Dir.Q.G.**	36 **11**	14	White pylon.	Intensified 190°-194°.
8368 *A 1488.1*	--Rear, 652 meters 192° from front.	49° 39.3′ N 1° 38.5′ W	**Dir.Q.G.**	84 **26**	**15**	Green post; 56	Intensified 189°-195°.
8372 *A 1495*	--E. mole, head.	49° 39.1′ N 1° 36.7′ W	**Oc.R.** period 4s lt. 3s, ec. 1s	30 **9**	8	White post, red top; 10.	

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8376 *A 1498*	--Gare Maritime, NE. corner.	49° 39.0′ N 1° 36.9′ W	**Fl.G.** period 4s fl. 1s, ec. 3s	7 **2**	6	Green column; 3.	
8380 *A 1496*	---NW. corner.	49° 39.0′ N 1° 37.0′ W	**Q.R.**	20 **6**	6	White column, red lantern; 20.	
8384 *A 1498.5*	---W. side.	49° 38.8′ N 1° 37.0′ W	**Oc.(2)R.** period 6s lt. 1s, ec. 1s lt. 3s, ec. 1s	10 **3**	3	Red post; 3.	Visible 006°-186°.
8386 *A 1499.5*	-Inner jetty.	49° 38.8′ N 1° 37.1′ W	**Fl.G.** period 2.5s	13 **4**	2	White tower, green top; 10.	
8388 *A 1499*	-Marina, pier, head.	49° 38.9′ N 1° 37.2′ W	**Oc.(2)G.** period 6s lt. 1s, ec. 1s lt. 3s, ec. 1s	23 **7**	6	Green column; 20.	
8392 *A 1491*	-Avant Port, S. side of entrance.	49° 39.2′ N 1° 37.8′ W	**F.R.**	36 **11**	6	White column, red top; 26.	
8396 *A 1492*	--Common rear, Bassin Napoleon.	49° 39.2′ N 1° 38.4′ W	**Q.W.**	52 **16**	8	Gray framework tower, white top.	Visible 250°-280°. In line 261° with N. and 268° with S. sides of entrance for swinging in Petite Rade.
8398 *A 1493*	-Inner Range, front.	49° 39.2′ N 1° 38.3′ W	**V.Q.W.**			Orange triangular daymark, black band; 13.	Visible 253°-262°.
8398.1 *A 1493.1*	--Rear, 255 meters 257° from front.	49° 39.1′ N 1° 38.5′ W	**V.Q.W.**			Orange triangular daymark, black band; 30.	Visible 253°-262°.
8400 *A 1490*	--N. side of entrance.	49° 39.3′ N 1° 37.8′ W	**F.G.**	36 **11**	6	White framework tower, green top; 26.	
8404 *A 1466*	**Le Becquet** Range, front.	49° 39.3′ N 1° 32.8′ W	**Dir.Oc.(2+1)W.** period 12s lt. 4s, ec. 1s lt. 4s, ec. 1s lt. 1s, ec. 1s	26 **8**	10	White octagonal tower; 20.	Intensified 183°-190°. Synchronized with rear.
8408 *A 1466.1*	-Rear, 49 meters 186°30′ from front.	49° 39.3′ N 1° 32.8′ W	**Dir.Oc.(2+1)R.** period 12s lt. 4s, ec. 1s lt. 4s, ec. 1s lt. 1s, ec. 1s	39 **12**	7	White octagonal tower, red top; 33.	Intensified 183°-190°.
8412 *A 1463*	Port de Levi.	49° 41.3′ N 1° 28.3′ W	**F.R.G.**	23 **7**	7	White and gray structure, white lantern; 20.	G. 050°-109°, R.-140°, obsc.-050°.
8416 *A 1462*	**Cap Levi.**	49° 41.8′ N 1° 28.4′ W	**Fl.R.** period 5s fl. 1s, ec. 4s	118 **36**	**22**	Gray tower, white top; 89.	
8420 *A 1458*	Anse de Vicq, entrance range, front.	49° 42.2′ N 1° 23.9′ W	**F.R.**	26 **8**	6	White tower red top; 16.	
8424 *A 1458.1*	-Rear, 403 meters 158° from front.	49° 42.0′ N 1° 23.8′ W	**F.R.**	46 **14**	6	Triangular daymark on white pylon, red top; 26.	
8428 *A 1454*	**Pointe de Barfleur.**	49° 41.8′ N 1° 15.9′ W	**Fl.(2)W.** period 10s fl. 0.1s, ec. 2.4s fl. 0.1s, ec. 7.4s	236 **72**	**29**	Gray tower, black top; 247.	**Horn:** (60 meters N.E.) 2 bl. ev. 60s (bl. 2s, si. 3s, bl. 2s, si. 53s).
	BARFLEUR:						
8432 *A 1444*	-Entrance Range, front.	49° 40.2′ N 1° 15.6′ W	**Oc.(3)W.** period 12s lt. 1.5s, ec. 1.5s lt. 1.5s, ec. 1.5s lt. 4.5s, ec. 1.5s	23 **7**	10	White square tower; 23.	

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
			FRANCE-NORTH COAST				
8436 *A 1444.1*	- -Rear, 288 meters 219° from front.	49° 40.1′ N 1° 15.8′ W	**Oc.(3)W.** period 12s lt. 1.5s, ec. 1.5s lt. 1.5s, ec. 1.5s lt. 4.5s, ec. 1.5s	43 **13**	10	Gray and white tower, green top; 43.	Visible 085°-355° Synchronized with front.
8440 *A 1448*	-Jetee Est, head.	49° 40.4′ N 1° 15.4′ W	**Oc.R.** period 4s lt. 3s, ec. 1s	16 **5**	7	White hut, red top; 13.	
8444 *A 1450*	-Jetee Ouest, head.	49° 40.4′ N 1° 15.5′ W	**Fl.G.** period 4s fl. 1s, ec. 3s	26 **8**	7	White pylon, green top; 23.	
8448 *A 1442*	Pointe de Saire, on redoubt.	49° 36.4′ N 1° 13.8′ W	**Oc.(2+1)W.** period 10s lt. 3.8s, ec. 0.6s lt. 0.6s, ec. 0.6s lt. 3.8s, ec. 0.6s	36 **11**	10	White tower, green top; 33.	
	ST. VAAST LA HOUGUE:						
8452 *A 1436*	-N. breakwater, head.	49° 35.3′ N 1° 15.6′ W	**Iso.G.** period 4s	20 **6**	2	White tank, green top; 20.	
8456 *A 1438*	-N. Groin, SW. side of entrance.	49° 35.2′ N 1° 15.6′ W	**Oc.(4)R.** period 12s lt. 1s, ec. 1s lt. 1s, ec. 1s lt. 1s, ec. 1s lt. 5s, ec. 1s	20 **6**	7	White hut, red top; 20.	
8460 *A 1434*	-Jetty, head.	49° 35.2′ N 1° 15.4′ W	**Oc.(2)W.R.G.** period 6s lt. 1s, ec. 1s lt. 3s, ec. 1s	39 **12**	W. 10 R. 7 G. 7	White octagonal tower, red top; 36.	R. 219°-237°, G.-310°, W.-350°, R.-040°, W. (unintensified)-219°. **Siren:** Mo.(N) ev. 30s.
8464 *A 1428*	La Hougue Range, front.	49° 34.3′ N 1° 16.4′ W	**Oc.W.** period 4s lt. 3s, ec. 1s	30 **9**	10	White pillar, green top; 23.	
8468 *A 1428.1*	-Rear, 3.3 km 267° from front.	49° 34.2′ N 1° 19.1′ W	**Oc.(4)W.R.G.** period 12s lt. 1s, ec. 1s lt. 1s, ec. 1s lt. 1s, ec. 1s lt. 5s, ec. 1s	295 **90**	W. 11 R. 8 G. 8	White octagonal tower, green top; 43.	W. 171°-316°, G.-321°, R.-342°, W.-355°.
	ILES ST. MARCOUF:						
8472 *A 1424*	-Ile du Large, on fort.	49° 29.9′ N 1° 08.8′ W	**V.Q.(3)W.** period 5s	59 **18**	9	Gray tower, green top; 56.	
8476 *A 1418*	**Carentan Range,** front.	49° 20.5′ N 1° 11.2′ W	**Dir.Oc.(3)R.** period 12s lt. 1.5s, ec. 1.5s lt. 1.5s, ec. 1.5s lt. 4.5s, ec. 1.5s	20 **6**	**17**	White post, red top; 20.	Synchronized with rear. Intensified 208°12′-210°42′.
8480 *A 1418.1*	-Rear, 723 meters 209°30′ from front.	49° 20.1′ N 1° 11.5′ W	**Oc.(3)W.** period 12s lt. 4.5s, ec. 1.5s lt. 1.5s, ec. 1.5s lt. 1.5s, ec. 1.5s	46 **14**	11	White pylon, green top; 49.	Visible 120°-005°.
8484 *A 1412*	**Isigny** Range, front.	49° 19.6′ N 1° 06.8′ W	**Dir.Oc.(2+1)W.** period 12s lt. 4s, ec. 1s lt. 4s, ec. 1s lt. 1s, ec. 1s	23 **7**	**18**	White post; 23.	Synchronized with rear. Intensified 170°30′- 174°30′.
8488 *A 1412.1*	-Rear, 625 meters 172°30′ from front.	49° 19.2′ N 1° 06.7′ W	**Dir.Oc.(2+1)W.** period 12s lt. 1s, ec. 1s lt. 4s, ec. 1s lt. 4s, ec. 1s	62 **19**	**18**	White pylon, black top; 75.	Intensified 170°30′-174°30′.

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
			FRANCE-NORTH COAST				
8492 *A 1410*	La Maresquerie.	49° 23.2′ N 1° 02.7′ W	**Oc.W.** period 4s lt. 3s, ec. 1s	92 **28**	12	White post; 39.	Visible 090°-270°.
8496 *A 1411*	-Entrance Range, front.	49° 23.4′ N 1° 02.8′ W	**Dir.Q.W.**	30 **9**	**15**	White metal post, red top, on platform; 23.	Visible 144°30′-147°30′.
8500 *A 1411.1*	- -Rear, 102 meters 146° from front.	49° 23.4′ N 1° 02.8′ W	**Dir.Q.W.**	39 **12**	**15**	White mast, red top; 33.	Visible 144°30′-147°30′.
8504 *A 1408*	Grandcamp-les-Bains, E. jetty, head.	49° 23.5′ N 1° 02.9′ W	**Oc.(2)R.** period 6s lt. 1s, ec. 1s lt. 3s, ec. 1s	30 **9**	9	Red top white column; 26.	**Siren:** Mo.(N) ev. 30s.
8508 *A 1409*	-W. jetty, head.	49° 23.5′ N 1° 03.0′ W	**Fl.G.** period 4s fl. 1s, ec. 3s	30 **9**	6	White column, green top; 46.	
8512 *A 1406*	-Perre.	49° 23.4′ N 1° 02.5′ W	**Oc.W.** period 4s lt. 3s, ec. 1s	26 **8**	12	Green pylon on white hut; 22.	Visible 083°-263°.
8516 *A 1400*	Port en Bessin Range, front.	49° 21.0′ N 0° 45.5′ W	**Oc.(3)W.** period 12s lt. 1.5s, ec. 1.5s lt. 1.5s, ec. 1.5s lt. 4.5s, ec. 1.5s	82 **25**	10	White mast, green top on hut; 26.	Visible 069°-339°. In W. sector sound is continuous; in E. sector sound is intermittent. **Siren:** swings 90° each side of channel ev. 20s.
8520 *A 1400.1*	-Rear, 93 meters 204° from front.	49° 21.0′ N 0° 45.5′ W	**Oc.(3)W.** period 12s lt. 1.5s, ec. 1.5s lt. 1.5s, ec. 1.5s lt. 4.5s, ec. 1.5s	139 **42**	11	Gray and white house; 39.	Visible 114°-294°. Synchronized with front. **Radiobeacon** 37 meters NW.
	PORT-EN-BESSIN:						
8524 *A 1403*	-Jetee Est.	49° 21.2′ N 0° 45.4′ W	**Oc.R.** period 4s lt. 3s, ec. 1s	46 **14**	7	Red pylon; 33.	
8528 *A 1404*	-Jetee Ouest.	49° 21.2′ N 0° 45.4′ W	**Fl.W.G.** period 4s fl. 1s, ec. 3s	46 **14**	W. 10 G. 7	Green metal pylon; 30.	G. 065°-114°30′, W.-065°.
8532 *A 1396*	**Pointe de Ver.**	49° 20.5′ N 0° 31.1′ W	**Fl.(3)W.** period 15s fl. 0.2s, ec. 2.8s fl. 0.2s, ec. 2.8s fl. 0.2s, ec. 8.8s	138 **42**	**26**	White square tower, gray top; 53.	
8540 *A 1390*	-Jetee Est, head.	49° 20.3′ N 0° 27.4′ W	**Oc.(2)R.** period 6s lt. 1s, ec. 1s lt. 3s, ec. 1s	29 **9**	7	Dark brown wooden pylon, upper part red; 39.	
8544 *A 1391*	-Jetee Ouest, submerged.	49° 20.4′ N 0° 27.4′ W	**Iso.W.G.** period 4s	23 **7**	W. 9 G. 6	Wooden pylon, upper part green; 46.	W. 135°-235°, G.-135°. Sounded 2 hrs. before and 2 hrs. after high tide. **Horn:** 1 bl. ev. 30s.
8552 *A 1377*	-Main, E. of dock.	49° 16.8′ N 0° 14.9′ W	**Oc.W.R.** period 4s lt. 3s, ec. 1s	121 **37**	W. **17** R. 13	White tower, red top; 125.	R. 115°-151°, W.-115°. Storm signal lights are shown from tower.
8556 *A 1378*	-Dique Est, head.	49° 18.1′ N 0° 14.6′ W	**Oc.(2)R.** period 6s lt. 1s, ec. 1s lt. 3s, ec. 1s	23 **7**	8	White pylon, red top; 36.	Iso.G. 4s shown 150 meters W. V.Q.(3)G. 5s and V.Q.(3)R. 5s mark channel 540 meters S.
8560 *A 1379*	-Jetee Ouest, head.	49° 17.5′ N 0° 15.2′ W	**Iso.G.** period 4s	36 **11**	7	Platform on white pylon, green top; 56.	Sounded from 2.5 hrs. before to 3 hrs. after H.W. Iso.R. 4s shown 100 meters E. **Nautophone:** 1 bl. ev. 10s.

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
			FRANCE-NORTH COAST				
8568 *A 1381*	-E. jetty, head, range, front.	49° 17.1′ N 0° 14.8′ W	**Dir.Oc.(3+1)R.** period 12s lt. 3s, ec. 1s lt. 3s, ec. 1s lt. 1s, ec. 1s lt. 1s, ec. 1s	33 **10**	**17**	White pylon, red top.	Synchronized with rear. Intensified 183°30-186°30′. Q.R. 30 meters W. **Radar reflector.**
8572 *A 1381.1*	- -Rear, 610 meters 184°30′ from front.	49° 16.9′ N 0° 14.8′ W	**Dir.Oc.(3+1)R.** period 12s lt. 3s, ec. 1s lt. 3s, ec. 1s lt. 1s, ec. 1s lt. 1s, ec. 1s	98 **30**	**17**	Tripod, red ball.	Intensified 183°30′-186°30′.
8580 *A 1374*	Dives-sur-Mer.	49° 17.8′ N 0° 05.2′ W	**Oc.(2+1)W.R.G.** period 12s lt. 1s, ec. 1s lt. 4s, ec. 1s lt. 4s, ec. 1s	20 **6**	W. 12 R. 9 G. 9	Red hut; 16.	G. 125°-157°, W.-162°, R.-194°, obsc.-125°.
	TROUVILLE:						
8584 *A 1284*	-Jetee Ouest, head.	49° 22.1′ N 0° 04.4′ E	**Q.G.**	36 **11**	9	White turret, upper part green; 33.	
8588 *A 1282.2*	-Jetee Est, submerged, head.	49° 22.3′ N 0° 04.4′ E	**Fl.(4)W.R.** period 12s fl. 1s, ec. 1s fl. 1s, ec. 1s fl. 1s, ec. 1s fl. 1s, ec. 5s	26 **8**	W. 7 R. 4	White metal pylon, red top; 49.	W. 131°-175°, R.-131°.
8592 *A 1282*	-Jetee Ouest.	49° 22.4′ N 0° 04.2′ E	**Fl.W.G.** period 4s fl. 1s, ec. 3s	33 **10**	W. 9 G. 6	Black pylon; 52.	W. 005°-176°, G.-005°.
8596 *A 1285*	-Nouveau mole, 0.3 meters SE. of jetty, W. head.	49° 22.2′ N 0° 04.4′ E	**Iso.G.** period 4s	29 **9**	5	Green fiberglass pole; 23.	
8600 *A 1283*	-Entrance Range, front.	49° 22.1′ N 0° 04.8′ E	**Oc.R.** period 4s lt. 3s, ec. 1s	36 **11**	12	White tower; red top; 36.	Visible 330°-150°. **Horn:** 2 bl. ev. 30s. Sounded from 3 hrs. before to 3 hrs. after H.W.
8604 *A 1283.1*	- -Rear, 217 meters 148° from front, La Cahotte.	49° 22.0′ N 0° 04.7′ E	**Oc.R.** period 4s	56 **17**	10	White pylon, red top; 49.	Visible 120°-170°. Synchronized with front.
	SEINE ESTUARY:						
8608 *A 1254*	*-LHA LANBY.*	49° 31.3′ N 0° 09.9′ W	**Mo.(A)W.** period 12s	33 **10**	9	SAFE WATER RW, superbuoy.	Q.W. riding lights.
	-RACON		**(• • • • • • • •)**		8		
	-Honfleur:						
8612 *A 1286*	- -Dique de Ratier ″A″, W. extremity of new dike.	49° 25.9′ N 0° 06.6′ E	**V.Q.W.**	33 **10**	4	Metal column with shelter on black platform; 33.	**Radar reflector.**
8616 *A 1290*	**- -Falaise des Fonds.**	49° 25.5′ N 0° 12.9′ E	**Fl.(3)W.R.G.** period 12s fl. 1s, ec. 1.5s fl. 1s, ec. 1.5s fl. 1s, ec. 6s	49 **15**	W. **17** R. 13 G. 13	White tower, green top; 59.	G. 040°-080°, R.-084°, G.-100°, W.-109°, R.-162°, G.-260°.
8618 *A 1289*	-Digue de Ratier.	49° 25.8′ N 0° 12.8′ E	**V.Q.(9)W.** period 10s	23 **7**	7	W. CARDINAL YBY, pylon, topmark.	
8620 *A 1296*	- -Dique Ouest, head.	49° 25.7′ N 0° 13.8′ E	**Q.G.**	32 **10**	6	Green pylon; 26.	
8628 *A 1256*	**-Cap de la Heve.**	49° 30.8′ N 0° 04.1′ E	**Fl.W.** period 5s fl. 0.1s, ec. 4.9s	404 **123**	**24**	White octagonal tower, red top; 105.	Visible 225°-196°.

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
			FRANCE-NORTH COAST				
	LE HAVRE:						
8632 *A 1260*	**-Munier Quai d'Escale** Range, front.	49° 29.0′ N 0° 06.5′ E	**Dir.F.W.**	118 **36**	**25**	Gray column, green top; 115.	Intensified 106°-108°.
8636 *A 1260.1*	--Rear, 1370 meters 106°48′ from front.	49° 28.8′ N 0° 07.6′ E	**Dir.F.W.**	256 **78**	**25**	Gray tower, green top; 253.	Intensified 106°-108°. **Radar reflector.**
8640 *A 1261*	**-Old Pass** Range, front.	49° 29.5′ N 0° 05.8′ E	**Dir.F.R.**	69 **21**	**19**	White pylon, red top; 59.	Intensified 088°42′-091°12′. Occasional.
8644 *A 1261.1*	--Rear, 620 meters 090° from front.	49° 29.6′ N 0° 06.4′ E	**Dir.F.R.**	141 **43**	**19**	Small tower on house, red lantern; 135.	Intensified 088°42′-091°12′. Occasional.
8648 *A 1262*	-Dique Nord, outer head.	49° 29.2′ N 0° 05.4′ E	**Fl.R.** period 5s fl. 0.1s, ec. 4.9s	49 **15**	**21**	White pylon, red top; 49.	**Horn:** 1 bl. ev. 15s.
8652 *A 1266*	-Yacht basin.	49° 29.3′ N 0° 05.6′ E	**Fl.(2)G.** period 6s	16 **5**	2	White column, green top; 9.	
8656 *A 1264*	-Digue Sud, outer head.	49° 29.1′ N 0° 05.4′ E	**V.Q.(3)G.** period 2s	49 **15**	11	White framework structure, green top; 46.	
	-Bassin Theophile Ducrocq:						
8660 *A 1274*	--N. mole, SW. spur, Bassin Ducrocq.	49° 28.9′ N 0° 06.3′ E	**Oc.(2)R.** period 6s lt. 1s, ec. 1s lt. 3s, ec. 1s	23 **7**	6	White pylon, red top; 9.	**Horn:** 2 bl. ev. 20s. Occas. **Radar reflector.**
8664 *A 1274.4*	--S. mole.	49° 28.8′ N 0° 06.3′ E	**Oc.(2)G.** period 6s lt. 1s, ec. 1s lt. 3s, ec. 1s	23 **7**	6	White tower, green top; 16.	**Radar reflector.**
8668 *A 1276*	--Charles La Roche, breakwater, W. head Range, front.	49° 28.0′ N 0° 07.0′ E	**F.G.**				
8672 *A 1276.1*	---Rear, 140 meters 154° from front.	49° 28.4′ N 0° 07.0′ E	**F.G.**				
8676 *A 1277*	-Basin No. ″2" Range, front.	49° 28.3′ N 0° 07.2′ E	**F.G.**				
8680 *A 1277.1*	---Rear, 140 meters 154° from front.	49° 28.2′ N 0° 07.3′ E	**F.G.**				
8684 *A 1278*	--S. side of Basin, Range, front.	49° 28.0′ N 0° 07.0′ E	**F.R.**	23 **7**			
8688 *A 1278.1*	---Rear, about 60 meters 170°42′ from front.	49° 28.3′ N 0° 07.3′ E	**F.R.**	26 **8**			
8692 *A 1279*	--Laroche, breakwater Range, front.	49° 28.0′ N 0° 08.0′ E	**F.G.**	26 **8**		Structure; 23.	
8696 *A 1279.1*	---Rear, 46 meters 142° from front.	49° 28.2′ N 0° 07.6′ E	**F.G.**	35 **11**		Structure; 29.	
8700 *A 1274.6*	--	49° 28.4′ N 0° 07.0′ E	**Dir.Oc.W.R.G.** period 4s lt. 3s, ec. 1s	49 **15**	W. 11 R. 10 G. 10	White support, green top; 42.	G. 183°-190°, W.-194°, R.-201°. Shown 24 hours.
8702 *A 1280.7*	--Dique Charles Laroch.	49° 28.1′ N 0° 08.3′ E	**Dir.Oc.W.R.G.** period 4s lt. 3s, ec. 1s	26 **8**	W. 12 R. 11 G. 11	White pyramidal tower, green top; 20.	G. 118°-119°, W.-120°, R.-121°.
	ANTIFER TERMINAL:						
8704 *A 1250.8*	-Harbor Approach.	49° 39.5′ N 0° 09.2′ E	**Dir.Oc.W.R.G.** period 4s lt. 3s, ec. 1s	79 **24**	W. **15** R. 13 G. 13	White pylon, black top; 65.	G. 068°18′-078°18′, W.-088°18′, R.-098°18′.

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
			FRANCE-NORTH COAST				
8708 *A 1251.84*	-Maurice Thieullent Dique (main breakwater), head.	49° 39.8′ N 0° 07.1′ E	**Q.R.**	65 **20**	7	White metal support, red top; 56.	
8712 *A 1251.62*	- -NW. angle.	49° 40.2′ N 0° 07.5′ E	**F.Vi.**	49 **15**	5	White truncated pylon, purple top; 26.	
8716 *A 1251.6*	- -NE. angle.	49° 40.3′ N 0° 08.2′ E	**F.Vi.**	49 **15**	5	White truncated pylon, purple top; 26.	
8720 *A 1251.7*	- -Berth ″2″.	49° 40.3′ N 0° 08.2′ E	**Dir.Oc.(2)W.R.G.** period 6s lt. 1s, ec. 1s lt. 3s, ec. 1s	79 **24**	W. **15** R. 13 G. 13	White metal support, red top; 56.	G. 334°30′-346°30′, W.-358°30′, R.-004°30′.
8724 *A 1251.8*	- -Berth ″3″.	49° 40.3′ N 0° 07.8′ E	**Dir.Oc.W.R.G.** period 4s lt. 3s, ec. 1s	69 **21**	W. **15** R. 13 G. 13	White metal support, red top; 56.	R. 352°30′-358°30′, W.-010°30′, G.-022°30′.
8726	*-Approach Buoy ″A5″.*	49° 46.0′ N 0° 17.5′ W	**V.Q.(9)W.** period 10s			W. CARDINAL YBY, pillar, topmark.	**Radar reflector.**
	-RACON		**K(– • –)**				
8727 *A 1250.2*	**Antifer** approach range, front.	49° 38.3′ N 0° 09.2′ E	**Dir.Oc.W.** period 4s lt. 3s, ec. 1s	344 **105**	**22**	White pylon, green top; 23.	Visible 127°-128°. Dir.F.W. (occas.) 33M, visible 126°30′-128°30′ by day.
8727.1 *A 1250.21*	-Rear, 430 meters 127°30′ from front.	49° 38.2′ N 0° 09.5′ E	**Dir.Oc.W.** period 4s	407 **124**	**22**	White pylon, green top; 43.	Visible 127°-128°. Dir.F.W. (occas.) 33M, visible 126°30′-128°30′ by day
	CHENAL D'ANTIFER:						
8728 *A 1251*	-Bassin de Caux, Mole Ouest, head.	49° 39.0′ N 0° 08.8′ E	**Fl.R.** period 4s fl. 1s, ec. 3s	42 **13**	5	White mast, red top; 26.	
8732 *A 1251.4*	- -Jetee Est, head.	49° 39.1′ N 0° 09.0′ E	**Fl.G.** period 4s fl. 1s, ec. 3s	42 **13**	5	White mast, green top; 26.	
8736 *A 1251.2*	- -Leading.	49° 39.3′ N 0° 09.1′ E	**Dir.Oc.W.R.G.** period 4s lt. 3s, ec. 1s	39 **12**	W. **15** R. 11 G. 11	Pylon; 16.	G. 006°30′-017°30′, W.-019°30′, R.-036°30′.
8740 *A 1250*	**Cap d'Antifer.**	49° 41.1′ N 0° 10.0′ E	**Fl.W.** period 20s fl. 0.5s, ec. 19.5s	420 **128**	**29**	Gray octagonal tower, green top; 125.	Obscured 222°-021°.
8744 *A 1248*	Yport Range, front.	49° 44.4′ N 0° 18.5′ E	**Oc.W.** period 4s lt. 3s, ec. 1s	36 **11**		White post, green top; 23.	
8748 *A 1248.1*	-Rear, 30 meters 166° from front.	49° 44.4′ N 0° 18.6′ E	**Oc.W.** period 4s lt. 3s, ec. 1s	46 **14**		White pylon, green top on house; 20.	
8752 *A 1244*	**Fecamp.**	49° 46.0′ N 0° 21.8′ E	**Fl.(2)W.** period 10s fl. 0.3s, ec. 2.2s fl. 0.3s, ec. 7.2s	49 **15**	**16**	Gray tower, red top; 46.	Sounded from 2½ hrs. before up to 2 hrs. after H.W. **Horn:** 2 bl. ev. 30s.
8755 *A 1245*	Pilot Range, front.	49° 46.0′ N 0° 21.7′ E	**Q.R.**	33 **10**	4	White metal post, red top, round daymark; 23.	
8756 *A 1246*	-Rear, about 235 meters 082° from front.	49° 45.9′ N 0° 21.9′ E	**Q.G.**	46 **14**	9	Gray tower, green top, 33.	Visible shore-217°.
8760 *A 1238*	St. Valery en Caux.	49° 52.5′ N 0° 42.5′ E	**Fl.(2)G.** period 6s fl. 1s, ec. 1s fl. 1s, ec. 3s	43 **13**	14	Green tower; 39.	
8764 *A 1239*	-Jetee Est, head.	49° 52.4′ N 0° 42.7′ E	**Fl.(2)R.** period 6s fl. 1s, ec. 1s fl. 1s, ec. 3s	26 **8**	4	White pylon, red top; 20.	

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
			FRANCE-NORTH COAST				
8768 *A 1234*	**Pointe d'Ailly.**	49° 55.0′ N 0° 57.5′ E	**Fl.(3)W.** period 20s fl. 0.1s, ec. 3.9s fl. 0.1s, ec. 3.9s fl. 0.1s, ec. 11.9s	312 **95**	**31**	White square tower, green top; 79.	**Horn:** 3 bl. ev. 60s.
	DIEPPE:						
8772	*-Entrance Bell Buoy "D1".*	49° 57.2′ N 1° 01.3′ E	**V.Q.(3)W.** period 5s			E. CARDINAL BYB, pillar.	**Bell.**
8776 *A 1230*	-Jetee Ouest.	49° 56.2′ N 1° 05.0′ E	**Iso.G.** period 4s	36 **11**	8	White tower, green top on house, 23.	**Horn:** 1 bl. ev. 30s.
8784 *A 1232.1*	-Falaise du Pollet.	49° 56.0′ N 1° 05.4′ E	**Q.W.**	115 **35**	11	Red and white structure; 13.	Visible 105°30′-170°30′.
8788 *A 1228*	-Jetee Est, head.	49° 56.2′ N 1° 05.1′ E	**Iso.R.** period 4s	39 **12**	8	White metal tower, red top; 33.	
	LE TREPORT:						
8792 *A 1222*	**-Jetee Ouest.**	50° 03.9′ N 1° 22.2′ E	**Fl.(2)G.** period 10s fl. 0.4s, ec. 2.1s fl. 0.4s, ec. 7.1s	49 **15**	**20**	White tower, upper part green; 46.	**Horn:** Mo.(N) ev. 30s. Sounded from 2 hrs. before up to 1¾ hrs. after H.W.
8796 *A 1224*	-Jetee Est, head.	50° 03.9′ N 1° 22.3′ E	**Oc.R.** period 4s lt. 3s, ec. 1s	26 **8**	6	White column, upper part red; 23.	
8797 *A 1226*	-Jetty, W. head.	49° 58.8′ N 1° 12.3′ E	**Fl.(4)Y.** period 15s		2		**Horn:** 2 bl. ev. 60s.
8800 *A 1220*	**Ault.**	50° 06.3′ N 1° 27.2′ E	**Oc.(3)W.R.** period 12s lt. 4.5s, ec. 1.5s lt. 1.5s, ec. 1.5s lt. 1.5s, ec. 1.5s	312 **95**	W. **18** R. 14	White tower, red top; 92.	W. 040°-175°, R.-220°.
	BAIE DE SOMME:						
8804 *A 1208*	**-Cayeux-sur-Mer.**	50° 11.7′ N 1° 30.7′ E	**Fl.R.** period 5s fl. 0.3s, ec. 4.7s	105 **32**	**22**	White tower, red top; 105.	
8808 *A 1210*	-Le Hourdel, S. side of entrance.	50° 12.9′ N 1° 34.0′ E	**Oc.(3)W.G.** period 12s lt. 1.5s, ec. 1.5s lt. 1.5s, ec. 1.5s lt. 4.5s, ec. 1.5s	62 **19**	W. 12 G. 9	White tower, green top; 59.	W. 053°-248°, G.-323°. **Horn:** 3 bl. ev. 30s.
8812 *A 1211*	-Le Crotoy, N. side of entrance.	50° 12.9′ N 1° 37.4′ E	**Oc.(2)R.** period 6s lt. 1s, ec. 1s lt. 3s, ec. 1s	62 **19**	9	White pylon; 36.	Obscured 135°-285°.
8816 *A 1215*	-St. Valery sur Somme, extremity of seawall.	50° 12.3′ N 1° 35.9′ E	**Fl.(3)G.** period 6s fl. 0.2s, ec. 0.8s fl. 0.2s, ec. 0.8s fl. 0.2s, ec. 3.8s	7 **2**	2	Green pylon; 20.	**Radar reflector.**
8820 *A 1214*	- -S. side of entrance.	50° 11.5′ N 1° 37.6′ E	**Iso.G.** period 4s	29 **9**	9	White metal support, green top, hut; 23.	Visible 347°-222°.
8824 *A 1216*	- -Seaward dike, head.	50° 11.2′ N 1° 38.6′ E	**Fl.R.** period 4s fl. 1s, ec. 3s	30 **9**	9	White metal support, hut, red top; 21.	Visible 000°-250°.
8828 *A 1202*	**Berck Plage.**	50° 23.9′ N 1° 33.7′ E	**Fl.W.** period 5s fl. 0.4s, ec. 4.6s	144 **44**	**23**	Tower, red and white bands, green top; 147.	

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
			FRANCE-NORTH COAST				
8832 *A 1196*	**Le Touquet.**	50° 31.4′ N 1° 35.6′ E	**Fl.(2)W.** period 10s fl. 0.5s, ec. 2s fl. 0.5s, ec. 7s	180 **55**	**25**	Orange tower, brown band, white and green top; 184.	
8840 *A 1194*	Camiers.	50° 32.9′ N 1° 36.4′ E	**Oc.(2)W.R.G.** period 6s lt. 1s, ec. 1s lt. 1s, ec. 3s	56 **17**	W. 10 R. 7 G. 7	Red metal framework tower; 36.	G. 015°-090°, W.-105°, R.-141°.
8841	*Bassurelle Buoy.*	50° 32.8′ N 0° 58.2′ E	**Fl.(4)R.** period 15s			PORT (A) R, pillar, topmark.	**Whistle.**
	RACON		**B(– • • •)**		6		
8842	*N. Vergoyer Buoy.*	50° 39.7′ N 1° 22.3′ E	**V.Q.W.**			N. CARDINAL BY, pillar, topmark.	
	RACON		**C(– • – •)**		5		
8844 *A 1190*	**Cap d'Alprech.**	50° 42.0′ N 1° 33.8′ E	**Fl.(3)W.** period 15s fl. 0.1s, ec. 2.9s fl. 0.1s, ec. 2.9s fl. 0.1s, ec. 8.9s	203 **62**	**23**	White tower, black top; 56.	3 F.R. 40m on pylon about 600 meters NE. **Radiobeacon.**
	BOULOGNE:						
8856 *A 1168*	-Dique Nord, head.	50° 44.8′ N 1° 34.3′ E	**Fl.(2)R.** period 6s fl. 1s, ec. 1s fl. 1s, ec. 3s	33 **10**	7	Red tower; 13.	
8860 *A 1170*	**-Dique Sud Carnot.**	50° 44.5′ N 1° 34.1′ E	**Fl.(2+1)W.** period 15s fl. 0.1s, ec. 2.5s fl. 0.1s, ec. 6.1s fl. 0.1s, ec. 6.1s	82 **25**	**19**	White tower, green top; 72.	Reserve light range 14M. **Horn:** 3 bl. (2+1) ev. 60s.
8864 *A 1172*	-Ro Ro Berths Range, front.	50° 43.7′ N 1° 34.1′ E	**F.G.**	53 **16**	8	Dolphin.	Visible 107°-287°.
8868 *A 1172.1*	- -Rear, 488 meters 197° from front.	50° 43.4′ N 1° 34.0′ E	**F.R.**	75 **23**	13	Red post, white band; 49.	Intensified 188°-206°.

Section 8

North Sea-France, Belgium and The Netherlands
Including Westerschelde

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
			FRANCE-NORTH SEA				
	BOULOGNE:						
8872 *A 1174*	-Darse Sarraz-Bournet.	50° 43.7′ N 1° 34.7′ E	**Oc.(2)R.** period 6s lt. 1s, ec. 1s lt. 3s, ec. 1s	26 **8**	6	White pylon, red top; 23.	
8876 *A 1175*	- -W. side of entrance.	50° 43.7′ N 1° 34.6′ E	**Iso.G.** period 4s	26 **8**	5	White pylon, green top; 23.	
8880 *A 1182*	-Gare Maritime Range, front.	50° 43.7′ N 1° 35.7′ E	**F.G.**	13 **4**	5	Gray octagonal pylon, green top; 30.	Visible 033°-213°. Lighted triangle also shown.
8884 *A 1182.1*	-Rear, center of Quai Gambetta, 560 meters 122°24′ from front.	50° 43.6′ N 1° 36.2′ E	**Dir.F.R.**	144 **44**	11	Gray pylon, upper part red; 141.	Intensified 113°-133°. F.W.R.(vert.) on each of 2 towers 0.5 mile SE.
8888 *A 1180*	-Jetee SW. head.	50° 43.9′ N 1° 35.2′ E	**F.G.**	56 **17**	5	White column, green top; 43.	**Horn:** 1 bl. ev. 30s (bl. 3s, si. 27s).
8892 *A 1178*	-Jetee NE. head.	50° 43.9′ N 1° 35.3′ E	**F.R.**	36 **11**	7	Red turret; 33.	
8896 *A 1166*	**Cap Gris Nez.**	50° 52.2′ N 1° 35.0′ E	**Fl.W.** period 5s fl. 0.4s, ec. 4.6s	236 **72**	**29**	White tower, black top; 102.	Visible 005°-232°. **Horn:** 1 bl. ev. 60s (bl. 3s, si. 57s).
8900 *A 1160*	Sangatte.	50° 57.2′ N 1° 46.5′ E	**Oc.W.G.** period 4s lt. 3s, ec. 1s	40 **12**	W. 8 G. 6	White metal pylon, black top; 26.	G. 065°-089°, W.-152°, G.-245°.
	CALAIS:						
8904 *A 1144*	-Main.	50° 57.7′ N 1° 51.2′ E	**Fl.(4)W.** period 15s fl. 0.4s, ec. 2.1s fl. 0.4s, ec. 2.1s fl. 0.4s, ec. 2.1s fl. 0.4s, ec. 7.1s	194 **59**	**22**	White octagonal tower, black top; 167.	Visible 073°-260°.
8905 *A 1158*	Maritime Station.	50° 58.0′ N 1° 51.4′ E	**Dir.F.R.**	46 **14**	14	Gray tower, red top.	Intensified 115°30′-121°30′.
8908 *A 1146*	**-Jetee Est.**	50° 58.4′ N 1° 50.5′ E	**Fl.(2)R.** period 6s fl. 0.1s, ec. 1.4s fl. 0.1s, ec. 4.4s	39 **12**	**17**	Gray tower, red top; 33.	2 Fl.(2)W. 6s (vert.) shown in fog, on request. **Horn:** 2 bl. ev. 40s (bl. 2s, si. 3s, bl. 2s, si. 33s). **Radar reflector.**
8912 *A 1148*	-Jetee Ouest, head.	50° 58.3′ N 1° 50.4′ E	**Iso.G.** period 3s	39 **12**	9	White tower, green top; 40.	Fl.W. 5s shown in fog, on request. **Bell:** 1 stroke ev. 5s.
8913 *A 1157*	Quai de Maree.	50° 58.1′ N 1° 50.9′ E	**2 F.Y.** (vert.)	20 **6**		Gray post; 26.	**Horn:** 4 bl. ev. 30s (bl. 3s, si. 3s, bl. 3s, si. 3s, bl. 3s, si. 3s, bl. 3s, si. 9s).
8914 *A 1157.4*	-Inner harbor, W. side.	50° 58.0′ N 1° 50.8′ E	**Dir.F.G.**	16 **5**	14	Gray column, green top; 13.	Intensified 291°-297°.
	GRAVELINES:						
8924 *A 1132.2*	-Jetee Est, head.	51° 01.0′ N 2° 05.7′ E	**Fl.(3)R.** period 12s fl. 0.5s, ec. 2s fl. 0.5s, ec. 2s fl. 0.5s, ec. 6.5s	16 **5**	6	Metal post, red top; 33.	V.Q.W. 6m 4M marks head of submerged jetty close NNW.

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
			FRANCE-NORTH SEA				
8928 *A 1132*	-Jetee Ouest, head.	51° 01.0′ N 2° 05.6′ E	**Fl.(2)W.G.** period 6s fl. 0.5s, ec. 1.4s fl. 0.5s, ec. 3.6s	30 **9**	W. 8 G. 6	Round yellow and gray tower, green top; 49.	W. 317°-327°, obsc.-078°, G.-085°, W.-244°, obsc.-317°.
	LE SANDETTIE:						
8932 *A 0994*	*-SANDETTIE LIGHTSHIP.*	51° 09.4′ N 1° 47.2′ E	**Fl.W.** period 5s fl. 0.2s, ec. 4.8s	39 **12**	**15**	Red hull.	**Nautophone:** 1 bl. ev. 30s (bl. 2s, si. 28s).
	-RACON		**T(–)** period 60s		10		
8936 *A 1000*	*Dyck buoy.*	51° 02.9′ N 1° 51.8′ E	**Fl.W.** period 3s fl. 0.3s, ec. 2.7s			Red pillar with can topmark.	
	RACON		**B(– • • •)**				
	NOUVEAU PORT OUEST DE DUNKERQUE:						
8948 *A 1126*	**-Avant-port Range,** front.	51° 01.7′ N 2° 12.0′ E	**Dir.F.G.**	52 **16**	**19**	White column, green top; 29.	Dir.F.W. shown by day. Intensified 119°-121°. **Radar reflector.**
8952 *A 1126.1*	**- -Rear,** 600 meters 120° from front.	51° 01.6′ N 2° 12.4′ E	**Dir.F.G.**	98 **30**	**19**	White column, green top; 63.	Dir.F.W. shown by day. Intensified 119°-121°.
8956 *A 1127*	-Jetee du Dyck, head.	51° 02.2′ N 2° 09.8′ E	**Fl.(4)G.** period 15s fl. 0.5s, ec. 2s fl. 0.5s, ec. 2s fl. 0.5s, ec. 2s fl. 0.5s, ec. 7s	79 **24**	**16**	White metallic pole, green top; 75.	Various lights are shown in the interior of the port.
8960 *A 1127.4*	**-Jetee du Clipon.**	51° 02.6′ N 2° 09.8′ E	**Fl.(4)R.** period 15s fl. 1s, ec. 1.5s fl. 1s, ec. 1.5s fl. 1s, ec. 1.5s fl. 1s, ec. 6.5s	79 **24**	**16**	White round column, red top; 76.	Visible 278°-243°.
	-Auxiliary.		**Fl.(4)W.** period 15s		**20**		In fog.
8961 *A 1129*	Atlantic Basin, E. jetty.	51° 01.4′ N 2° 10.5′ E	**Fl.R.** period 4s fl. 1s, ec. 3s	49 **15**	5	Metal post on hut; 13.	
8962 *A 1129.2*	- -W. jetty.	51° 01.3′ N 2° 10.2′ E	**Iso.G.** period 4s	49 **15**	5	Metal post on hut; 13.	
8963 *A 1127.6*	-167°.	51° 00.4′ N 2° 10.8′ E	**Dir.Iso.W.R.G.** period 4s	42 **13**	W. 14 R. 11 G. 11	Metal hut on column; 16.	G. 162°-166°, W.-168°, R.-172°.
8964 *A 1114*	**-Dunkerque.**	51° 03.0′ N 2° 21.9′ E	**Fl.(2)W.** period 10s fl. 0.1s, ec. 2.4s fl. 0.1s, ec. 7.4s	194 **59**	**26**	White round tower, black top and square base; 184.	
8968 *A 1114.9*	-Range, front.	51° 03.2′ N 2° 21.1′ E	**Dir.F.Vi.**	33 **10**	3	White metal column, red top; 20.	Intensified 183°-187°.
8972 *A 1115*	- -Common rear, 185° from front.	51° 02.8′ N 2° 21.1′ E	**Dir.F.Vi.**	79 **24**	4	Gray pylon; 99.	Intensified 183°42′-186°12′ and 178°12′-180°42′.
8976 *A 1115.1*	-Range, front. In line 179°30′ with common rear.	51° 03.2′ N 2° 21.1′ E	**Dir.F.Vi.**	33 **10**	3	White metal column, green top; 20.	Intensified 177°30′-181°30′.

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
	FRANCE-NORTH SEA						
	DUNKERQUE:						
8980 *A 1122*	-Jetee Watier, head.	51° 03.3′ N 2° 21.3′ E	**Fl.(3)G.** period 12s fl. 1s, ec. 1.5s fl. 1s, ec. 1.5s fl. 1s, ec. 6s	36 **11**	7	Green triangular daymark, point up, on green pylon marked ″Watier″″; 52.	
	-Auxilliary.		**Fl.(3)W.** period 15s				
8984 *A 1123*	-Jetee Charles de Gaulle.	51° 03.4′ N 2° 20.9′ E	**Fl.G.** period 4s fl. 1s, ec. 3s	33 **10**	6	White round tower, green top; 23.	Reserve light Fl. 5s 15M, visible 200°-080°.
8988 *A 1121*	-Ancienne Jetty, W.	51° 03.4′ N 2° 21.5′ E	**Q.W.**	36 **11**	9	Green pylon on hut; 46.	
8992 *A 1118*	Jetee Ouest, head.	51° 03.6′ N 2° 21.0′ E	**Fl.(2)G.** period 6s fl. 1s, ec. 1s fl. 1s, ec. 3s	115 **35**	11	White tower, brown top; 118.	
8996 *A 1116*	**-Musoir.**	51° 03.6′ N 2° 21.2′ E	**Fl.(2)R.** period 10s fl. 0.2s, ec. 2.3s fl. 0.2s, ec. 7.3s	39 **12**	**16**	White pylon, red square daymark, red top; 26.	Reserve light Fl.(2)W. 10s.
	BELGIUM-NORTH SEA						
	WEST HINDER-A1 ROUTE:						
9000 *B 0145*	-Westhinder.	51° 23.4′ N 2° 26.3′ E	**Fl.(4)W.** period 30s fl. 1s, ec. 4s fl. 1s, ec. 4s fl. 1s, ec. 4s fl. 1s, ec. 14s	75 **23**	12	Platform.	**Horn:** Mo.(U) ev. 30s.
	-RACON		**W(• – –)**				
9002 *B 0147*	-Oost dyck, Heli-tower.	51° 16.5′ N 2° 26.8′ E	**Fl.(5)Y.** period 20s	49 **15**	12	Red tower, three white bands.	Light on each of four corners. **Horn:** Mo(U) ev. 30s.
	-RACON		**O(– – –)**				
9004	-″KB".	51° 20.9′ N 2° 42.9′ E	**Q.W.**			N. CARDINAL BY pillar.	
	RACON		**K(– • –)**				
	NIEUWPOORT:						
9008 *B 0074*	-E. jetty, near root.	51° 09.3′ N 2° 43.8′ E	**Fl.(2)R.** period 14s fl. 0.4s, ec. 2.6s fl. 0.4s, ec. 10.6s	85 **26**	**16**	Round tower, red and white bands.	
9012 *B 0076*	-W. mole, head.	51° 09.4′ N 2° 43.1′ E	**F.G.**	36 **11**	9	White metal tower.	Visible 025°-250°, 284°-324°. **Bell:** 2 strokes ev. 10s.
9016 *B 0075*	-E. mole, head.	51° 09.4′ N 2° 43.2′ E	**F.R.**	36 **11**	10	White metal tower.	Visible 025°-250°, and 307°-347°. **Horn:** Mo.(K) ev. 30s.

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
			BELGIUM-NORTH SEA				
	OOSTENDE:						
9020 *B 0092*	**-Oostende.**	51° 14.2′ N 2° 55.8′ E	**Fl.(3)W.** period 10s fl. 0.2s, ec. 1.4s fl. 0.2s, ec. 1.4s fl. 0.2s, ec. 6.6s	213 **65**	**27**	White round tower; 190.	Obscured 069°30′-071°.
9022 *B 0094*	-W. Pier, head.	51° 14.3′ N 2° 55.0′ E	**F.G.**	39 **12**	10	White round tower.	Visible 057°-327°. **Bell:** 1 stroke ev. 4s.
9024 *B 0096*	-E. pier, head.	51° 14.5′ N 2° 55.1′ E	**F.R.**	43 **13**	12	White round column.	Visible 333°-243°. **Horn:** Mo.(OE) ev. 30s.
9028 *B 0098*	-E. pier, close SE.	51° 14.4′ N 2° 55.2′ E	**Q.Y.**			Signal mast.	Shown whenever channel is closed.
9032 *B 0102*	-Entrance channel Range, front.	51° 14.2′ N 2° 55.5′ E	**F.R.**	40 **12**	4	Pylon, red and white bands, St. Andrews cross daymark.	Visible 051°-201°. Light has vertical fluorescence 4 ft. long. **Radar reflector.**
9036 *B 0102.1*	- -Rear, 175 meters 128° from front.	51° 14.1′ N 2° 55.7′ E	**F.R.**	59 **18**	4	Pylon, red and white bands, St. Andrews cross daymark.	Visible 052°-201°. Light has vertical fluorescence 7 ft. long. **Radar reflector.**
9040 *B 0103.24*	-Bassin Montgomery, N. side.	51° 14.1′ N 2° 55.4′ E	**Q.Y.**				Q.Y. shown from S. side.
	BLANKENBERGE:						
9044 *B 0112*	**-Comte Jean.**	51° 18.8′ N 3° 06.9′ E	**Fl.(2)W.** period 8s fl. 1.3s, ec. 1.3s fl. 1.3s, ec. 4.1s	99 **30**	**20**	White concrete tower, upper part black.	Visible 065°-245°. Storm signals.
9048 *B 0114*	-E. breakwater, head.	51° 19.0′ N 3° 06.5′ E	**F.R.**	41 **12**	11	White round metal column.	Visible 290°-245°. **Bell:** 2 strokes ev. 15s.
9052 *B 0113.4*	-W. breakwater, head.	51° 18.9′ N 3° 06.5′ E	**F.G.**	45 **14**	11	White round metal tower; 26.	G. (intensified) 065°-290°, G. (unintensified)-335°, obscured elsewhere.
9056 *B 0113*	-Entrance Range, front, W. pier.	51° 18.7′ N 3° 06.9′ E	**F.R.**	16 **5**	3	Metal post, red St. Andrews cross daymark; 16.	
9060 *B 0113.1*	- -Rear, 81 meters 134° from front.	51° 18.7′ N 3° 06.9′ E	**F.R.**	26 **8**	3	Metal post, red St. Andrews cross topmark; 26.	
9064 *B 0116*	-Promenade Pier, head.	51° 19.4′ N 3° 08.2′ E	**Fl.(3)Y.** period 20s	26 **8**	4	Pylon.	
9066 *B 0118*	Droogte van Schooneveld, MOW 5.	51° 25.5′ N 3° 09.0′ E	**Fl.(5)Y.** period 20s	39 **12**	2	Platform on yellow pole.	Measuring station. **Radar reflector.**
9067 *B 0119*	MOW 0.	51° 23.7′ N 3° 02.8′ E	**Fl.(5)Y.** period 20s				Tide gauge. **Whistle:** 1 bl. ev. 5s.
	RACON		**S(• • •)**		10		
9067.5 *B 0119.8*	MOW 3.	51° 23.4′ N 3° 12.0′ E	**Fl.(5)Y.** period 20s				Tide gauge. **Whistle:** 1 bl. ev. 5s.
	RACON		**H(• • • •)**		10		
	ZEEBRUGGE:						
9068 *B 0124*	-Range, front, mole.	51° 20.8′ N 3° 13.2′ E	**Oc.W.** period 5s lt. 4s, ec. 1s	72 **22**	8	White mast, red bands.	Visible 131°-141°. Shown 24 hours.
9072 *B 0124.1*	- -Rear, 890 meters 136° from front.	51° 20.4′ N 3° 13.7′ E	**Oc.W.** period 5s	148 **45**	8	White mast, red bands.	Visible 131°-141°. Synchronized with front.

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
			BELGIUM-NORTH SEA				
9073 *B 0123.2*	-W. breakwater, head.	51° 21.8′ N 3° 11.3′ E	**Oc.G.** period 7s	102 **31**	7	Tower.	Visible 057°-267°. **Nautophone:** 4 bl. (1+3) ev. 90s.
9074 *B 0123*	-E. breakwater, head.	51° 21.8′ N 3° 12.0′ E	**Oc.R.** period 7s	102 **31**	7		Visible 087°-281°. Unintensified in harbor. Red strip lights on seaward side. **Bell:** 3 strokes ev. 25s.
9075 *B 0124.16*	-Wielingen Dock Range, front.	51° 21.5′ N 3° 10.8′ E	**F.W.**	46 **14**			
9075.1 *B 0124.17*	--Rear, 274° from front.	51° 21.5′ N 3° 10.8′ E	**F.W.**	52 **16**			
9075.5 *B 0124.18*	--Jetty Range, front.	51° 21.4′ N 3° 10.8′ E	**F.W.**	46 **14**			
9075.51 *B 0124.19*	---Rear, 420 meters 229° from front.	51° 21.2′ N 3° 10.5′ E	**F.W.**	72 **22**			
9075.6 *B 0124.3*	-Albert II Dock.	51° 20.6′ N 3° 10.6′ E	**F.W.R.**	95 **29**			W. 232°-052°, R.-232°.
9075.7 *B 0124.5*	--Range, front.	51° 20.6′ N 3° 10.6′ E	**2 F.W.**	66 **20**			
9075.72 *B 0124.51*	---Rear, 155 meters 232° from front.	51° 20.5′ N 3° 10.5′ E	**2 F.W.**	92 **28**			
9076 *B 0122*	-Mole, head.	51° 20.9′ N 3° 12.3′ E	**Oc.W.R.** period 15s lt. 12s, ec. 3s	72 **22**	W. **20** R. **18**	Gray round concrete tower.	W. 068°-145°, R.-201°, W.-296°, obscured elsewhere. Traffic signals.
9088 *B 0128*	-Harbor Range, front.	51° 20.4′ N 3° 11.7′ E	**2 F.W.** (vert.)	98 **30** 73 **22**		Pipe bands, black and white banded.	2 neon strips.
9092 *B 0128.1*	--Rear, 200 meters 220° from front.	51° 20.3′ N 3° 11.6′ E	**F.W.** (neon)	98 **30**		Concrete post, black and white bands.	
9096 *B 0125*	-Outer Harbor Range, front.	51° 20.4′ N 3° 13.0′ E	**Oc.W.R.** period 6s lt. 4s, ec. 2s	65 **20**	3	Steel pylon, red triangular daymark, white band; 36.	W. 135°-160°, R.-169°, obsc.-135°. Visible 150°-162° by day.
9100 *B 0125.1*	--Rear, 520 meters 154° from front.	51° 20.1′ N 3° 13.2′ E	**Oc.W.** period 6s	112 **34**	3	NE. corner of service building roof, red triangular daymark, point down, white band; 98.	Visible 150°-162°. Synchronized with front. Shown 24 hours.
			THE NETHERLANDS-NORTH HINDER TO GOEREE				
9104	*Noord Hinder Buoy.*	52° 00.1′ N 2° 51.2′ E	**Fl.(2)W.** period 10s			SAFE WATER RW, spherical.	
	RACON		**T(–)**				
9106	*Noord Hinder Buoy "NHR-SE".*	51° 45.5′ N 2° 40.0′ E	**Fl.G.** period 5s			Green conical.	
	RACON		**N(– •)** period 120s		10		
9108	*Noord Hinder Buoy "NHR-N".*	52° 08.2′ N 3° 01.3′ E	**L.Fl.W.** period 8s			SAFE WATER RW, spherical.	
	RACON		**K(– • –)**				
9110 *B 0157*	Appelzak.	51° 22.8′ N 3° 22.8′ E	**Fl.(5)Y.** period 20s			Yellow post.	Wavemeter.
9116 *B 0166*	Nieuwe Sluis.	51° 24.4′ N 3° 30.4′ E				White metal framework tower, black bands.	**Horn:** 1 bl. ev. 15s.

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
	THE NETHERLANDS-NORTH HINDER TO GOEREE						
9120 *B 0166.1*	Nieuwe Sluis.	51° 24.4′ N 3° 31.3′ E	**Oc.W.R.G.** period 10s lt. 7s, ec. 3s	85 **26**	W. 14 R. 11 G. 10	Black and white octagonal tower; 72.	R. 055°-089°, W.-093°, G.-105°, R.-134°, W.-136°30′, G.-156°30′, W.-236°30′, G.-243°, W.-254°, R.-292°, W.-055°.
9124 *B 0208*	Breskens Veerhaven, W. mole.	51° 24.4′ N 3° 33.2′ E	**F.G.**	26 **8**	4	Black and white, steel mast; 33.	F.Y. shown in fog. **Fog detector light.** **Radar reflector.**
9128 *B 0209*	-E. mole.	51° 24.3′ N 3° 33.3′ E	**F.R.**	26 **8**	5	Black and white steel mast; 33.	F.Y. shown in fog. **Radar reflector.**
9132 *B 0212*	Breskens, W. mole.	51° 24.1′ N 3° 34.1′ E	**F.W.R.G.**	20 **6**		Gray metal mast; 16.	R. 090°-128°, W.-157°, G.-169°30′, W.-173°, R.-194, G.-296°, W.-300°, R.-320°, G.-090°. F.Y. shown in fog. **Horn:** Mo.(U) ev. 30s.
	THE NETHERLANDS-ENTRANCE TO WESTERSCHELDE						
	BRESKENS:						
9136 *B 0214*	-E. mole.	51° 24.0′ N 3° 34.1′ E	**F.R.**	16 **5**		Gray mast; 16.	**Radar reflector.**
9137	*Schouwenbank Buoy.*	51° 45.0′ N 3° 14.4′ E	**Mo.(A)W.** period 8s			SAFE WATER RW, spherical.	
	RACON		**O(– – –)** period 120s		10		
	WALCHEREN:						
	-Westkapelle:						
9140 *B 0173.9*	- -Noorderhoofd Range, front.	51° 32.5′ N 3° 26.5′ E	**Oc.W.R.G.** period 10s lt. 7s, ec. 3s	59 **18**	W. 13 R. 10 G. 10	Red round metal tower; white band; 52.	R. 353°-008°, G.-029°, W.-169°.
9144 *B 0174*	**- - -Westkapelle** rear, about 1.3 km. 149°30′ from front.	51° 31.8′ N 3° 26.9′ E	**Fl.W.** period 3s fl. 0.1s, ec. 2.9s	157 **48**	**28**	Red square stone tower, red metal superstructure; 172.	Obscured by shore on certain bearings.
9148 *B 0176*	- -Molenhoofd.	51° 31.6′ N 3° 26.1′ E	**Oc.W.R.G.** period 6s lt. 4s, ec. 2s	30 **9**		White mast red bands; 23.	R. 306°-329°, W.-349°, R.-008°, G.-034°40′, W.-036°30′, G.-144°, W.-169°, R.-198°.
9152 *B 0174.1*	-Zoutelande.	51° 30.5′ N 3° 28.5′ E	**F.R.**	69 **21**	12	Red square stone structure; 43.	Visible 321°-352°. Range lights in line 326° with Westkapelle.
9156 *B 0184*	-Kaapduinen Range, front.	51° 28.5′ N 3° 31.0′ E	**Oc.W.** period 5s lt. 4s, ec. 1s	85 **26**	13	Yellow square stone tower, red bands; 46.	Visible 115°-145°.
9160 *B 0184.1*	- -Rear, 220 meters 130° from front.	51° 28.4′ N 3° 31.2′ E	**Oc.W.** period 5s lt. 4s, ec. 1s	115 **35**	13	Yellow square stone tower, red bands; 43.	Visible 107°30′-152°30′. Synchronized with front.
9164 *B 0188*	-Fort de Nolle.	51° 27.0′ N 3° 33.1′ E	**Oc.W.R.G.** period 9s	36 **11**	W. 6 R. 4 G. 4	White metal column, red bands; 20.	R. 293°-309°, W.-324°30′, G.-336°30′, R.-014°, G.-064°, R.-099°30′, W.- 110°30′, G.-117°, R.-130°, obsc.-293°.
	-Vlissingen (Flushing):						
9168 *B 0200*	- -Commercial Harbor.	51° 26.4′ N 3° 34.5′ E	**Iso.W.R.G.** period 3s	49 **15**	W. 12 R. 10 G. 9	Red metal framework tower; 36.	R. 253°-277°, W.-284°, R.-297°, W.-306°30′, G.-013°, W.-024°, G.-033°, W.-035°, G.-039°, W.-055°, G.-084°30′, R.-092°, G.-111°, W.-114°.

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
	THE NETHERLANDS-ENTRANCE TO WESTERSCHELDE						
9172 *B 0192*	--Leugenaarshoofd Range, front.	51° 26.5′ N 3° 34.2′ E	**Oc.R.** period 5s lt. 3s, ec. 2s	16 **5**	7	White and red pile.	Intensified 108°-126°.
9176 *B 0192.1*	---Rear, 550 meters 117° from front.	51° 26.3′ N 3° 34.6′ E	**Oc.W.R.G.** period 5s lt. 3s, ec. 2s	26 **8**	W. 12 R. 9 G. 8	Red and white mast, triangular daymark, point up; 23.	R. 245°-271°, G.-285°, W.-123°, R.-147°, obscured elsewhere. Synchronized with front.
9180 *B 0202*	--Buitenhaven, W. mole, head.	51° 26.4′ N 3° 36.1′ E	**F.R.**	33 **10**	5	Black mast; 23.	Harbor signal lights. **Horn:** 1 bl. ev. 15s.
			Iso.W.R.G. period 4s				W. 072°-021°, G.-042°, W.-056°, R.-072°.
9184 *B 0202.2*	---E. side.	51° 26.5′ N 3° 36.5′ E	**F.G.**		4	Gray metal mast on black post.	F.Y. shown in fog.
9188 *B 0203*	--Schone Waardin.	51° 26.5′ N 3° 37.9′ E	**Oc.W.R.G.** period 9s lt. 6s, ec. 3s	33 **10**	W. 12 R. 10 G. 9	Red steel mast, platform; 16.	R. 248°-260°30′, G.-269°, W.-287°30′, G.-326°, R.-341°, G.-023°, W.-024°, G.-054°, R.-062°, W.-076°30′, G.-078°30′, R.-083°, obsc.-248°.
	THE NETHERLANDS-WESTERSCHELDE						
	WALCHEREN:						
	-Sloehaven (Flushing East):						
9192 *B 0204*	--W. mole.	51° 26.9′ N 3° 40.2′ E	**F.R.**	26 **8**	5	White concrete column; 16.	F.Y. shown in fog. Traffic signals. **Horn:** 2 bl. ev. 20s.
9196 *B 0205*	--E. mole.	51° 26.8′ N 3° 40.6′ E	**F.G.**	26 **8**	4	White concrete column; 16.	
9200 *B 0206*	--Range, front.	51° 27.9′ N 3° 41.1′ E	**Oc.R.** period 8s lt. 6s, ec. 2s	23 **7**	8	Green mast; 13.	Visible 015°-031°, by day.
9204 *B 0206.1*	---Rear, 100 meters 023° from front.	51° 28.0′ N 3° 41.1′ E	**Oc.R.** period 8s	49 **15**	8	Green mast; 29.	Visible 015°-031°, by day. Synchronized.
9208 *B 0206.2*	--Quarleshavn, Range, front.	51° 28.3′ N 3° 43.3′ E	**Oc.G.** period 5s lt. 4s, ec. 1s	19 **6**	12	Black mast.	
9212 *B 0206.21*	---Rear, 190 meters 059° from front.	51° 28.4′ N 3° 43.4′ E	**Oc.G.** period 5s	29 **9**	12	Black mast.	
9214 *B 0206.5*	--Van Cittershaven.	51° 26.7′ N 3° 43.4′ E	**Dir.F.W.R.G.**				G. 123°30′-124°24′, W.-124°36′, R.-125°24′.
9215 *B 0206.7*	---	51° 27.9′ N 3° 40.6′ E	**Dir.F.W.R.G.**				R. 303°30′-304°54′, W.-305°06′, G.-306°30′.
	ZUIDBEVELAND:						
9216 *B 0218*	-Borssele-Noordnol.	51° 25.6′ N 3° 42.8′ E	**Oc.W.R.G.** period 5s lt. 4s, ec. 1s	29 **9**		Red mast, white bands; 23.	R. 305°-336°, W.-341°, G.-001°30′, W.-007°30′, R.-022°, G.-054°, W.-057°, G.-109°30′, W.-128°, R.-155°, W.-305°.
9220 *B 0218.5*	-Hoek Van Borssele, NW. head of jetty.	51° 24.9′ N 3° 43.6′ E	**Oc.W.R.** period 10s lt. 8s, ec. 2s	33 **10**		Red metal mast, white bands; 13.	R. 133°-159°, W.-133°.
9224 *B 0219*	-Borssele-Everingen.	51° 24.7′ N 3° 44.1′ E	**Iso.W.R.G.** period 4s	36 **11**		White round structure, red band; 18.	R. 270°-313°, W.-345°, G.-359°, W.-028°, G.-076°, W.-094°, R.-134°, W.-270°.

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
	THE NETHERLANDS-WESTERSCHELDE						
	BRAAKMANHAVEN:						
9232 *B 0233*	-First entrance Range, front.	51° 20.3′ N 3° 45.8′ E	**Iso.W.** period 4s	33 **10**		Black pile, white bands; 20.	
9236 *B 0233.1*	- - -Rear, 60 meters 191° from front.	51° 20.3′ N 3° 45.8′ E	**Iso.W.** period 4s	46 **14**		Black pile, white bands.	Synchronized.
9240 *B 0233.4*	- -Second entrance Range, front.	51° 20.4′ N 3° 45.5′ E	**Oc.G.** period 4s	33 **10**		White pile, black bands; 20.	
9244 *B 0233.41*	- - -Rear, 50 meters 211°30′ from front.	51° 20.4′ N 3° 45.5′ E	**Oc.G.** period 4s	46 **14**		White pile, black bands; 36.	Synchronized.
9248 *B 0236*	-Outer dyke Range, front.	51° 21.0′ N 3° 47.3′ E	**Oc.W.** period 5s lt. 4s, ec. 1s	59 **18**	13	Black and white mast; 13.	Intensified 117°-133°.
9252 *B 0236.1*	- -Rear, 365 meters 125° from front.	51° 20.9′ N 3° 47.6′ E	**Oc.W.** period 5s lt. 4s, ec. 1s	59 **18**	13	Black and white framework structure; 49.	Intensified 117°-133°. Synchronized.
	TERNEUZEN SEA HARBOR:						
9256 *B 0250*	-Entrance Range, front.	51° 20.1′ N 3° 48.7′ E	**Iso.W.** period 4s	33 **10**	8	Gray mast; 26.	Visible 184°30′-200°30′, by day.
9260 *B 0250.1*	- -Rear, 88 meters 192°30′ from front.	51° 20.1′ N 3° 48.6′ E	**Iso.W.** period 4s	42 **13**	8	Gray mast; 26.	Synchronized.
9264 *B 0251*	-W. mole.	51° 20.6′ N 3° 48.6′ E	**F.G.**	29 **9**	4	Gray lantern on gray mast; 16.	
9268 *B 0252*	-E. mole.	51° 20.6′ N 3° 48.9′ E	**F.R.**	29 **9**	5	Gray lantern on gray mast; 16.	
	TERNEUZEN WEST HARBOR:						
9272 *B 0245*	-W. mole, near head.	51° 20.7′ N 3° 49.7′ E	**F.G.**	19 **6**		Gray steel mast, platform; 20.	F.Y. shown in fog.
9276 *B 0246*	-E. mole, near head.	51° 20.6′ N 3° 49.8′ E	**F.R.**	23 **7**		Gray steel mast, platform; 23.	Traffic signals.
9280 *B 0244*	-W. jetty, about 101 meters from head.	51° 20.5′ N 3° 49.6′ E	**Oc.W.R.G.** period 5s lt. 3s, ec. 2s	49 **15**	W. 9 R. 7 G. 6	Black and white metal framework tower; 33.	R. 090°-115°, W.-120°, G.-130°, W.-245°, G.-249°, W.-279°, R.-004°, obsc.-090°.
9284 *B 0256*	-Othenepolder, W. mole near root.	51° 20.2′ N 3° 51.6′ E	**Iso.W.R.G.** period 8s	36 **11**	W. 12 R. 9 G. 9	Round steel tower, upper part black, lower part white; 12.	R. 083°-113°, G.-146°30′, W.-149°30′, G.-194°30′, W.-197°30′, G.-218°30′, R.-234°.
9288 *B 0258*	-Margarethapolder, tide gauge.	51° 21.0′ N 3° 53.1′ E	**Oc.W.R.G.** period 9s lt. 6s, ec. 3s	30 **9**	W. 6 R. 4 G. 4	Stucture, green and white bands; 39.	R. 060°-075°30′, W.-079°, G.-103°30′, W.-179°, G.-217°, W.-233°, R.-239°, W.-060°.
9292 *B 0262*	-Eendragtpolder Range, front, on embankment.	51° 21.4′ N 3° 54.4′ E	**Oc.W.R.G.** period 5s lt. 4s, ec. 1s	26 **8**	W. 8 R. 6 G. 5	White mast, black bands; 15.	R. 045°-064°30′, W.-077°, G.-221°, W.-228°, R.-250°. Synchronized.
9296 *B 0262.1*	-Rear, 283 meters 074°30′ from front.	51° 21.5′ N 3° 54.6′ E	**Oc.W.** period 5s lt. 4s, ec. 1s	59 **18**	6	White mast, black bands; 59.	Also shown by day.
9320 *B 0282*	-Schore Range, front.	51° 27.2′ N 3° 59.4′ E	**Oc.W.R.G.** period 4s lt. 3s, ec. 1s	33 **10**	W. 4 R. 4 G. 4	White structure, red bands; 13.	R. 300°-331°, W.-358°30′, G.-020°, W.-023°, R.-046°, G.-076°30′, W.-092°30′, R.-112°. Shown by day only.
9324 *B 0282.1*	- -Rear, 480 meters 021°30′ from front.	51° 27.5′ N 3° 59.6′ E	**Oc.W.** period 4s	62 **19**		Mast, red and white bands; 67.	Synchronized with front.

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
	THE NETHERLANDS-WESTERSCHELDE						
	-Hansweert:						
9328 *B 0286*	--W. side of entrance canal.	51° 26.4′ N 4° 00.5′ E	**Oc.W.R.G.** period 10s lt. 7s, ec. 3s	33 **10**	W. 9 R. 7 G. 6	Red metal framework tower, white band; 26.	R. 288°-313°, G.-320°, W.-334°, G.-356°30′, W.-042°30′, R.-061°30′, W.-078°, G.-099°, W.-114°30′, R.-127°30′, W-288°. F.Y. shown in fog.
9328.5 *B 0286.1*	--W. harbor, head.	51° 26.4′ N 4° 00.5′ E	**F.R.**	43 **13**	10		
9329 *B 0288*	--E. side of entrance canal.	51° 26.4′ N 4° 00.8′ E	**F.G.**	19 **6**		Gray column; 16.	**Horn:** 4 bl. ev. 30s.
	WALSOORDEN:						
9348 *B 0296*	-Oude Hootd.	51° 23.6′ N 4° 02.0′ E	**Iso.W.R.G.** period 4s	29 **9**	W. 8 R. 6 G. 5	Black round hut, white band, on dolphins; 41.	R. 132°-172°, W.-268°, G.-325°, W.-341°, R.-012°, W.-132°.
9352 *B 0298*	-Nieuwe haven, N. jetty.	51° 23.0′ N 4° 02.1′ E	**F.G.**	16 **5**		Silver-gray mast; 12.	F.Y. shown in fog.
9356 *B 0299*	-S. jetty.	51° 23.0′ N 4° 02.2′ E	**F.R.**	16 **5**		Silver-gray mast; 12.	
9360 *B 0300*	-Entrance Range, front.	51° 22.9′ N 4° 02.1′ E	**Oc.W.** period 3s lt. 2s, ec. 1s	29 **9**		Silver-gray mast, white rectangular daymark; 26.	Visible 200°-240°.
9364 *B 0300.1*	--Rear, 60 meters 220° from front.	51° 22.9′ N 4° 02.0′ E	**Oc.W.** period 3s lt. 2s, ec. 1s	39 **12**		Silver-gray mast, red triangular daymark, point down; 23.	Visible 200°-240°. Synchronized.
	GROENENDIJK:						
9368 *B 0306*	-Range, front.	51° 22.3′ N 4° 02.7′ E	**Oc.W.R.G.** period 7s lt. 5s, ec. 2s	26 **8**	W. 11 R. 8 G. 7	White square framework structure, black band; 13.	R. 147°-162°, W.-195°, G.-237°, W.-273°, R.-286°30′, obscured over Schor van Baalhoek. Oc.W. 7s 6M visible 159°30′-175°30′ by day.
9372 *B 0306.1*	--Rear, 572 meters 167°30′ from front.	51° 22.0′ N 4° 02.8′ E	**Oc.W.** period 7s lt. 5s, ec. 2s	56 **17**	14	Black mast, white lantern; 46.	Range leads through Zuidergat. Visible by day 159°30′-175°30′.
9384 *B 0315*	Marlemonsche Plaat, S. side of Zuidergat.	51° 22.3′ N 4° 08.9′ E	**Iso.W.R.G.** period 10s	26 **8**	W. 6 R. 4 G. 4	Black tank, two white bands; 39.	R. 070°-082°, W.-088°, G.-159°, W.-224°, G.-236°, R.-245°, W.-070°. Tide gauge. **Radar reflector.**
	BATH:						
9388 *B 0318*	-Westketel.	51° 23.7′ N 4° 10.3′ E	**Oc.W.R.G.** period 10s lt. 7s, ec. 3s	23 **7**	W. 8 R. 5 G. 5	Red pedestal; 36.	R. 233°30′-244°, W.-255°, G.-299°30′, W.-001°30′, G.-025°30′, W.-038°, R.-060°, W.-233°30′.
9392 *B 0319.9*	-Middenketel Range, front.	51° 24.1′ N 4° 11.3′ E	**Iso.W.R.** period 3s	26 **8**	6	Red tank, white band; 34.	R. 248°-275°, W. elsewhere.
9396 *B 0320*	--Noordketel, common rear, 683 meters 044° from front.	51° 24.3′ N 4° 11.6′ E	**Oc.W.** period 3s lt. 2s, ec. 1s	39 **12**	6	Red tank on concrete piles; 42.	
9400 *B 0320.1*	-Oostketel, 344 meters 310° from rear.	51° 24.1′ N 4° 11.8′ E	**Q.W.R.G.**	19 **6**	W. 6 R. 4 G. 4	Red pedestal, white bands; 33.	R. 270°-301°30′, W.-325°, G.-055°, W.-065°30′, R.-090°, W.-270°.

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
	THE NETHERLANDS-WESTERSCHELDE						
	ZUID BEVELAND:						
9404 *B 0330*	-Reigersbergsche Polder, angle of sea dyke.	51° 24.0′ N 4° 12.5′ E	**Oc.W.R.G.** period 5s lt. 4s, ec. 1s	13 **4**	W. 7 R. 5 G. 4	Red round pedestal; 16.	W. 075°-087°, R.-112°, W.-280°, R.-343°, W.-349°, G.-075°.
	BELGIUM-SCHELDE						
9408 *B 0336*	Zuid Saaftinge.	51° 21.9′ N 4° 13.2′ E	**Iso.W.R.G.** period 10s	23 **7**	W. 6 R. 4 G. 4	Structure, black gas tank, white band; 37.	R. 158°-168°30′, W.-246°, G.-297°, W.-321°, R.-332°, W.-158°. Tide gauge.
9412 *B 0338*	Nord Ballastplaat.	51° 21.4′ N 4° 14.9′ E	**Fl.W.R.G.** period 4s fl. 1s, ec. 3s	16 **5**	W. 9 R. 7 G. 6	Black beacon, red daymark, red lantern.	R. shore-309°, W.-320°, G.-327°, W.-348°, G.-044°, W.-096°, R.-shore.
9416	Plaat van Doel, W. side of river.	51° 21.0′ N 4° 14.5′ E	**F.G., 2 F.R.**	26 **8**	4	Tide gauge.	
9420 *B 0346*	Zandvliet.	51° 20.6′ N 4° 16.3′ E	**Dir.W.R.G.**	77 **24**	W. 4 R. 3 G. 3		F.W. 118°08′-118°38′. Oc.G. 116°38′-117°10′, F.G.-117°35′, Al.W.G.-118°38′, Al.W.R.-119°11′, F.R.-119°35′, Oc.R.-120°08′.
9422 *B 0346.1*	-Front, 200 meters 118°06′ from common rear.	51° 20.6′ N 4° 16.3′ E	**Oc.W.** period 5s	30 **9**	9		
9422.1 *B 0346.11*	-Front, 200 meters 117°42′ from common rear.	51° 20.6′ N 4° 16.3′ E	**Oc.W.** period 5s	30 **9**	9		
9424 *B 0346.12*	- -Common rear.	51° 20.6′ N 4° 16.5′ E	**Oc.W.** period 5s lt. 4s, ec. 1s	69 **21**	9	Red mast, red and white daymark.	
9426 *B 0346.2*	Entrance, S. side.	51° 20.7′ N 4° 16.2′ E	**F.G.**				
9448 *B 0355*	Ouden Doel.	51° 19.9′ N 4° 16.3′ E	**Iso.W.R.G.** period 4s	16 **5**	9	Black beacon, black and white square daymark, red lantern.	W. 201°-248°, G.-295°, W.-001°, R.-201°.
	DOEL:						
9452 *B 0358*	-Jetty, head.	51° 18.7′ N 4° 16.2′ E	**Oc.W.R.** period 5s lt. 4s, ec. 1s	30 **9**	W. 9 R. 7	Black lattice mast, red lantern, yellow square daymark.	R. shore-185°, W.-334°, R.-shore.
9456 *B 0356*	-Range, front.	51° 18.5′ N 4° 16.2′ E	**Fl.W.R.G.** period 3s fl. 1s, ec. 2s	16 **5**	W. 9 R. 7 G. 6	Black beacon, black and white daymark, red lantern.	R. shore-175°, W.-202°, G.-306°30′, W.-330°54′, R.-shore. Visible 183°-188° by day.
9460 *B 0356.1*	- -Rear, 260 meters 185°30′ from front.	51° 18.4′ N 4° 16.2′ E	**Fl.W.** period 3s fl. 1s, ec. 2s	46 **14**	9	Yellow post, black and yellow daymark, red lantern.	Visible 183°-188° by day. Synchronized with front.
9464 *B 0364*	Lillo, jetty, head.	51° 18.2′ N 4° 17.3′ E	**Oc.W.R.G.** period 10s lt. 7s, ec. 3s	16 **5**	W. 9 R. 7 G. 6	Black beacon, red daymark, red lantern.	R. shore-303°06′, W.-308°12′, G.-096°30′, W.-148°, R.-shore.
9472 *B 0368*	Liefkenshoek Range.	51° 17.8′ N 4° 17.2′ E	**Oc.W.R.G.** period 3s lt. 2s, ec. 1s	13 **4**	W. 8 R. 6 G. 5	Concrete tower, black and white diagonal stripes.	R. shore-125°24′, W.-151°30′, G.-258°30′, W.-288°36′, R.-shore. Tide gauge. Oc.W. 3s visible 280°30′-285°30′ by day.
9476 *B 0368.1*	-Rear, 60 meters 283° from front.	51° 17.8′ N 4° 17.2′ E	**Oc.W.** period 3s lt. 2s, ec. 1s	33 **10**	9	Mast, black and white, red lantern.	Synchronized with front. Visible 280°30′-285°30′ by day.

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
			BELGIUM-SCHELDE				
	ANTWERPEN:						
9484 *B 0372*	-Kruisschans Range, front.	51° 17.4′ N 4° 19.4′ E	**Oc.W.R.G.** period 5s lt. 4s, ec. 1s	16 **5**	9	Black beacon, red daymark, red lantern.	R. shore-358°24′, W.- 014°36′, G.-105°30′, W.-121°, R.-shore. Lighted tide gauge. F.W. visible 109°30′- 114°30′ by day.
9488 *B 0372.1*	--Rear, 195 meters 112° from front.	51° 17.3′ N 4° 19.5′ E	**Oc.W.** period 5s lt. 4s, ec. 1s	39 **12**	7	Red post, red triangular daymark, point down, red lantern.	Visible 109°30′-114°30′ by day. Synchronized with front.
9492 *B 0376*	-Meestoof.	51° 16.6′ N 4° 19.3′ E	**Fl.W.R.G.** period 4s fl. 1s, ec. 3s	16 **5**	W. 9 R. 7 G. 6	Black beacon, red lantern, red and white daymark.	W. shore-039°, R.-052°54′, W.-116°54′, G.-172°12′, W.-192°42′, R.-shore.
			F.R.				
9496 *B 0378*	-Fort de Parel Range, front.	51° 15.9′ N 4° 17.7′ E	**Oc.W.R.G.** period 4s lt. 3s, ec. 1s	42 **13**	W. 9 R. 7 G. 6	Black beacon, yellow daymark, red lantern.	R. shore-222°, W.-232°30′, G.-319°, W.-339°, R.-shore. Visible 224°30′-229°30′ by day
9500 *B 0378.1*	--Rear, 187 meters 227° from front.	51° 15.8′ N 4° 17.6′ E	**Oc.W.** period 4s	62 **19**	9	Black ″X″″ on yellow post, red lantern.	Visible 224°30′-229°30′ by day. Synchronized with front.
9504 *B 0380*	-Krankeloon Range, front, near fort.	51° 15.5′ N 4° 18.0′ E	**Oc.W.R.G.** period 5s lt. 4s, ec. 1s	19 **6**	W. 9 R. 7 G. 6	Wooden structure, white square daymark, black bands, red lantern.	R. shore-164°, W.-200°, G.-274°, W.-283°30′, R.-shore. Visible 277°30′-282°30′ by day.
9508 *B 0380.1*	--Rear, 280 meters 280° from front.	51° 15.4′ N 4° 17.8′ E	**Oc.W.** period 5s lt. 4s, ec. 1s	39 **12**	7	Yellow lattice mast, black and white daymark, red lantern.	Visible 277°30′-282°30′, by day. Synchronized with front.
9512 *B 0382*	-Fort Filip, SW. side.	51° 15.5′ N 4° 18.5′ E	**L.Fl.W.R.G.** period 6s fl. 2s, ec. 4s	16 **5**	W. 7 R. 5 G. 4	Black beacon, square daymark.	R. shore-294°, W.-306°, G.-358°, W.-104°, G.-127°, R.-153°.
9516 *B 0384*	-Boerenschans Range, front.	51° 15.2′ N 4° 19.9′ E	**F.R.**	26 **8**		Black beacon, red lantern, red square.	Neon triangle, point up.
			Fl.W.R.G. period 4s fl. 1s, ec. 3s	16 **5**	W. 9 R. 7 G. 6		R. shore-317°30′, W.-336°, G.-080°, W.-102°, R.-115°, obscured eleswhere. Tide gauge.
9520 *B 0384.1*	--Rear, 400 meters 095° from front.	51° 15.2′ N 4° 20.3′ E	**F.R.** Q.W.	36 **11**	5	Red ″X″″, white bands, red lantern.	Neon triangle, point down.
9528 *B 0387.9*	-Draaiende Sluis, rear, 240 meters 141° from front.	51° 14.2′ N 4° 21.0′ E	**Q.W.**	36 **11**	6	Black ″X″″ on yellow mast, red lantern.	Visible 113°-194°.
9532 *B 0388*	--Pijp Tabak Range, common front.	51° 14.3′ N 4° 20.9′ E	**Oc.W.R.G.** period 5s lt. 4s, ec. 1s	13 **4**	W. 7 R. 5 G. 4	White concrete post, black bands, red latern, white, black and yellow square daymark.	R. shore-135°, W.-147°, G.-263°, W.-274°, R.-shore.
9536 *B 0388.1*	-Rear, 270 meters 269° from front.	51° 14.3′ N 4° 20.6′ E	**Q.W.**	36 **11**	6	Yellow ″X″″ on black column, red lantern.	
9540 *B 0392*	--Range, front.	51° 14.3′ N 4° 24.0′ E	**F.R.** (neon)	16 **5**	2	Red rectangular daymark; 7.	10-foot vertical neon tube.
9544 *B 0392.1*	---Rear, 170 meters 091° from front.	51° 14.3′ N 4° 24.1′ E	**F.R.** (neon)	26 **8**	2	Red triangular daymark, point down; 13.	

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
			THE NETHERLANDS-NORTH SEA				
	SCHOUWEN EN DUIVELAND:						
9576 *B 0500*	**-West Schouwen.**	51° 42.6′ N 3° 41.6′ E	**Fl.(2+1)W.** period 15s fl. 0.2s, ec. 6s fl. 0.2s, ec. 6s fl. 0.2s, ec. 2.4s	187 **57**	**30**	Gray round stone tower, upper part brown, spiral band; 164.	Storm signals.
9584 *B 0408*	-Burghsluis.	51° 40.6′ N 3° 45.6′ E	**F.W.R.G.**	29 **9**	W. 8 R. 5 G. 4	Mast on red column; 24.	R. 230°-245°, W.-253°30′, G.-293°, W.-000°, G.-025°30′, W.-032°, G.-041°, R.-070°, W.-095°.
9588 *B 0506*	-Ossehoek, pier, head.	51° 44.6′ N 3° 53.7′ E	**F.G.**	19 **6**	3	White beacon.	
	GOEREE EN OVER-FLAKKEE:						
	-Ouddorp Haven:						
9592 *B 0514*	- -W. mole, head.	51° 47.9′ N 3° 56.3′ E	**F.R.**	10 **3**		Post; 8.	
9596 *B 0515*	- -E. mole, head.	51° 47.9′ N 3° 56.2′ E	**F.G.**	10 **3**		Post; 7.	
9600 *B 0518*	**-Westhoofd.**	51° 48.8′ N 3° 51.9′ E	**Fl.(3)W.** period 15s fl. 0.2s, ec. 2.8s fl. 0.2s, ec. 2.8s fl. 0.2s, ec. 8.8s	184 **56**	**30**	Brown stone square tower; 170.	
	HELLEVOETSLUIS:						
9624 *B 0536*	-Naval harbor, W. head.	51° 49.2′ N 4° 07.7′ E	**Iso.W.R.G.** period 10s	53 **16**	W. 11 R. 8 G. 7	White round stone tower, red cupola; 60.	G. shore-275°, W.-294°, R.-316°, W.-036°, G.-058°, W.-095°, R.-shore.
9628 *B 0540*	-W. mole, head.	51° 49.2′ N 4° 07.9′ E	**F.R.**	19 **6**		Column; 13.	
9632 *B 0542*	-E. mole, head.	51° 49.2′ N 4° 08.0′ E	**F.G.**	19 **6**		Column; 13.	F.Y. shown in fog.
9636 *B 0630*	**Goeree.**	51° 55.5′ N 3° 40.2′ E	**Fl.(4)W.** period 20s fl. 0.1s, ec. 3.2s fl. 0.1s, ec. 3.2s fl. 0.1s, ec. 3.2s fl. 0.1s, ec. 10s	105 **32**	**28**	Platform island, upper structure and light tower painted red and white checkers. Helicopter landing platform.	Reserve light: Mo.(U)W. **Horn:** 4 bl. ev. 30s.
	RACON		**T(–)**		12		
9637	Rijn Field, Platform "P15-B" RACON.	52° 18.5′ N 3° 46.7′ E	**B(– • • •)**		12		Azimuth coverage 030°-270°.
9637.5	*Ijmuiden Channel Buoy.*	52° 22.2′ N 3° 46.6′ E	**V.Q.(9)W.** period 10s			W. CARDINAL YBY, pillar, topmark.	
	RACON		**D(– • •)**				
	HOEK VAN HOLLAND:						
9640 *B 0633*	**-Maasvlakte.**	51° 58.2′ N 4° 00.9′ E	**Fl.(5)W.** period 20s fl. 0.1s, ec. 2.9s fl. 0.1s, ec. 2.9s fl. 0.1s, ec. 2.9s fl. 0.1s, ec. 2.9s fl. 0.1s, ec. 7.9s	221 **67**	**28**	Octagonal concrete tower, orange and black bands; 203.	Obscured 267°-340°.

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
			THE NETHERLANDS-NORTH SEA				
9644 *B 0635*	-Zuiderdam, head.	51° 59.2′ N 4° 02.6′ E	**F.G.**	82 **25**	10	Concrete tower, orange and black bands, 102. Helicopter platform.	**Horn:** 1 bl. ev. 10s.
	-Fog light.		**Al.Fl.W.G.** period 6s			Same structure.	Obscured 307°-330°.
9646	*-Maas Center Buoy.*	52° 01.2′ N 3° 53.5′ E	**Iso.W.** period 4s		8	SAFE WATER RW, spherical.	
	-RACON		**M(– –)** period 60s		10		
9648 *B 0634*	-Noorderdam, new head, N. side of entrance.	51° 59.7′ N 4° 02.9′ E	**F.R.**	84 **26**	10	Green concrete tower, white bands: 102. Helicopter platform.	
	-Fog light.		**Al.Fl.W.R.** period 6s			Same structure.	Obscured 255°-278°.
9652 *B 0636*	-Noorddam, old head.	51° 59.2′ N 4° 05.1′ E	**Oc.R.** period 10s lt. 7s, ec. 3s	42 **13**	6	Black pole.	
9656 *B 0637*	**-Maasmond** Range, front.	51° 58.9′ N 4° 04.9′ E	**Iso.W.** period 4s	98 **30**	**21**	White tower, black bands.	Visible 101°-123°. Shown also by day. For use of very deep draft vessels only.
9660 *B 0637.1*	--Rear, 1135 meters 112° from front.	51° 58.6′ N 4° 05.8′ E	**Iso.W.** period 4s	154 **47**	**21**	White tower, black bands.	Visible 101°-123°. Synchronized with front. Shown by day.
9664 *B 0638*	--Entrance Range, front.	51° 58.6′ N 4° 07.6′ E	**Iso.R.** period 6s	95 **29**	**18**	Red tower, white bands.	Visible 099°30′-114°30′. Shown by day.
9668 *B 0638.1*	---Rear, 450 meters 107° from front.	51° 58.5′ N 4° 08.0′ E	**Iso.R.** period 6s	141 **43**	**18**	Red tower, white bands.	Visible 099°30′-114°30′. Synchronized with front. Shown by day.
	-Europoort:						
9672 *B 0642*	**--Calandkanaal** Range, front.	51° 57.6′ N 4° 08.8′ E	**Oc.G.** period 6s lt. 4s, ec. 2s	95 **29**	**16**	Concrete tower, red and white bands.	Visible 108°30′-123°30′.
9676 *B 0642.1*	---Rear, 550 meters 116° from front.	51° 57.5′ N 4° 09.2′ E	**Oc.G.** period 6s	141 **43**	**16**	Concrete tower, red and white bands.	Visible 108°30′-123°30′. Synchronized with front.
9684 *B 0646*	---Entrance Range, front.	51° 56.4′ N 4° 04.8′ E	**Iso.G.** period 3s	66 **20**	2	Red and white checkered column; 13.	Visible 185°-200°.
9688 *B 0646.1*	----Rear, 50 meters 192°30′ from front.	51° 56.4′ N 4° 04.7′ E	**Iso.G.** period 3s	75 **23**	2	Red and white checkered column; 26.	Visible 185°-200°.
9692 *B 0647*	-Petroleum Port, No. ″6″.	51° 56.8′ N 4° 05.2′ E	**Iso.G.** period 4s			White platform.	
9696 *B 0648*	-Mississippihaven, E. side.	51° 56.6′ N 4° 05.1′ E	**Iso.W.R.G.** period 3s	62 **19**		Red and white checkered column.	G. 066°30′-068°, W.-071°, R.-072°30′.
9701 *B 0648.31*	--W. side.	51° 55.9′ N 4° 02.2′ E	**Iso.W.R.G.** period 3s	79 **24**	W. 13 R. 10 G. 10	Red and white checkered column.	G. 247°30′-248°30′, W.-250°30′, R.-251°30′.
	ROTTERDAMSCHE WATERWEG:						
9704 *B 0662*	-Poortershaven Range, No. ″8″, front.	51° 56.1′ N 4° 13.1′ E	**L.Fl.R.** period 8s		8	Dolphin, red round daymark; 26.	Intensified 322°-329°.
9708 *B 0662.1*	--Rear, 325 meters 325°30′ from front.	51° 56.3′ N 4° 13.0′ E	**F.R.**	30 **9**	10	Metal mast.	Visible 322°-329°.
9716 *B 0670.2*	-Maassluis, E. mole, head.	51° 55.0′ N 4° 14.9′ E	**F.G.**	19 **6**		Metal column; 16.	
9720 *B 0670*	--W. mole, head.	51° 55.0′ N 4° 14.8′ E	**2 F.R.**	19 **6**		Metal column; 16.	

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
			THE NETHERLANDS-NORTH SEA				
9724 *B 0673*	-Blankenburg Range, front.	51° 54.0′ N 4° 16.4′ E	**Iso.W.** period 4s	29 **9**	13	Tower, black and white bands; 13.	Visible 274°30′-289°30′.
9728 *B 0673.1*	-Rear, 260 meters 282° from front.	51° 54.1′ N 4° 16.2′ E	**Iso.W.** period 4s	56 **17**	13	Tower, black and white bands; 39.	Visible 274°30′-289°30′. Synchronized with front.
9732 *B 0711.4*	-Oude Maas.	51° 53.5′ N 4° 19.6′ E	**Iso.W.** period 2s			Red and green beacon, red triangular daymark, point down, above green triangular daymark, point up.	
9736 *B 0712*	-Oude Maas Range, front.	51° 52.9′ N 4° 19.8′ E	**Iso.W.** period 8s	39 **12**	**15**	On pile.	Visible 150°-165°.
9740 *B 0712.1*	- -Rear, 115 meters 157°30′ from front.	51° 52.8′ N 4° 19.8′ E	**Iso.W.** period 8s	46 **14**	**15**	Light on roof of ″Mission to Seamen″″.	Visible 150°-165°. Synchronized with front.
9748 *B 0750*	**Scheveningen.**	52° 06.3′ N 4° 16.2′ E	**Fl.(2)W.** period 10s fl. 0.2s, ec. 2.3s fl. 0.2s, ec. 7.3s	161 **49**	**29**	Brown metal tower; 98.	Obscured 244°-014°.
9752 *B 0751*	-Approach Range, front.	52° 05.8′ N 4° 15.7′ E	**Iso.W.** period 4s	55 **17**	14	Gray metal mast.	
9756 *B 0751.1*	- -Rear, 100 meters 156° from front.	52° 05.8′ N 4° 15.7′ E	**Iso.W.** period 4s	69 **21**	14	Gray metal mast.	Range lighted day and night. Synchronized with front.
9760 *B 0753.1*	-Harbor Range, front.	52° 05.9′ N 4° 16.0′ E	**Oc.G.** period 5s lt. 3.5s, ec. 1.5s	29 **9**	11	Gray concrete column; 10.	
9764 *B 0753.11*	- -Rear, 50 meters 131° from front.	52° 05.8′ N 4° 16.0′ E	**Oc.G.** period 5s lt. 3.5s, ec. 1.5s	30 **9**	11	Gray post; 31.	Range lighted day and night. Synchronized with front.
9768 *B 0751.6*	-Noorderhoofd, head.	52° 06.3′ N 4° 15.4′ E	**F.R.**	39 **12**	9	Black and yellow tower, red lantern; 28.	
9772 *B 0751.4*	-Zuiderhoofd, head.	52° 06.3′ N 4° 15.5′ E	**F.G.**	39 **12**	9	Black and yellow tower, red lantern; 28.	**Horn:** 3 bl. ev. 30s.
9776 *B 0752*	-Zuiderbinnenhoofd.	52° 06.1′ N 4° 15.5′ E	**Oc.G.** period 7.5s lt. 5s, ec. 2.5s	33 **10**	5	Column; 12.	
9780 *B 0753*	-Noorderbinnenhoofd, head.	52° 06.1′ N 4° 15.6′ E	**Oc.R.** period 7.5s lt. 5s, ec. 2.5s	33 **10**	5	Column; 12.	
9782 *B 0755*	-Promenade Pier, head.	52° 07.1′ N 4° 16.9′ E	**Iso.W.** period 5s	146 **44**	5	Concrete tower; 108.	Visible 013°-253°.
9784 *B 0760*	**Noordwijkaan Zee.**	52° 14.9′ N 4° 26.1′ E	**Oc.(3)W.** period 20s lt. 8s, ec. 2s lt. 3s, ec. 2s lt. 3s, ec. 2s	108 **33**	**18**	White square stone tower; 84.	
	HAVEN VAN IJMUIDEN:						
9792 *B 0766*	-Entrance Range, front.	52° 27.8′ N 4° 34.5′ E	**F.W.R.**	102 **31**	W. **16** R. 13	Reddish-brown round metal tower; 79.	W. 050°-122°, R.-145°, W.-160°. Storm, tidal and traffic signals.
			F.W.		4		Visible 090°30′-110°30′, shown by day.
9796 *B 0766.1*	-Rear, 570 meters 100°30′ from front.	52° 27.7′ N 4° 35.0′ E	**Fl.W.** period 5s fl. 0.3s, ec. 4.7s	174 **53**	**29**	Brown round metal tower; 142.	Visible 019°-199°.
			F.W.		4		Visible 090°30′-110°30′, shown by day.
9800 *B 0768*	-N. breakwater, outer head.	52° 28.1′ N 4° 32.6′ E	**F.R.**	50 **15**	10	White tower, red bands.	

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
			THE NETHERLANDS-NORTH SEA				
9804 *B 0769*	--Inner head.	52° 28.1′ N 4° 33.3′ E	**Q.R.**	40 **12**	9	White tower, red band, black base; 33.	Visible 263°-096°. F.W. shown in fog.
9808 *B 0767*	-S. breakwater, outer head.	52° 27.9′ N 4° 32.0′ E	**F.G.**	50 **15**	10	White tower, green bands.	**Horn:** 2 bl. ev. 30s.
	-Fog light.		**Fl.W.** period 3s			Below light on same structure.	Shown at visibility less than 2M day or night.
9812 *B 0770*	--Inner head.	52° 27.8′ N 4° 33.4′ E	**Q.G.**	40 **12**	9	White tower, green band.	Visible 096°-295°. F.W. shown in fog.
	-Zuider Buitenkanal:						
9824 *B 0777*	--Range, front, N. wall 440 yards W. of Middensluis.	52° 28.0′ N 4° 35.5′ E	**Q.W.**	30 **9**		Metal mast; 18.	Visible 024°-114°. Range leads to outer entrance of Middensluis.
9828 *B 0777.1*	---Rear, 100 meters 069° from front.	52° 28.1′ N 4° 35.6′ E	**Q.W.**	43 **13**		Metal mast; 19.	Visible 024°-114°. Synchronized with front.
9832 *B 0783*	-Fish Harbor, W. side of entrance.	52° 27.8′ N 4° 34.9′ E	**F.G.**	24 **7**		Mast; 18.	Visible 085°-308°. F.Y. shown in fog.
9836 *B 0784*	--E. side of entrance.	52° 27.8′ N 4° 35.0′ E	**F.R.**	26 **8**		Mast; 18.	Visible 284°-181°. 2 F.Y. shown in fog.
	-Noorder Buitenkanal:						
9844 *B 0789*	--Entrance Range, front.	52° 28.3′ N 4° 35.7′ E	**Iso.W.** period 3s	28 **9**		Green wooden mast.	Visible 031°-121°.
9848 *B 0789.1*	--Rear, 530 meters 077° from front.	52° 28.3′ N 4° 36.2′ E	**Iso.W.** period 3s	56 **17**		Green metal mast, white round daymark; 43.	Visible 031°-121°. Synchronized with front.
9854	*-Ijmuiden Approach Buoy.*	52° 28.7′ N 4° 23.9′ E	**Mo.(A)W.** period 8s			SAFE WATER RW, spherical.	
	-RACON		**Y(– • – –)** period 60s		10		
9856 *B 0800*	-Foundry Basin Range, front.	52° 28.5′ N 4° 36.1′ E	**Iso.G.** period 2s	39 **12**		Post; 15.	
9860 *B 0800.1*	--Rear, 150 meters 065° from front.	52° 28.5′ N 4° 36.3′ E	**Iso.G.** period 2s	56 **17**		Post; 27.	Synchronized with front.
9864 *B 0842*	**Egmond aan Zee.**	52° 37.3′ N 4° 37.6′ E	**Iso.W.R.** period 10s	121 **37**	W. **18** R. 14	White round stone tower; 92.	W. 010°-175°, R.-188°, obsc.-010°.
9868	Platform Helm ″A", RACON.	52° 52.4′ N 4° 08.6′ E	**T(–)**				
9870	Logger ″L-16" Platform, RACON.	53° 00.9′ N 4° 13.0′ E	**X(– • • –)**		12		Azimuth coverage 240°-090°.
9876 *B 0849*	-Zanddijk.	52° 52.9′ N 4° 42.9′ E	**Oc.W.R.G.** period 10s	103 **31**	W. 11 R. 8 G. 8	Brown tower; 56.	G. 041°-088°, W.-094°, R.-131°.
9878	*Schulpengat Fairway Buoy ″SG".*	52° 52.9′ N 4° 38.0′ E	**Mo.(A)W.** period 8s			SAFE WATER RW, pillar, topmark.	
	RACON		**Z(– – • •)**				
9880 *B 0856*	-Huisduinen.	52° 57.2′ N 4° 43.3′ E	**F.W.R.**	92 **28**	W. 14 R. 11	Square stone tower; 59.	W. 070°-113°, R.-158°, W.-208°, obscured elsewhere.
9884 *B 0858*	**-Kijkduin,** rear.	52° 57.4′ N 4° 43.6′ E	**Fl.(4)W.** period 20s fl. 0.2s, ec. 3.1s fl. 0.2s, ec. 3.1s fl. 0.2s, ec. 3.1s fl. 0.2s, ec. 9.9s	187 **57**	**30**	Brown metal tower; 182.	In range 253°30′ with Nieuwediep W. breakwater head.

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
			THE NETHERLANDS-NORTH SEA				
	ZEEGAT VAN TEXEL:						
9900 *B 0864*	-Den Helder Range, front.	52° 57.4′ N 4° 47.2′ E	**Oc.G.** period 5s lt. 4s, ec. 1s	56 **17**	14	Building, black triangular topmark, point down.	Visible 161°-221°. By day visible 183°-199°.
9904 *B 0864.1*	- -Rear, 275 meters 191° from front.	52° 57.3′ N 4° 47.1′ E	**Oc.G.** period 5s lt. 4s, ec. 1s	85 **26**	14	Black framework tower, black triangular daymark, point down.	Visible 161°-247°. By day visible 183°-199°. Synchronized with front.
9908 *B 0864.5*	-Malzwin.	52° 57.7′ N 4° 48.2′ E	**Q.W.R.**	30 **9**	W. 7 R. 5	Mast.	R. 165°-195°, W.-020°. By day visible 183°-199°.
9912 *B 0865*	- -Nieuwediep, W. breakwater, head.	52° 58.0′ N 4° 47.2′ E	**Q.G.**	41 **12**	8	Mast, red lantern; 23.	In range 253°30′ with Kijkduin. **Horn:** 1 bl. ev. 20s.
9924 *B 0867*	- - -W. side.	52° 57.8′ N 4° 47.2′ E	**Fl.G.** period 5s	33 **10**	4	Square concrete post, red lantern; 30.	Visible 180°-067°.
9928 *B 0867.5*	-Nieuwe Haven.	52° 57.8′ N 4° 47.4′ E	**Q.R.**	33 **10**	4	Square concrete post, red lantern; 16.	
9930 *B 0867.3*	-"MH6".	52° 58.0′ N 4° 47.4′ E	**Iso.R.** period 4s			Red pile.	**Radar reflector.**
9931 *B 0867.2*	-"MH8".	52° 57.9′ N 4° 47.4′ E	**Iso.R.** period 8s			Red pile.	
9936 *B 0870*	-E. harbor, head.	52° 57.6′ N 4° 46.8′ E	**Oc.R.** period 5s lt. 3s, ec. 2s	33 **10**	4	Steel mast, red lantern; 16.	
9944 *B 0852*	**- -Den Hoorn** Range, front.	53° 00.9′ N 4° 44.5′ E	**Oc.W.** period 8s		**18**	Steel structure; 6.	Visible 024°30′-028°30′. By day visible 025°-028°.
9948 *B 0852.1*	- - -Rear, about 1.5 km. 026°30′ from front.	53° 01.6′ N 4° 45.1′ E	**Oc.W.** period 8s lt. 6s, ec. 2s		**18**	Church tower.	Visible 024°-028°30′. By day visible 025°-028°.
	-Texel:						
9952 *B 0859*	**- -Schilbolsnol.**	53° 00.6′ N 4° 45.8′ E	**F.W.R.G.**	92 **28**	W. **15** R. 12 G. 11	Green tower; 69.	W. 338°-002°, G.-035°, W.-038°, R.-051°, W.-068°30′, obscured elsewhere.
	-Oudeschild:						
9956 *B 0881*	- -S. mole, head.	53° 02.4′ N 4° 51.2′ E	**F.R.**	26 **8**		Red mast, white bands; 23.	Sounded 0600-2300. **Horn:** 2 bl. ev. 30s.
9960 *B 0886*	**-Eirland.**	53° 11.0′ N 4° 51.4′ E	**Fl.(2)W.** period 10s fl. 0.2s, ec. 2.3s fl. 0.2s, ec. 7.3s	174 **53**	**29**	Red round stone tower; 114.	
9964 *B 0889*	- -Metering station.	53° 11.3′ N 4° 48.0′ E	**Fl.(5)Y.** period 20s		5	Yellow post.	
	VLIELAND:						
9966	-N. Vlieland, metering station.	53° 19.1′ N 4° 59.8′ E	**Fl.(5)Y.** period 20s				
9968 *B 0894*	**-Vuurboetsduin.**	53° 17.8′ N 5° 03.6′ E	**Iso.W.** period 4s	177 **54**	**20**	Brown round metal tower; 55.	
9972 *B 0896*	-E. mole, head.	53° 17.8′ N 5° 05.6′ E	**F.G.**	13 **4**		Lamppost.	
9976 *B 0898*	-W. mole, head.	53° 17.7′ N 5° 05.6′ E	**F.R.**			Lamppost.	
9977 *B 0890*	*-VL-CENTER LANBY.*	53° 27.0′ N 4° 40.0′ E	**Fl.W.** period 5s		12	SAFE WATER RW.	
	-RACON		**C(– • – •)**		12		

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
			THE NETHERLANDS-NORTH SEA				
9979 *A 7581.85*	-Wintershall ″L8-G" Platform.	53° 34.9′ N 4° 36.3′ E	**Mo.(U)W.** period 15s				**Horn:** Mo.(U) ev. 30s.
			2 F.R.				
	-RACON		**G(– – •)**		12		Azimuth coverage 000°-160°.
9979.5	-Platform ″L2-FA-1", RACON.	53° 57.7′ N 4° 29.9′ E	**9(– – – •)**				
	ZEEGAT VAN TERSCHELLING:						
9980 *B 0904*	**-Terschelling (Brandaris).**	53° 21.7′ N 5° 12.9′ E	**Fl.W.** period 5s fl. 0.3s, ec. 4.7s	184 **56**	**29**	Yellow square stone tower; 172.	Obscured by dunes on Vlieland and Terschelling. Storm signals.
9982 *B 0904.5*	-N. Terschelling, metering station.	53° 25.8′ N 5° 20.1′ E	**Fl.(5)Y.** period 20s				
	-West Terschelling:						
9984 *B 0908*	- -Mole, W. head.	53° 21.3′ N 5° 13.1′ E	**F.R.**	20 **6**	5	Red post, white bands.	**Horn:** 1 bl. ev. 15s.
9992 *B 0912*	- -E. mole, head.	53° 21.3′ N 5° 13.2′ E	**F.G.**	16 **5**	4	Green mast, white bands; 16.	
	AMELANDER GAT:						
9996 *B 0920*	**-Ameland.**	53° 27.0′ N 5° 37.6′ E	**Fl.(3)W.** period 15s fl. 0.2s, ec. 2.8s fl. 0.2s, ec. 2.8s fl. 0.2s, ec. 8.8s	190 **58**	**30**	Red and brown round metal tower, white bands; 181.	
10000 *B 0924*	-Nes, mole, head.	53° 26.0′ N 5° 46.5′ E	**Iso.W.** period 6s	13 **4**	8	Red lantern on masonry structure.	
10004 *B 0926*	-Holwerd, pier, head.	53° 23.8′ N 5° 52.8′ E	**Oc.W.** period 6s lt. 4s, ec. 2s	23 **7**	6	Round tank, red lantern.	
	FRIESCHE GAT:						
10008 *B 0938*	**-Schiermonnikoog.**	53° 29.2′ N 6° 09.0′ E	**Fl.(4)W.** period 20s fl. 0.2s, ec. 3.1s fl. 0.2s, ec. 3.1s fl. 0.2s, ec. 3.1s fl. 0.2s, ec. 9.9s	144 **44**	**28**	Dark red round stone tower; 118.	
			F.W.R.	98 **30**	W. **15** R. 12		W. 210°-221°, R.-230°.
10009	*Buoy ″BR/S".*	52° 55.0′ N 3° 18.0′ E	**Mo.(A)W.** period 8s			SAFE WATER RW, spherical.	
	RACON		**G(– – •)**				
10009.5	*Buoy ″BG/S".*	53° 35.8′ N 3° 01.0′ E	**Mo.(A)W.** period 15s			SAFE WATER RW, spherical.	
	RACON		**T(–)**				
10010	″NAM K14-FA1" Platform, RACON.	53° 16.2′ N 3° 37.7′ E	**7(– – • • •)**				
10011	Placid ″K9C-PA" Platform, RACON.	53° 39.2′ N 3° 52.5′ E	**8(– – – • •)**				
10012	*Friesland Junction Buoy ″FR/A".*	54° 00.4′ N 4° 21.4′ E	**Mo.(A)W.** period 8s			SAFE WATER RW, spherical.	
	RACON		**M(– –)**				

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
			THE NETHERLANDS-NORTH SEA				
10013 *A 7682*	Elf Petroland Platform, ″F15-A", RACON.	54° 13.0′ N 4° 49.7′ E	**U(• • –)**				
10013.1 *A 7682.5*	NAM ″F3-OLT" Platform, RACON.	54° 51.3′ N 4° 43.6′ E	**D(– • •)**				
10013.3	*Buoy ″EF".*	54° 03.5′ N 4° 59.8′ E	**L.Fl.W.** period 10s			SAFE WATER RW, spherical.	
	RACON		**T(–)**				
10013.5	*Buoy ″EF/B".*	54° 06.7′ N 5° 40.0′ E	**Fl.(4)Y.** period 10s			SPECIAL Y, spherical.	
	RACON		**M(– –)**				
10013.7	*Buoy ″EF/C".*	54° 08.3′ N 6° 00.0′ E	**L.Fl.W.** period 10s			SAFE WATER RW, spherical.	
	RACON		**O(– – –)**				
10013.9 *A 7697*	″GNSC-H-7" Platform, RACON.	54° 30.6′ N 6° 02.1′ E	**D(– • •)**				
10014 *B 1051*	*″GW/EMS" LIGHTFLOAT.*	54° 10.0′ N 6° 20.8′ E	**Iso.W.** period 8s	56 **17**	**17**	″GW/EMS"" on red hull.	**Horn:** Mo.(R) ev. 30s.
	RACON		**T(–)**		6		

Section 9

North Sea-Germany and Denmark

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
			GERMANY-NORTH SEA				
10016	*Borkumriff Buoy.*	53° 47.5′ N 6° 22.1′ E	**Oc.W.** period 4s			SAFE WATER RW, pillar, topmark.	
	RACON		**T(–)** period 48s				
10024	*Westerems Buoy.*	53° 37.2′ N 6° 19.5′ E	**Iso.W.** period 4s			SAFE WATER RW, pillar, topmark.	
	RACON		**T(–)**		8		
10028	*Osterems Buoy.*	53° 42.0′ N 6° 36.0′ E	**Iso.W.** period 4s			SAFE WATER RW, pillar, topmark.	
10030 *B 0980.5*	Horsbornzand.	53° 31.5′ N 6° 39.9′ E	**Fl.(5)Y.** period 20s			Post.	Tide gauge.
10032 *B 0970*	**Borkum Grosser.**	53° 35.4′ N 6° 39.8′ E	**Fl.(2)W.** period 12s fl. 0.3s, ec. 2.7s fl. 0.3s, ec. 8.7s	207 **63**	**24**	Brown round brick tower; 197.	
			F.W.R.G.	151 **46**	W. **19** R. **15** G. **15**		G. 107°24′-109°, W.-111°12′, R.-112°36′.
	WESTEREMS:						
10036 *B 0972*	**-Borkum, Kleiner Leuchttrum.**	53° 34.8′ N 6° 40.1′ E	**Dir.F.W.**	105 **32**	**30**	Red tower, white bands; 89.	Visible 089°54′-090°54′.
			Fl.W. period 3s fl. 0.7s, ec. 2.3s		**16**		Visible 088°-089°54′.
			Fl.(4)W. period 10s fl. 0.5s, ec. 0.5s fl. 0.5s, ec. 0.5s fl. 0.5s, ec. 0.5s fl. 0.5s, ec. 6.5s		**16**		Visible 090°54′-093°.
10040 *B 0976*	**-Fischer Balje.**	53° 33.2′ N 6° 43.0′ E	**Oc.(2)W.R.G.** period 16s lt. 3s, ec. 1s lt. 11s, ec. 1s	49 **15**	W. **16** R. 12 G. 11	White round tower, red top and lantern, on 3 black piles; 52.	R. 260°-313°, G.-014°, W.-068°, R.-123°. **Fog detector light.**
10048 *B 0983*	**Campen.**	53° 24.4′ N 7° 01.0′ E	**F.W.**	203 **62**	**30**	Red metal framework tower, two galleries, white central column, green cupola; 213.	Visible 126°48′-127°06′.
			Fl.W. period 5s fl. 0.7s, ec. 4.3s				Visible 126°18′-126°48′.
			Fl.(4)W. period 15s fl. 0.7s, ec. 2.3s fl. 0.7s, ec. 2.3s fl. 0.7s, ec. 2.3s fl. 0.7s, ec. 5.3s				Visible 127°06′-127°36′.
10052 *B 1010*	-Knock.	53° 20.4′ N 7° 01.5′ E	**F.W.R.G.**	92 **28**	W. 12 R. 9 G. 8	Gray tower, operational floor and four platforms; 210.	W. 270°-299°, R.-008°18′, G.-023°, W.-026°48′, R.-039°, W.-073°, R.-119°, W.-154°. **Fog detector light.**
10054 *B 1046*	Leysiel.	53° 32.2′ N 7° 02.5′ E	**F.W.R.G.**	33 **10**	W. 8 R. 6 G. 5	On floodgate.	G. 156°-164°, W.-166°, R.-174°.

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
			GERMANY-NORTH SEA				
10056 *B 1012*	Wybelsum.	53° 20.2′ N 7° 06.6′ E	**F.W.R.**	52 **16**	W. 6 R. 5	White framework tower, red bands, radar aerial; 59.	W. 295°-320°, R.-024°, W.-049°. **Fog detector light.**
10060 *B 1052*	*GERMAN BIGHT LIGHTFLOAT.*	54° 10.7′ N 7° 26.1′ E	**Iso.W.** period 8s	39 **12**	**17**	″GB″″ on red hull. Floodlit.	Light shown by day when fog signal is operating. **Horn:** Mo.(R) ev. 30s.
	RACON		**T(–)** period 30s		7		
	NORDERNEY:						
10072 *B 1054*	-Near center of island.	53° 42.6′ N 7° 13.8′ E	**Fl.(3)W.** period 12s fl. 0.2s, ec. 2.8s fl. 0.2s, ec. 2.8s fl. 0.2s, ec. 5.8s	194 **59**	**23**	Red octagonal tower on square substructure; 176.	Unintensified 067°-077° and 270°-280°.
10092 *B 1074*	-Fish Harbor, W. mole, head.	53° 41.9′ N 7° 09.9′ E	**Oc.W.R.** period 4s lt. 3s, ec. 1s	33 **10**	W. 7 R. 5	Red and white tower; 26.	R. 289°30′-062°, W.-093°, R.-259°30′, W.-289°30′.
10096 *B 1074.1*	- -Rear, 460 meters 274°30′ from front.	53° 41.9′ N 7° 10.3′ E	**Oc.W.** period 4s	60 **18**	7	Gray mast; 52.	Synchronized.
	NORDDEICH:						
10100 *B 1078*	-W. wall, N. head.	53° 38.7′ N 7° 09.0′ E	**F.G.**	26 **8**	4	Black metal framework, white lantern; 30.	Visible 021°-327°.
10104 *B 1080*	-E. wall, N. head.	53° 38.8′ N 7° 09.0′ E	**F.R.**	27 **8**	4	Framework beacon, red triangular daymark; 26.	Visible 327°-237°.
10108 *B 1082*	-Range, front.	53° 38.4′ N 7° 09.4′ E	**Iso.W.R.** period 6s	20 **6**	W. 6 R. 5	Black mast; 23.	R. 078°-122°, W.-150°.
10112 *B 1082.1*	- -Rear, 140 meters 144° from front.	53° 38.3′ N 7° 09.5′ E	**Iso.W.** period 6s	30 **9**	6	Black mast; 33.	Synchronized with front.
10116 *B 1084*	-1,463 meters from N. end of E. wall Range, front.	53° 38.5′ N 7° 09.2′ E	**Iso.W.R.** period 3s	16 **5**	W. 6 R. 4	Black metal post; 23.	W. 340°-022°30′, R.-098°.
10120 *B 1084.1*	- -Rear, 95 meters 170° from front.	53° 38.5′ N 7° 09.2′ E	**Iso.W.** period 3s	26 **8**	6	Black post; 33.	Synchronized.
10124 *B 1092*	-Langeoog, W. mole, head.	53° 43.5′ N 7° 30.1′ E	**Oc.W.R.G.** period 6s lt. 5s, ec. 1s	26 **8**	W. 7 R. 4 G. 3	Red steel mast and platform; 14.	G. 064°-070°, W.-074°, R.-326°, W.-330°, G.-335°, R.-064°. **Horn:** Mo.(L) ev. 30s.
10128 *B 1096.5*	-Spiekeroog.	53° 45.0′ N 7° 41.3′ E	**F.R.**	19 **6**	4	Red post with platform; 23.	Visible 197°-114°.
10136 *B 1312*	**-Helgoland.**	54° 11.0′ N 7° 53.0′ E	**Fl.W.** period 5s fl. 0.1s, ec. 4.9s	270 **82**	**28**	Brown square brick tower, black lantern, white cupola; 111.	F.R. on radio masts 0.1 mile SSE. and 0.4 mile NNW.
10140	*-Approach Whistle Buoy.*	54° 09.0′ N 7° 54.0′ E	**Q.(3)W.** period 10s			E. CARDINAL BYB, pillar, topmark.	
10148 *B 1326*	-Dune entrance Range, front.	54° 10.9′ N 7° 54.9′ E	**Iso.W.** period 4s	36 **11**	8	Red and white framework tower, triangular topmark, point up; 42.	
10152 *B 1326.1*	- -Rear, 120 meters 020° from front.	54° 11.0′ N 7° 54.8′ E	**Iso.W.R.G.** period 4s	56 **17**	W. 11 R. 10 G. 10	Red round tower, white band; 49.	G. 106°-125°, W.-130°, R.-144°, G. 010°-018°30′, W.-021°, R.-030°. Synchronized.
	-Vorhafen:						
10156 *B 1318*	- -E. mole, S. elbow.	54° 10.4′ N 7° 54.0′ E	**Oc.W.G.** period 6s lt. 5s, ec. 1s	16 **5**	W. 7 G. 4	Gray mast; 7.	W. 203°-250°, G.-109°. **Fog detector light.**
10160 *B 1318.2*	- - -Head.	54° 10.4′ N 7° 53.9′ E	**F.G.**	23 **7**	4	Gray mast; 7.	Visible 289°-180°. **Horn:** Mo.(S) ev. 30s.

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
			GERMANY-NORTH SEA				
10164 *B 1320*	--S. mole, head.	54° 10.3′ N 7° 54.0′ E	**Oc.(2)R.** period 12s lt. 3s, ec. 1s lt. 7s, ec. 1s	23 **7**	4	Gray mast; 7.	Visible 101°-334°.
	-Binnenhafen:						
10168 *B 1324*	--Entrance Range, front.	54° 10.8′ N 7° 53.4′ E	**Oc.R.** period 6s lt. 5s, ec. 1s	26 **8**	7	Mast, red and white band, cone topmark, point up; 23.	
10172 *B 1324.1*	---Rear, 220 meters 302°12′ from front.	54° 10.8′ N 7° 53.4′ E	**Oc.R.** period 6s lt. 5s, ec. 1s	33 **10**	7	Mast, red and white band, cone topmark, point down; 19.	Synchronized with front.
10176 *B 1325*	--S. side of entrance.	54° 10.7′ N 7° 53.5′ E	**F.W.R.**	16 **5**	W. 7 R. 5	Red mast; 10.	R. 040°-238°, W.-270°.
10180 *B 1325.2*	--N. side of entrance.	54° 10.8′ N 7° 53.5′ E	**F.W.G.**	16 **5**	W. 7 G. 4	Green mast; 7.	W. 248°-254°, G.-102°.
10184 *B 1328*	-Dunenhafen, W. mole, head.	54° 11.0′ N 7° 54.3′ E	**F.R.**	13 **4**	5	Red mast; 8.	Visible 294°-172°.
10188	*-Sellebrunn Buoy.*	54° 14.0′ N 7° 50.0′ E	**Q.(9)W.** period 15s			W. CARDINAL YBY, pillar, topmark.	**Whistle.**
10192 *B 1112*	**Wangerooge.**	53° 47.4′ N 7° 51.5′ E	**Fl.R.** period 5s fl. 0.1s, ec. 4.9s	197 **60**	**23**	Red round tower two white bands; 210.	
			F.W.R.	79 **24**	W. **15** R. 11	Same tower, gallery; 85.	W. 055°-060°30′, R.-065°30′, W.-071°.
			Dir.F.W.R.G.	79 **24**	W. **22** R. **17** G. **18**	Same structure.	G. 119°24′-138°48′, W.-152°12′, R.-159°54′.
10193 *B 1113*	-W. embankment, head.	53° 46.4′ N 7° 52.0′ E	**F.R.**	10 **3**	4	Red mast, red lantern.	
10194 *B 1113.2*	--E. embankment, head.	53° 46.5′ N 7° 52.2′ E	**F.G.**	10 **3**	3	Green mast.	
10212 *B 1138*	**-Voslapp** Range, front.	53° 37.3′ N 8° 06.8′ E	**Iso.W.** period 6s	49 **15**	**24**	Red round tower, white bands, red lantern; 56.	**Radar reflector.**
10216 *B 1138.1*	--Rear, 4.3 km. 164°30′ from front.	53° 34.9′ N 8° 07.9′ E	**Iso.W.** period 6s	198 **60**	**27**	White round concrete tower, red bands; 201.	Synchronized with front.
10220 *B 1139*	-Niedersachsenbrucke Range, front.	53° 34.9′ N 8° 09.5′ E	**F.W.**	33 **10**	4	Framework tower, white and red triangular daymark, point up; 36.	
10224 *B 1139.1*	--Rear, 15 meters 298° from front.	53° 34.9′ N 8° 09.5′ E	**F.W.**	42 **13**	4	Framework tower, white and red triangular daymark, point down; 46.	Range lit for arrival and departure maneuvers only.
10244 *B 1133*	Hooksielplate radar tower.	53° 40.2′ N 8° 09.0′ E	**Oc.W.R.G.** period 3s lt. 2.2s, ec. 0.8s	82 **25**	W. 7 R. 5 G. 4	White round tower, red bands; 180.	R. 345°-359°18′, W.-002°06′, G.-011°48′, W.-018°30′, R.-098°42′, W.-104°24′, G.-115°18′, W.-119°48′, R.-129°12′. **Fog detector light.**
10248 *B 1134*	**-Tossens** Range, front.	53° 34.5′ N 8° 12.4′ E	**Oc.W.** period 6s	49 **15**	**20**	White round tower, red band, red lantern; 56.	
10248.1 *B 1134.1*	--Rear, about 3860 meters 146° from front.	53° 32.8′ N 8° 14.4′ E	**Oc.W.** period 6s	167 **51**	**20**	Red round tower, 2 white bands, 3 galleries; 171.	
10256 *B 1141*	-Eckwarden Range, front.	53° 32.5′ N 8° 13.1′ E	**Iso.W.R.G.** period 3s	49 **15**	W. 12 R. 9 G. 8	Round tower, red and white bands, red lantern; 59.	R. 346°-348°, W.-028°, R.-052°, W. (intensified)- 054°, G.-067°30′, W.-110°, G.-152°36′, W. (intensified) across range line.
10260 *B 1141.1*	--Rear, 2.35 km. 154° from front.	53° 31.3′ N 8° 14.0′ E	**Iso.W.** period 3s	135 **41**	**21**	Red pyramidal framework tower; lantern; 121.	Synchronized with front.

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
			GERMANY-NORTH SEA				
10264 *B 1156*	-Vorhafen, Entrance Range, front.	53° 31.9′ N 8° 09.7′ E	**Iso.W.** period 4s	57 **17**	11	Black mast, red lantern; 30.	Intensified on range line.
10268 *B 1156.1*	- -Rear, 180 meters 207°48′ from front.	53° 31.8′ N 8° 09.6′ E	**Iso.W.** period 4s	76 **23**	11	Yellow square building; 72.	
10272 *B 1158*	-W. mole, head.	53° 32.5′ N 8° 10.2′ E	**Oc.G.** period 6s lt. 4.5s, ec. 1.5s	49 **15**	4	Green mast; 39.	
10276 *B 1159*	-E. mole, head.	53° 32.5′ N 8° 10.3′ E	**Oc.R.** period 6s lt. 4.5s, ec. 1.5s	49 **15**	5	Red mast; 39.	
10280 *B 1162*	-Third entrance, N. pier, head.	53° 31.3′ N 8° 09.9′ E	**Oc.W.G.** period 3s lt. 2.3s, ec. 0.7s	39 **12**	W. 8 G. 5	Black 4-legged structure on brick base.	W. 180°-235°, G.-271°30′, W.-036°, G.-050°. Signal station.
10284 *B 1163*	-N. mole, head.	53° 30.9′ N 8° 09.4′ E	**F.W.G.**	29 **9**	W. 6 G. 3	Green metal framework tower; 33.	W. 216°-280°, G.-010°, W.-020°, G.-130°.
10288 *B 1164*	-Mole, head.	53° 30.8′ N 8° 09.2′ E	**F.R.**	20 **6**	5	Red post on platform.	
10292 *B 1166*	-N. mole, angle.	53° 30.9′ N 8° 08.9′ E	**F.G.**	20 **6**	3	Black post; 16.	
10296 *B 1168*	-S. mole, head.	53° 30.8′ N 8° 08.8′ E	**F.R.**	15 **5**	4	Red post; 13.	Signal station. **Fog detector light.**
10300 *B 1152*	**-Arngast Sand.**	53° 28.9′ N 8° 11.0′ E	**F.W.R.G.**	99 **30**	W. **21** R. **16** G. **17**	Red round tower, two galleries, white band; 118.	W. 135°-142°, G.-150°, W.-152°, G.-174°36′, R. 180°30′-191°, W.-213°, R.-225°, W. 286°-303°, G.-314°.
			Fl.W.G. period 3s fl. 0.7s, ec. 2.3s				G. 174°36′-175°30′, W.-176°24′.
			Fl.(2)W. period 9s fl. 0.7s, ec. 2.3s fl. 0.7s, ec. 5.3s				Visible 177°24′-180°30′.
			Oc.W. period 6s lt. 5s, ec. 1s		**20**		Visible 176°24′-177°24′.
10302	*-Jade-Weser Buoy.*	53° 58.3′ N 7° 38.8′ E	**Oc.W.** period 4s			SAFE WATER RW, pillar, topmark.	
	-RACON		**T(–)**		6		
	WESER RIVER:						
10304 *B 1186*	*-3/Jade 2 Buoy.*	53° 52.1′ N 7° 47.3′ E	**Fl.(2+1)G.** period 15s			PREFERRED CHANNEL (A) GRG, pillar, topmark.	
	-RACON		**T(–)**		7		
10308 *B 1188*	**-Alte Weser.**	53° 51.9′ N 8° 07.6′ E	**F.W.R.G.**	108 **33**	W. **22** R. **19** G. **17**	Red round tower, two white bands, green lantern with radar antenna.	W. 288°-352°, R.-003°, W.-017°(leading sector), G.-045°, W.-074°, G.-118°, W.-123° (leading sector), R.-140°, G.-175°, W.-183°, R.-196°, W.-238°. **Horn:** Mo.(AL) ev. 60s. **Fog detector light.**

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
			GERMANY-NORTH SEA				
10316 *B 1122*	**-Mellumplate.**	53° 46.3′ N 8° 05.6′ E	**Dir. Fl.W.** period 4s fl. 1s, ec. 3s	89 **27**	**23**	Red square tower, white band, gallery; 105. Helicopter platform.	Visible 114°-115°12′.
			Mo.(A)W. period 7.5s	89 **27**	**23**		Visible 115°12′-116°06′.
			F.W.	89 **27**	**24**		Visible 116°06′-116°24′.
			Mo.(N)W. period 7.5s	89 **27**	**23**		Visible 116°24′-117°12′.
			Fl.(4)W. period 15s fl. 1s, ec. 2s fl. 1s, ec. 2s fl. 1s, ec. 2s fl. 1s, ec. 5s	89 **27**	**23**		Visible 117°12′-118°24′.
10320 *B 1196*	**Tegeler Plate.**	53° 47.9′ N 8° 11.5′ E	**Oc.(3)W.R.G.** period 12s lt. 2s, ec. 1s lt. 2s, ec. 1s lt. 5s, ec. 1s	68 **21**	W. **21** R. **17** G. **16**	Red round tower, white lantern, red roof; 79.	W. 329°-340°, R.-014°, W.-100°, G.-116°, W.-119°, R.-123°, G.-144°, W.-147°, R.-264°. **Fog detector light.**
10324 *B 1198*	**-Hohe Weg.**	53° 42.9′ N 8° 14.7′ E	**F.W.R.G.**	95 **29**	W. **19** R. **16** G. **15**	Red octagonal tower, two galleries, green lantern, with radar antenna; 118.	W. 102°-138°30′, G.-142°30′, W.-145°30′, R.-184°, W.-278°30′. **Fog detector light.**
10328 *B 1225*	**Dwarsgat** Range, front.	53° 43.2′ N 8° 18.5′ E	**Iso.W.** period 6s	52 **16**	**15**	Red mast, white bands, double cone topmark, points together; 62.	
10332 *B 1225.1*	--Rear, about 1.3 km. 320°06′ from front.	53° 43.7′ N 8° 17.8′ E	**Iso.W.** period 6s	115 **35**	**17**	Red mast, white bands, double cone topmark, points together; 121.	Synchronized with front. Range is reciprocal range at Wremer Loch range.
10336 *B 1210*	-Robbennordsteert.	53° 42.2′ N 8° 20.5′ E	**F.W.R.**	36 **11**	W. 10 R. 7	Black tripod, lantern on red column with gallery; 52.	W. 324°-004°, R.-090°, W.-121°.
10340 *B 1214*	**-Robbenplate** Range, front.	53° 40.9′ N 8° 23.0′ E	**Oc.W.** period 6s lt. 4.5s, ec. 1.5s	49 **15**	**17**	Red tripod, gallery; 49.	Intensified on range line.
10344 *B 1214.1*	--Rear, about 1 km. 122°18′ from front.	53° 40.6′ N 8° 23.8′ E	**Oc.W.** period 6s	121 **37**	**18**	Red square tower, three galleries, green lantern; 128.	Visible 116°-125°30′. Synchronized with front. **Fog detector light.**
10352 *B 1228*	-Langlutjen Sand Range, front.	53° 39.6′ N 8° 23.1′ E	**Oc.W.** period 6s lt. 5.2s, ec. 0.8s	49 **15**	13	Black structure, black and white gallery; 62.	Visible 288°-310°.
10356 *B 1228.1*	--Rear, 930 meters 305°12′ from front.	53° 40.0′ N 8° 22.2′ E	**Oc.W.** period 6s	102 **31**	14	Black mast with white gallery; 110.	Synchronized with front.
10360 *B 1224*	-Wremer Loch Range, front, NE. side of Langlutjen Sands.	53° 38.5′ N 8° 25.1′ E	**Iso.W.** period 6s	49 **15**	13	Black pipe with band and green lantern; 59.	**Radar reflector.**
10364 *B 1224.1*	--Rear, about 1.06 km. 140°06′ from front.	53° 38.0′ N 8° 25.7′ E	**Iso.W.** period 6s	101 **31**	14	Black steel pipe, two white bands and green lantern; 111.	Synchronized with front. **Radar reflector.**
10368	-Solthorn Range, front.	53° 38.3′ N 8° 27.4′ E	**Iso.W.** period 4s	49 **15**	13	Red and white pipe, two red galleries; 65.	
10372 *B 1239.1*	**--Rear,** 700 meters 320°36′ from front.	53° 38.6′ N 8° 27.0′ E	**Iso.W.** period 4s	102 **31**	**17**	Red and white pipe, two red galleries; 108.	Synchronized with front.
10376 *B 1240*	**-Hofe** Range, front.	53° 37.1′ N 8° 29.8′ E	**Oc.W.** period 6s lt. 5s, ec. 1s	49 **15**	**18**	White mast, red bands, red ball topmark.	
10380 *B 1240.1*	--Rear, 1.3 km. 330°48° from front.	53° 37.7′ N 8° 29.2′ E	**Oc.W.** period 6s lt. 5s, ec. 1s	115 **35**	**18**	White mast, red bands, red ball topmark; 141.	Synchronized with front.

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
			GERMANY-NORTH SEA				
	BREMERHAVEN:						
10388 *B 1257*	**-Fischeriehafen.**	53° 31.9′ N 8° 34.6′ E	**Oc.W.** period 6s lt. 5s, ec. 1s	55 **17**	**18**	White mast, red triangular daymark, point up; 36.	F.Y. on yellow pile 535 meters S.
10392 *B 1258*	-N. Lock.	53° 34.0′ N 8° 32.9′ E	**F.R.**	40 **12**	5	Red metal framework mast, 39.	Visible 184°-150°. **Horn:** Mo.(NN) ev. 30s.
10396 *B 1260*	- -On quay.	53° 33.9′ N 8° 33.1′ E	**F.G.**	49 **15**	4	Red mast, black band; 39.	Visible 330°-184°.
	-Kaiserhafen:						
10400 *B 1262*	- -On mole, W. side of entrance to locks.	53° 33.4′ N 8° 33.5′ E	**F.R.**	46 **14**	5	Red mast; 39.	
10404 *B 1264*	- -E. side of entrance to Kaiserhafen.	53° 33.3′ N 8° 33.7′ E	**F.G.**	33 **10**	4	Red brick tower, concrete base, green lantern; 49.	Visible 058°-141°. **Bell:** 4 strokes ev. 10s.
	-Neuer Hafen:						
10408 *B 1268*	- -Bremerhaven Range, front, S. mole.	53° 32.7′ N 8° 34.3′ E	**Iso.W.** period 4s	69 **21**	8	Conical metal tower, red and white bands; 85.	
10412 *B 1268.1*	- - -Rear, NE. side of entrance, 208 meters 006° from front.	53° 32.8′ N 8° 34.3′ E	**Iso.W.** period 4s	111 **34**	8	Brown square brick tower, green lantern; 121.	Synchronized with front.
10416 *B 1274*	-Old Harbor entrance, Geeste N. mole.	53° 32.3′ N 8° 34.5′ E	**F.R.**	49 **15**	5	Red tower, lantern and gallery; 45.	Visible 245°-166°. **Fog detector light.**
10420 *B 1275*	-Harbor entrance, S. mole, head.	53° 32.2′ N 8° 34.5′ E	**F.G.**	49 **15**	5	Red framework tower, black band, green lantern; 45.	Visible 355°-265°.
	ELBE RIVER ENTRANCE:						
10424 *B 1332*	*-Elbe Buoy.*	54° 00.0′ N 8° 06.5′ E	**Iso.W.** period 10s			SAFE WATER RW, pillar, topmark.	**Horn:** Mo.(R) ev. 30s.
	-RACON		**T(–)** period 30s		7		
10436 *B 1344*	**-Neuwerk.**	53° 55.0′ N 8° 29.8′ E	**L.Fl.(3)W.R.G.** period 20s fl. 2s, ec. 3s fl. 2s, ec. 3s fl. 2s, ec. 8s	124 **38**	W. **16** R. 12 G. 11	Square brick tower, black dome; 127.	G. 165°18′-215°18′, W.-238°48′, R.-321°, R. 343°-100°.
	CUXHAVEN:						
10440 *B 1360.9*	**-Baumronne** Range, front, 151°12′, 3 km. from common rear.	53° 51.2′ N 8° 44.2′ E	**Fl.W.** period 3s fl. 0.8s, ec. 2.2s	82 **25**	**17**	White round tower, black band and gallery; 72.	Visible 143°48′-149°12′.
			Iso.W. period 4s				Visible 149°12′-154°12′.
			Fl.(2)W. period 9s fl. 0.8s, ec. 2.2s fl. 0.8s, ec. 5.2s				Visible 154°12′-156°42′.
10444 *B 1361*	- -**Altenbruch** common rear.	53° 49.9′ N 8° 45.5′ E	**Iso.W.** period 4s	190 **58**	**21**	Black round tower, white bands and gallery; 194.	Synchronized with Baumronne front and intensified on range line.
	- -Rear range, 261°.		**Iso.W.** period 8s	167 **51**	**22**	Same structure.	Synchronized with Altenbruch common front and intensified on range line.

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
			GERMANY-NORTH SEA				
10445 *B 1361.1*	**-Altenbruch** Range, 261°, common front.	53° 50.1′ N 8° 47.8′ E	**Iso.W.** period 8s	62 **19**	**19**	White round tower, black bands; 65.	
			Iso.W.R.G. period 8s		W. 8 R. 9 G. 8		G. 117°30′-124°, W.-135°, R.-140°.
10446 *B 1361.2*	--Wehldorf rear, 150 meters 130°48′ from common front.	53° 49.8′ N 8° 48.2′ E	**Iso.W.** period 8s	102 **31**	11	Black round tower, white bands; 65.	Synchronized with common front and intensified on range line.
10448 *B 1363*	-Neuer Fahrhafen, W. mole, head.	53° 52.7′ N 8° 42.3′ E	**F.W.G.**	23 **7**	W. 6 G. 3	Green post.	G. 125°-349°, W.-125°.
10452 *B 1363.2*	-Ferry pier, head.	53° 52.7′ N 8° 42.3′ E	**F.W.R.**	23 **7**	W. 6 R. 4	Red post, red lantern.	R. 117°-336°, W.-117°.
	-Cuxhaven (Fischeriehafen):						
10456 *B 1360*	--W. side of entrance to Alter Hafen.	53° 52.4′ N 8° 42.6′ E	**F.W.R.**	79 **24**	W. 8 R. 6	Brown round tower, copper cupola; 75.	W. 199°30′-245°, R.-285°, W.-290°18′.
			Fl.(4)W. period 12s fl. 1s, ec. 1s fl. 1s, ec. 1s fl. 1s, ec. 1s fl. 1s, ec. 5s				Visible 290°18′-301°.
			Oc.W. period 6s lt. 5s, ec. 1s				Visible 301°-310°.
			Fl.(5)W. period 12s fl. 1s, ec. 1s fl. 1s, ec. 1s fl. 1s, ec. 1s fl. 1s, ec. 1s fl. 1s, ec. 3s				Visible 310°-318°.
10460 *B 1368*	--W. mole, head.	53° 52.3′ N 8° 42.9′ E	**F.W.G.**	21 **6**	W. 4 G. 2	Square yellow tower, green lantern, green dome; 13.	G. 125°-344°, W.-125°.
10464 *B 1370*	--E. mole, head.	53° 52.3′ N 8° 42.9′ E	**F.W.R.**	23 **7**	W. 6 R. 4	Square yellow tower, red edges and red lantern; 16.	R. 124°-008°, W.-124°.
	-Amerikahafen:						
10468 *B 1374*	--Steubenhoft.	53° 52.1′ N 8° 43.1′ E	**Oc.W.G.** period 4s lt. 3s, ec. 1s	39 **12**	W. 5 G. 3	Green round metal tower; 33.	G.122°-338°, W.-122°.
10500 *B 1392*	Medem, entrance to Hadelner Kanal.	53° 50.2′ N 8° 53.9′ E	**Fl.(3)W.** period 12s fl. 0.7s, ec. 2.3s fl. 0.7s, ec. 2.3s fl. 0.7s, ec. 5.3s	20 **6**	5	Black metal post, triangular daymark, point up, yellow platform; 23.	
10502 *B 1396*	**Otterndorf/Belum** Range, common front.	53° 50.2′ N 8° 56.3′ E	**Iso.W.** period 4s	75 **23**	**18**	Tower, red conical top, red and white bands; 82.	
10502.1 *B 1395.9*	**-Belum,** rear, 1250 meters 092°48′ from common front.	53° 50.1′ N 8° 57.4′ E	**Iso.W.** period 4s	148 **45**	**18**	Tower, red conical top, red and white bands; 144.	
10502.2 *B 1396.1*	**-Otterdorf,** rear, 2500 meters 245° 30′ from common front.	53° 49.6′ N 8° 54.1′ E	**Iso.W.** period 4s	171 **52**	**21**	Tower, red conical top, red and white bands; 171.	
	OSTE RIVER:						
10508 *B 1402*	-Belumer Dyke Range, front, inner head.	53° 50.3′ N 8° 59.7′ E	**Iso.W.** period 6s	30 **9**	5	Red mast; 30.	Visible 118°48′-145°48′.
10512 *B 1402.1*	--Rear, 141 meters 132°18′ from front.	53° 50.2′ N 8° 59.8′ E	**Iso.W.** period 6s	46 **14**	5	Red metal lattice mast, platform; 40.	

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
			GERMANY-NORTH SEA				
10520 *B 1412*	**Balje** Range, front.	53° 51.4′ N 9° 02.7′ E	**Iso.W.** period 8s	79 **24**	**17**	White tower, red bands.	
10524 *B 1412.1*	-Rear, about 3 km. 081° from front.	53° 51.5′ N 9° 04.9′ E	**Iso.W.** period 8s	177 **54**	**21**	White tower, red bands.	Visible either side of range line (sector unspecified). Synchronized, intensified on range line.
10528 *B 1416*	**Schleuseninsel** Range, front.	53° 53.4′ N 9° 08.5′ E	**Iso.W.** period 3s	79 **24**	**16**	Tower, red and white bands; 69.	
10532 *B 1416.1*	**Industriegebiet,** rear, about 1.63 km. 065°30′ from front.	53° 53.7′ N 9° 09.9′ E	**Iso.W.** period 3s	151 **46**	**21**	Tower, red and white bands; 154.	Synchronized with front light, intensified on range line.
	BRUNSBUTTEL:						
	-Nord-Ostsee-Kanal:						
10552 *B 1438*	--New entrance, N. mole, head.	53° 53.3′ N 9° 07.6′ E	**2 F.W.R.** (vert.)	49 **15** 42 **13**	W. 10 R. 8	White tower, red band, cupola, designation ″4″″; 42.	R. 275°30′-079°, W.-084°. Storm signals.
10556 *B 1431*	--Elbehafen, W. Range, front.	53° 53.5′ N 9° 10.1′ E	**L.Fl.W.** period 8s fl. 2s, ec. 6s	33 **10**	10	Gray mast, white double cone topmark each, red border.	
10560 *B 1431.1*	---Rear, 360° from front.	53° 53.5′ N 9° 10.1′ E	**L.Fl.W.** period 8s fl. 2s, ec. 6s	42 **13**	10	Gray mast, white double cone topmark each, red border.	Synchronized with front.
10564 *B 1436*	---S. mole, head.	53° 53.3′ N 9° 08.2′ E	**2 F.G.** (vert.)	49 **15** 42 **13**	7	White tower, black band, cupola, designation ″3″″; 39.	Visible 275°30′-088°30′. **Nautophone:** 1 bl. ev. 10s.
10568 *B 1442*	--Old entrance, N. mole, head.	53° 53.3′ N 9° 08.4′ E	**F.R.**	47 **14**	7	Red tower, white roof, gray base; 43. Floodlit.	Visible 278°30′-084°30′.
10572 *B 1444*	---S. mole, head.	53° 53.3′ N 9° 08.6′ E	**F.W.G.**	47 **14**	W. 10 G. 6	White tower, white roof, black gallery, gray base; 36.	W. 266°18′-273°54′, G.-088°48′.
10576 *B 1352*	Friedrichskoog Harbor.	53° 59.5′ N 8° 50.7′ E	**F.W.**	23 **7**	6	Black dolphin; 23.	**Nautophone:** Mo.(F) ev. 30s.
	BUSUM:						
10580 *B 1606*	-Fishing harbor, W. side.	54° 07.7′ N 8° 51.6′ E	**Iso.W.R.G.** period 6s	72 **22**	W. **17** R. 14 G. 13	Round metal tower, white and red stripes; 72.	W. 024°-084°, G.-092°30′, W.-094°30′ (Suderpiep Dir. sector), R.-097°, W.-148°, obsc.-248°, W.-317°, R.-024°.
10584 *B 1609*	-W. pier, head.	54° 07.2′ N 8° 51.6′ E	**Oc.(3)R.** period 12s lt. 2s, ec. 1s lt. 2s, ec. 1s lt. 5s, ec. 1s	33 **10**	4	Red tower, gray lantern; 29.	**Fog detector light.**
10592 *B 1610*	--Starboard side.	54° 07.2′ N 8° 51.7′ E	**Oc.(3)G.** period 12s lt. 2s, ec. 1s lt. 2s, ec. 1s lt. 5s, ec. 1s	33 **10**	4	Green dolphin.	
10596 *B 1624*	**Saint Peter.**	54° 17.2′ N 8° 39.2′ E	**L.Fl.(2)W.R.** period 15s fl. 2s, ec. 3s fl. 2s, ec. 8s	77 **23**	W. **15** R. 13	Red round tower, black lantern; 60.	R. 271°-280°30′, W.-035°, R.-055°, W.-068°, R.-091°, W.-120°.
10600 *B 1652*	**Westerheversand.**	54° 22.5′ N 8° 38.5′ E	**Oc.(3)W.R.G.** period 15s lt. 2s, ec. 1s lt. 2s, ec. 1s lt. 8s, ec. 1s	135 **41**	W. **21** R. **17** G. **16**	Red tower, white bands; 131.	W. 012°12′-069°, G.-079°30′, W.-080°30′, R.-107°, W.-206°30′, R.-218°30′, W.-233°, R.-248°.

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
			GERMANY-NORTH SEA				
10604 *B 1672*	**Suderoogsand.**	54° 25.4′ N 8° 28.8′ E	**Iso.W.R.G.** period 6s	59 **18**	W. **15** R. 12 G. 11	Black beacon; 62.	R. 240°-244°, W.-246°, G.-263°, W.-320°, R.-338°, W.-013°, R.-048°, W.- 082°30′, R.-122°30′, W.-150°.
10608 *B 1676*	**Pellworm Island** Range, front.	54° 29.3′ N 8° 39.1′ E	**Oc.W.R.** period 5s lt. 4s, ec. 1s	46 **14**	W. 11 R. 8	Gray structure, white lantern and platform; 56.	W. 303°30′-313°30′, R.-316°30′. W. intensified on range line.
10612 *B 1676.1*	-Rear, about 1.5 km. 041° from front.	54° 29.8′ N 8° 40.0′ E	**Oc.W.** period 5s	125 **38**	**20**	Red tower, white band; 115.	
			Oc.W.R. period 5s lt. 4s, ec. 1s		W. 14 R. 6		R. 255°-265°30′, W.-276°, R.-297°, W.-307°, R. 122°36′-140°, W.-161°30′, R.-179°30′, W.-210°12′.
	AMRUM:						
10616 *B 1685*	-Amrum harbor Range, 272°, front.	54° 37.9′ N 8° 22.9′ E	**Iso.R.** period 4s	36 **11**	10	Red tower, white bands; 16.	
10620 *B 1685.1*	**--Amrum,** rear.	54° 37.9′ N 8° 21.4′ E	**Fl.W.** period 7.5s fl. 1s, ec. 6.5s	207 **63**	**23**	Red tower, white bands; 134.	
			Iso.R. period 4s	108 **33**	**15**		
10628 *B 1688*	-Wriakhorn.	54° 37.6′ N 8° 21.2′ E	**L.Fl.(2)W.R.** period 15s fl. 2s, ec. 3s fl. 2s, ec. 8s	85 **26**	W. 9 R. 7	Lattice framework with platform; 56.	W. 297°30′-319°30′, R.-330°, W.-005°30′, R.-034°.
10636 *B 1728*	**-Norddorf.**	54° 40.3′ N 8° 18.6′ E	**Oc.W.R.G.** period 6s lt. 4.5s, ec. 1.5s	72 **22**	W. **15** R. 12 G. 11	White round metal tower; 23.	W. 009°-034°, R.-094°, W.-146°, R.-176°30′, W.-178°30′, G.-188°, G. (unintensified)-202°, W.-230°.
10640 *B 1700*	Nordmarsch.	54° 37.6′ N 8° 31.8′ E	**L.Fl.(3)W.R.** period 20s	43 **13**	W. 14 R. 11	Brown round stone tower; 37.	W. 268°-279°, R.-306°, W.-045°, R.-070°, W.-218°.
	FOHR:						
10644 *B 1704*	-Oldenhorn.	54° 40.9′ N 8° 34.1′ E	**Oc.(4)W.R.** period 15s lt. 2s, ec. 1s lt. 2s, ec. 1s lt. 2s, ec. 1s lt. 5s, ec. 1s	34 **10**	W. 13 R. 10	Square red brick tower with platform, conical roof, gray lantern; 26.	W. 208°-245°, R.-298°, W.-333°, R.-080°.
10648 *B 1706*	--Wyk, pier, head.	54° 41.6′ N 8° 34.7′ E	**F.R.**	30 **9**	4	Red mast.	
10652 *B 1714*	Oland, NW. side, on Hallig wharf.	54° 40.5′ N 8° 41.3′ E	**F.W.R.G.**	22 **7**	W. 13 R. 10 G. 9	Red tower; 23.	G. 086°-093°, W.-160°, R.-172°.
	SYLT:						
10676 *B 1735*	**-Hornum.**	54° 45.3′ N 8° 17.5′ E	**Fl.(2)W.** period 9s fl. 0.4s, ec. 2.6s fl. 0.4s, ec. 5.6s	157 **48**	**20**	Red round tower, white band; 110.	
10688	-Hornum Odde, cross.	54° 44.4′ N 8° 17.7′ E	**Oc.(2)W.R.G.** period 12s lt. 3s, ec. 1s lt. 7s, ec. 1s	56 **17**	W. 6 R. 4 G. 3	Gray mast; 13.	R. 180°-204°, W.-270°, G.-290°, W.-313°, R.-328°, W.-023°, R.-045°.
10692 *B 1738*	-N. mole.	54° 45.6′ N 8° 17.9′ E	**F.G.**	20 **6**	3	Black mast; 10.	Visible 024°-260°.
10696 *B 1738.6*	--Outer S. mole, head.	54° 45.6′ N 8° 18.0′ E	**F.R.**	20 **6**	3	Red mast.	Mole floodlit.

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
			GERMANY-NORTH SEA				
10700 *B 1740*	**-Kampen.**	54° 56.8′ N 8° 20.5′ E	**L.Fl.W.R.** period 10s fl. 3s, ec. 7s	203 **62**	W. **20** R. **16**	White round stone tower, black band and conical roof; 124.	W. 193°-260°, W. (unintensified)-339°, W.-165°, R.-193°.
10704 *B 1746*	-List, W.	55° 03.2′ N 8° 24.2′ E	**Oc.W.R.G.** period 6s lt. 4.5s, ec. 1.5s	62 **19**	W. 14 R. 11 G. 10	White round metal tower, red cupola; 35.	W. 040°-069°, R.-133°, W.-227°, R.-266°24′, W.-268°, G.-285°, W.-310°, W. (unintens.)-040°.
10708 *B 1748*	-List E.	55° 03.0′ N 8° 26.7′ E	**Iso.W.R.G.** period 6s	73 **22**	W. 14 R. 11 G. 10	White round metal tower, red lantern; 43.	W. (unintensified) 010°30′-098°, W.-262°, R.-278°, W.-296°, R.-323°18′, W.-324°30′, G.-350°, W.-010°30′.
10712 *B 1749*	-List Land.	55° 01.1′ N 8° 26.5′ E	**Oc.W.R.G.** period 3s lt. 2s, ec. 1s	46 **14**	W. 13 R. 10 G. 9	White mast, red band; 33.	W. 170°-203°, G.-212°, W.-215°30′, R.-232°30′, W.-234°, G.-243°, W.-050°. F.G. and F.R. mark naval boat harbor entrance.
			DENMARK-NORTH SEA				
10716 *B 1848*	**Blavandshuk.**	55° 33.5′ N 8° 05.1′ E	**Fl.(3)W.** period 20s fl. 0.3s, ec. 3.7s fl. 0.3s, ec. 3.7s fl. 0.3s, ec. 11.7s	180 **55**	**23**	White rectangular tower; 128.	**DGPS Station.**
10716.3	*Regnar Field TANKER Superbuoy.*	55° 23.2′ N 5° 13.9′ E	**Mo.(U)W.** period 15s		10		**Horn.**
	RACON		**U(• • –)** period 30s				
10716.5	Dan Field, Platform ″FC", RACON.	55° 28.0′ N 5° 08.0′ E	**U(• • –)** period 90s				**Aero Radiobeacon.**
10717	Kraka Field, Platform ″A", RACON.	55° 24.0′ N 5° 05.1′ E	**U(• • –)** period 90s				
10717.1 *A 7784*	″GNSC-B-11" Platform, RACON.	55° 27.8′ N 4° 33.0′ E	**D(– • •)**				
10717.2	Rolf Field, Platform ″A", RACON.	55° 36.4′ N 4° 29.6′ E	**U(• • –)**				
10717.3	Valdemar Field, Platform ″A", RACON.	55° 50.2′ N 4° 33.5′ E	**U(• • –)** period 90s				
10717.5	Dagmar Field, Platform ″A", RACON.	55° 34.6′ N 4° 37.2′ E	**U(• • –)** period 90s				
10718	Gorm Field, Platform ″C", RACON.	55° 34.9′ N 4° 45.6′ E	**U(• • –)** period 12s		10		
10718.2	Tyra East Field, Platform ″A", RACON.	55° 43.3′ N 4° 48.2′ E	**U(• • –)** period 90s		**20**		
10718.4	Tyra West Field, Platform ″A", RACON.	55° 43.0′ N 4° 45.1′ E	**U(• • –)** period 90s		**20**		
10719	*Gradyb Anduvning Buoy.*	55° 24.7′ N 8° 11.7′ E	**L.Fl.W.** period 10s			SAFE WATER RW, pillar, topmark.	
	RACON		**G(– – •)**				(3 & 10 cm)
10719.3	Harald Field, Platform ″B", RACON.	56° 20.7′ N 4° 16.3′ E	**U(• • –)** period 60s				
10719.5 *B 1757*	-Romo Channel, outer.	55° 03.5′ N 8° 31.1′ E	**Fl.(2)R.** period 10s fl. 1.5s, ec. 1.5s fl. 1.5s, ec. 5.5s	13 **4**	2	Red dolphin; 11.	
10719.6 *B 1758*	- -Middle.	55° 04.0′ N 8° 32.7′ E	**Fl.R.** period 3s fl. 0.3s, ec. 2.7s	13 **4**	2	Red dolphin; 11.	Shown 24 hours.

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
			DENMARK-NORTH SEA				
10719.7 *B 1759*	---Inner.	55° 04.8′ N 8° 34.2′ E	**Fl.R.** period 5s fl. 0.5s, ec. 4.5s	13 **4**	3	Red dolphin; 11.	
	ESBJERG APPROACH:						
10720 *B 1772*	**-Saedenstrand** Range, front.	55° 29.8′ N 8° 24.0′ E	**Iso.W.** period 2s	43 **13**	**21**	Red wooden building; 23.	Visible 051°48′-055°48′. Shown 24 hours.
10724 *B 1772.1*	--Middle, 630 meters 053°48′ from front.	55° 30.0′ N 8° 24.4′ E	**Iso.W.** period 4s	89 **27**	**21**	Red metal tower, white bands; 46.	Visible 051°-057°. Shown 24 hours.
10728 *B 1772.2*	--Rear, about 1.4 km. 053°48′ from middle.	55° 30.2′ N 8° 25.0′ E	**F.W.**	121 **37**	**18**	Red lattice mast, red rectangular daymark; 72.	Visible 052°-056°. Shown 24 hours.
10730 *B 1774*	-Tide Gauge.	55° 26.1′ N 8° 16.0′ E	**Fl.(5)Y.** period 20s	30 **9**	4	Yellow mast.	
10732 *B 1780*	-Fano Sandende, Jerg.	55° 28.9′ N 8° 22.2′ E	**Q.W.**	23 **7**	5	Black tower, yellow base.	
10736 *B 1780.4*	-Fovrfelt.	55° 29.1′ N 8° 23.8′ E	**Fl.(2)R.** period 10s fl. 1.5s, ec. 1.5s fl. 1.5s, ec. 5.5s	36 **11**	6	Red tower.	
10740 *B 1780.2*	--N.	55° 29.3′ N 8° 23.9′ E	**Oc.(2)W.R.G.** period 6s lt. 1s, ec. 1s lt. 3s, ec. 1s	23 **7**	5	Yellow tower.	G. 327°-331°, W.-333°30′, R.-342°, G. 066°30′-073°, W.-077°, R.-085°30′.
10744 *B 1778*	**-Saedenstrand,** S. Range, front.	55° 28.7′ N 8° 24.7′ E	**F.G.**	36 **11**	**16**	Gray square wooden tower; 25.	Shown 24 hours.
10748 *B 1778.1*	--Rear, about 1.2 km. 067° from front.	55° 29.1′ N 8° 26.1′ E	**F.G.**	82 **25**	**16**	Gray tower; 56.	Shown 24 hours.
10752 *B 1779*	--N. Range, front.	55° 29.9′ N 8° 23.8′ E	**F.R.**	57 **17**	**16**	White mast; 20.	Shown 24 hours.
10756 *B 1779.1*	--Rear, 550 meters 049° from front.	55° 30.1′ N 8° 24.1′ E	**F.R.**	93 **28**	**16**	Gray concrete tower; 37.	Shown 24 hours.
10760 *B 1782*	-Strandby.	55° 28.8′ N 8° 24.7′ E	**Oc.W.R.G.** period 5s lt. 4s, ec. 1s	20 **6**	W. 13 R. 9 G. 9	White building, red band; 16.	G. 101°42′-105°30′, W.-109°30′, R.-111°42′.
10768 *B 1784*	-Commercial Fishing harbor, W. mole.	55° 28.6′ N 8° 25.0′ E	**Fl.R.** period 5s fl. 1s, ec. 4s	16 **5**	4	Red conical building; 8.	
10772 *B 1784.4*	--E. mole.	55° 28.6′ N 8° 25.1′ E	**Fl.G.** period 5s fl. 1s, ec. 4s	16 **5**	4	Green conical building; 8.	
10776 *B 1786*	-Konsumfiskerihaven, W. mole.	55° 28.4′ N 8° 25.4′ E	**Fl.R.** period 3s fl. 0.7s, ec. 2.3s	16 **5**		Red metal pyramidal structure; 9.	Visible 203°-119°.
10780 *B 1788*	--E. mole.	55° 28.3′ N 8° 25.5′ E	**Fl.G.** period 3s fl. 0.7s, ec. 2.3s	16 **5**		Green metal pyramidal structure; 9.	Visible 023°-256°.
10784 *B 1792*	--Mole, between New Trafikhavn and Fishing Harbor.	55° 28.3′ N 8° 25.5′ E	**Oc.(2)W.R.G.** period 12s lt. 2s, ec. 2s lt. 6s, ec. 2s	20 **6**	W. 13 R. 9 G. 9	White building, red band; 13.	G. 118°-124°30′, W.-129°, R.-131°.
10788 *B 1794*	-Commercial Harbor, N. mole, head.	55° 28.2′ N 8° 25.5′ E	**F.R.**	26 **8**	5	Red conical metal building; 16.	Visible 232°-135°.
10792 *B 1796*	--S. mole, head.	55° 28.1′ N 8° 25.6′ E	**F.G.**	26 **8**	4	Green conical metal building; 16.	Visible 045°-276°.

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			DENMARK-NORTH SEA				
	ESBJERG HARBOR:						
10796 *B 1804*	-Commercial Harbor, W. mole, head.	55° 27.5′ N 8° 26.2′ E	**F.R.**	29 **9**	4	Red post on concrete foundation; 18.	
10800 *B 1805*	- -E. mole, head.	55° 27.5′ N 8° 26.4′ E	**F.G.**	29 **9**	4	Green post on concrete foundation; 18.	
10802 *B 1818.5*	-Western Excavation Limit Range, front.	55° 27.7′ N 8° 26.1′ E	**F.R.**	30 **9**	3	Gray steel framework mast; 20.	Visible 047°-077°.
10802.1 *B 1818.51*	- -Rear, 140 meters 062° from front.	55° 27.7′ N 8° 26.2′ E	**F.R.**	20 **6**	3	Gray steel framework mast; 13.	Visible 047°-077°.
10806	-Kremer Sand Range, front.	55° 27.7′ N 8° 24.9′ E	**F.W.**	31 **9**	7	Gray framework mast on white pipe support; 35.	Visible 276°54′-306°54′. Shown 24 hours.
10806.1	- -Rear, 244 meters 291°54′ from front.	55° 27.8′ N 8° 24.7′ E	**F.W.**	41 **12**	7	Gray framework mast on white pipe support; 36.	Visible 276°54′-306°54′. Shown 24 hours. Marks southern boundary of dredged area at Australia Quay.
10816 *B 1822*	-Nordby Range, front.	55° 27.0′ N 8° 24.5′ E	**F.R.**	26 **8**	4	White stake; 15.	Visible 123°42′-303°42′.
10820 *B 1822.1*	- -Rear, 73 meters 213°42′ from front.	55° 27.0′ N 8° 24.5′ E	**F.R.**	31 **9**	4	Gray framework mast; 30.	Visible 123°42′-303°42′.
10840 *B 1816.2*	-Kremer Sand S.	55° 27.3′ N 8° 24.9′ E	**F.G.**	17 **5**	3	Green post; 13.	
	HVIDE SANDE KANAL:						
10848 *B 1858*	**-Hvide Sande.**	56° 00.1′ N 8° 07.3′ E	**F.W.**	89 **27**	14	Gray framework mast; 62.	
10852 *B 1860*	-Breakwater, head.	56° 00.0′ N 8° 06.6′ E	**Fl.R.** period 3s fl. 0.8s, ec. 2.2s	24 **7**	8	Red mast, red band; 8.	
10856 *B 1861*	-W. entrance, N. mole, head.	56° 00.0′ N 8° 06.9′ E	**Fl.R.** period 5s fl. 1s, ec. 4s	33 **10**	6	Red structure; 16.	**Horn:** 1 bl. ev. 15s.
10860 *B 1862*	- -S. mole, W. head.	56° 00.0′ N 8° 06.9′ E	**Fl.G.** period 5s fl. 1s, ec. 4s	33 **10**	6	Green structure; 16.	
10864 *B 1862.4*	-Innerhead, S. mole, head.	56° 00.1′ N 8° 07.4′ E	**F.G.**	16 **5**	4	Gray metal structure; 7.	
10868 *B 1862.2*	- -Innerhead, N. mole, head.	56° 00.1′ N 8° 07.3′ E	**F.R.**	16 **5**	3	Gray metal structure; 7.	
10872 *B 1868*	**Lyngvig.**	56° 03.0′ N 8° 06.3′ E	**Fl.W.** period 5s fl. 0.3s, ec. 4.7s	174 **53**	**22**	White round tower; 125.	
	TORSMINDE:						
10876 *B 1879*	-Torsminde.	56° 22.6′ N 8° 07.1′ E	**F.W.**	98 **30**	14	Gray framework mast; 82.	
10880 *B 1880*	-N. mole, about 25 meters from head.	56° 22.4′ N 8° 06.7′ E	**Iso.R.** period 2s	30 **9**	4	Red round mast; 23.	
10884 *B 1881*	- -S. mole, head.	56° 22.3′ N 8° 07.0′ E	**Iso.G.** period 2s	30 **9**	4	Green round mast; 20.	
10892 *B 1885*	-E. side of lock.	56° 22.4′ N 8° 07.3′ E	**Iso.W.** period 4s	40 **12**	4	Gray mast; 40.	Visible 020°-160°.
10896 *B 1885.2*	-E. side of bridge.	56° 22.4′ N 8° 07.3′ E	**Iso.W.** period 4s	16 **5**	4	On bridge.	Visible 200°-340°.

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			DENMARK-NORTH SEA				
10900 *B 1884.4*	-E. Range, front.	56° 22.3′ N 8° 07.3′ E	**F.G.**	16 **5**	4	Gray post on dolphin.	
10904 *B 1884.6*	- -Rear.	56° 22.3′ N 8° 07.3′ E	**F.G.**	16 **5**	4	Gray post on dolphin.	
10908 *B 1886*	**Bovbjerg.**	56° 30.8′ N 8° 07.3′ E	**L.Fl.(2)W.** period 15s fl. 2.5s, ec. 2.5s fl. 2.5s, ec. 7.5s	203 **62**	**16**	Red round tower; 85.	
10910	*Thyboron Buoy.*	56° 42.8′ N 8° 08.5′ E	**L.Fl.W.** period 10s			SAFE WATER RW, pillar, topmark.	
	RACON		**T(–)** period 120s		10		
10912 *B 1890*	**Thyboron.**	56° 42.5′ N 8° 13.0′ E	**Fl.(3)W.** period 10s fl. 1s, ec. 1s fl. 1s, ec. 1s fl. 1s, ec. 5s	79 **24**	**16**	Framework tower; 56.	Intensified 023°30′-203°30′.
10916 *B 1894*	-Agger-Tange Range, front.	56° 43.0′ N 8° 14.1′ E	**Iso.W.R.G.** period 4s	26 **8**	W. 11 R. 8 G. 8	Red tower; 16.	G. 074°30′-079°30′, W.-084°30′, R.-089°30′.
10920 *B 1894.1*	- -Rear, 804 meters 082° from front.	56° 43.0′ N 8° 14.9′ E	**Iso.W.** period 4s	36 **11**	12	Gray framework mast, red triangular daymark, point down; 43.	Visible 075°-089°. Synchronized with front.
10924 *B 1897*	-Svaneholm Range, front.	56° 42.5′ N 8° 14.6′ E	**Iso.W.** period 2s	23 **7**	11	Red light structure, red triangular daymark, point up; 6.	Visible 113°-127°.
10928 *B 1897.1*	- -Rear, 312 meters 120° from front.	56° 42.4′ N 8° 14.8′ E	**Iso.W.** period 2s	42 **13**	11	Framework mast, red triangular daymark, point down; 42.	Visible 113°-127°. Synchronized with front.
10932 *B 1900*	-Thyboron Tange.	56° 42.4′ N 8° 13.5′ E	**Oc.(2)W.R.G.** period 12s lt. 2s, ec. 2s lt. 6s, ec. 2s	20 **6**	W. 12 R. 9 G. 9	White tower, red band; 10.	G. 122°30′-146°30′, W.-150°, R.-211°18′, G.-337°30′, W.-340°, R.-344°. Sectors altered and light moved as channel changes.
10936 *B 1902*	-Canal mole, head.	56° 42.1′ N 8° 13.6′ E	**Fl.G.** period 3s fl. 0.7s, ec. 2.3s	16 **5**	2	Green structure; 10. Floodlit.	
10940 *B 1903*	-S. mole, head.	56° 42.0′ N 8° 13.6′ E	**Fl.R.** period 3s fl. 0.7s, ec. 2.3s	16 **5**	2	Red structure; 10. Floodlit.	
10944 *B 2070*	**Lodbjerg.**	56° 49.4′ N 8° 15.8′ E	**Fl.(2)W.** period 20s fl. 0.5s, ec. 5.5s fl. 0.5s, ec. 13.5s	157 **48**	**23**	Round granite tower; 115.	
	NORRE VORUPOR:						
10948 *B 2072*	-Range, front.	56° 57.5′ N 8° 22.2′ E	**Iso.R.** period 4s	65 **20**	9	Red tower, white band; 13.	Visible 22°30′ each side of range line. **Siren:** (2 miles SSW) 2 bl. ev. 30s.
10952 *B 2072.1*	- -Rear, 80 meters from front.	56° 57.5′ N 8° 22.3′ E	**Iso.R.** period 4s	98 **30**	9	Red tower, white band; 30.	Visible 22°30′ each side of range line. Moves as channel changes.
10956 *B 2074*	-Mole, head.	56° 57.8′ N 8° 21.7′ E	**Fl.G.** period 5s	19 **6**	4	Gray framework structure; 10.	
10960 *B 2080*	Klitmoller Range, front.	57° 02.7′ N 8° 29.2′ E	**F.R.**	26 **8**	4	Mast; 16.	Visible 097°-210°. Moved as channel changes.
10964 *B 2080.1*	-Rear, 50 meters 146° from front.	57° 02.7′ N 8° 29.2′ E	**F.R.**	43 **13**	4	Mast; 26.	Visible 090°-202°. **Siren:** 2 bl. ev. 60s.

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
			DENMARK-NORTH SEA				
	HANSTHOLM:						
10968 *B 2084*	**-Hanstholm.**	57° 06.8′ N 8° 36.0′ E	**Fl.(3)W.** period 20s fl. 0.7s, ec. 3s fl. 0.7s, ec. 3s fl. 0.7s, ec. 11.9s	213 **65**	**26**	White octagonal tower; 75.	Lighted by day when visibility is 3M or less.
10972 *B 2087*	-Entrance Range, front.	57° 07.1′ N 8° 36.3′ E	**Iso.W.** period 2s	121 **37**	13	Orange mast, orange triangular daymark, point up; 13.	Visible 127°36′-157°36′.
10976 *B 2087.1*	- -Rear, 170 meters 142°36′ from front.	57° 07.1′ N 8° 36.3′ E	**Iso.W.** period 2s	147 **45**	13	Orange mast, orange triangular daymark, point down; 15.	Synchronized with front.
10980 *B 2086*	-Outer mole, E. section, head.	57° 07.6′ N 8° 35.7′ E	**Fl.R.** period 3s fl. 0.8s, ec. 2.2s	36 **11**	9	Red pillar; 16.	
10984 *B 2085*	- -W. section, head.	57° 07.6′ N 8° 35.5′ E	**Fl.G.** period 3s fl. 0.3s, ec. 2.7s	36 **11**	9	Green pillar; 16.	
10988 *B 2088*	-Transverse mole, W. section, head.	57° 07.5′ N 8° 35.7′ E	**F.G.**	20 **6**	6	Green column; 10.	**Nautophone:** (at root of mole) 1 bl. ev. 15s.
10992 *B 2089*	- -E. section, head.	57° 07.4′ N 8° 35.7′ E	**F.R.**	20 **6**	6	Red column; 10.	
10996 *B 2090*	-Roshage, mole, head.	57° 07.8′ N 8° 37.3′ E	**Fl.W.** period 5s fl. 0.5s, ec. 4.5s	23 **7**	6	Red column; 16.	
11000 *B 2098*	Lildstrand Ranges.	57° 09.2′ N 8° 57.9′ E	**3 F.W.**	71 **22** 40 **12** 40 **12**	8 7 7	Unpainted wooden masts.	Visible 127°-149°. Range lights. Occasional.
11004 *B 2102*	Lokken.	57° 22.4′ N 9° 42.2′ E	**Fl.W.** period 5s fl. 1s, ec. 4s	16 **5**	5	Tubular mast.	
11008 *B 2106*	**Hirtshals.**	57° 35.1′ N 9° 56.6′ E	**F.Fl.W.** period 30s fl. 0.3s, ec. 29.7s	187 **57**	F. **18** Fl **25**	White round tower; 115.	
11012 *B 2107*	-Range, front on transverse mole.	57° 35.7′ N 9° 57.7′ E	**Iso.R.** period 2s	33 **10**	11	White framework mast, red triangular daymark, point up; 30.	Visible 156°-176°.
11016 *B 2107.1*	- -Rear, 330 meters 166° from front.	57° 35.6′ N 9° 57.8′ E	**Iso.R.** period 4s	59 **18**	11	White framework mast, red triangular daymark, point down; 39.	Visible 156°-176°.
11020 *B 2108*	-Breakwater, head.	57° 36.0′ N 9° 57.5′ E	**Fl.G.** period 3s fl. 0.7s, ec. 2.3s	46 **14**	6	Green mast; 33. Floodlit.	**Horn:** 1 bl. ev. 15s (bl. 5s, si. 10s).
11024 *B 2110*	-Hirtshals outer harbor, W. mole, head.	57° 35.8′ N 9° 57.6′ E	**Fl.G.** period 5s fl. 1s, ec. 4s	30 **9**	4	Green floodlit pole; 23.	
11028 *B 2112*	- -E. mole, head.	57° 35.9′ N 9° 57.7′ E	**Fl.R.** period 5s fl. 1s, ec. 4s	30 **9**	6	Red pole; 23.	
11032 *B 2113*	-Inner harbor, transverse mole, E. head.	57° 35.7′ N 9° 57.9′ E	**F.G.**	20 **6**	2	Green pole; 13.	
11035	Svend Oilfield, Platform ″A", RACON.	56° 10.7′ N 4° 10.8′ E	**U(• • – –)** period 30s				
11038	Eldfisk Oilfield, platform, RACON	56° 22.5′ N 3° 16.0′ E	**O(– – – –)**		**16**		
11040	Tor Oilfied, platform, RACON	56° 38.5′ N 3° 19.8′ E	**N(– •)**		**16**		

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
			DENMARK-NORTH SEA				
11042	Skjold Oilfield, Platform ″C", RACON.	55° 31.9′ N 4° 54.5′ E	**U(• • –)**				

Section 10

Radiobeacons

(1) No.	(2) Name	(3) Position	(4) Characteristic	(5) Range	(6) Sequence	(7) Frequency	(8) Remarks
			UNITED KINGDOM				
10	Brighton Marina	50° 48.7′ N 0° 06.0′ W	**BM** **(– • • • – –).**	10		294.5 A1A.	
110	Cloch Point Light, Calibration Radiobeacon	55° 57.0′ N 4° 53.0′ W	**CL** **(– • – • • – • •).**	8		300 A1A.	Transmits upon request to Estuary Control on VHF Ch 16 or 12 or by telephone Greenock (0475) 26221. Six hours prior notice is required.
			CHANNEL ISLANDS				
270	Castle Breakwater Light	49° 27.4′ N 2° 31.4′ W	**GY** **(– – • – • – –).**	10		304.5 A1A.	Synchronized with horn for distance finding.
			GERMANY				
510	Wilhelmshaven Calibration Radiobeacon	53° 31.0′ N 8° 08.8′ E	**VB** **(• – – – – • • •).**			312.6, 2168 A2A.	Transmits on request to Wasser and Schiffahrtsamt Wilhelmshaven through Jade Revier on VHF Ch 16 or 20.
520	Bremerhaven Calibration Radiobeacon	53° 32.4′ N 8° 34.9′ E	**GB** **(– – • – • • •).**			312.6, 2168 A2A.	Transmits on request to Wasser and Schiffahrtsamt Bremerhaven through Bremerhaven Weser Revier on VHF Ch 5 or 7.
530	Hollerwettern Calibration Radiobeacon	53° 50.4′ N 9° 21.2′ E	**HB** **(• • • • – • • •).**			313.5, 2168 A2A.	Transmits on request to Revierzentrale Brunsbuttel to all district radio channels of the Wasser and Schiffahrtsam Hamburg or by telephone (04852) 8011-16 ext 393 or (04852) 8400.
540	Krautsand Calibration Radiobeacon	53° 45.6′ N 9° 22.6′ E	**KB** **(– • – – • • •).**			312.6, 2168 A1A.	Transmits on request to Revierzentrale Brunsbuttel to all district radio channels of the Wasser and Sciffahrtsamt Hamburg or by telephone (04852) 8011-16 ext. 393 or (04852) 8400.
			DENMARK				
570	Platform FC, Dan Oil Field	55° 28.0′ N 5° 08.0′ E	**DNF** **(– • • – • • • – •).**	25		349 A2A.	AERO.
			FRANCE				
610	Cap d'Alprech Light	50° 42.0′ N 1° 33.8′ E	**PH** **(• – – • • • • •).**	30		294 A1A.	
650	Port-en-Bessin Rear Light	49° 21.0′ N 0° 45.6′ W	**BS** **(– • • • • • •).**	5		290 A1A.	
720	Roscoff, Bloscon Jettty Light	48° 43.3′ N 3° 57.7′ W	**BC** **(– • • • – • – •).**	10		304.5 A1A.	

Section 11

Differential GPS Stations

(1) No.	(2) Name	(3) Position	(4) Station ID	(5) Range	(6) Frequency	(7) Transfer Rate	(8) Remarks
			DENMARK				
10	Blavands Huk	55° 33.5′ N 8° 05.1′ E	T 452	120	296.5	100	
			UNITED KINGDOM				
20	St. Catherine's Point Light	50° 34.5′ N 1° 17.8′ W	T 440 R 680 R 690	100	307.5	100	Message Types: 3,7,9,16.
25	Wormleighton DGPS Station	52° 11.8′ N 1° 21.9′ W	T 439 R 691	172	291	100	Message Types: 3,6,7,9,16.
30	Lizard Point Light	49° 57.6′ N 5° 12.1′ W	T 441 R 681 R 691	100	306	100	Message Types: 3,7,9,16.
40	Nash Point Light	51° 24.0′ N 3° 33.1′ W	T 449 R 689 R 699	100	309.5	100	Message Types: 3,7,9,16.
50	Point Lynas Light	53° 25.0′ N 4° 17.3′ W	T 442 R 682 R 692	100	297.5	100	Message Types: 3,7,9,16.
60	Butt Of Lewis Light	58° 30.9′ N 6° 15.7′ W	T 444 R 684 R 694	200	295.5	100	Message Types: 3,7,9,16.
70	Sumburgh Head Light Shetland Islands.	59° 51.3′ N 1° 16.4′ W	T 445 R 685 R 695	200	291.5	100	Message Types: 3,7,9,16.
80	Girdle Ness Light	57° 08.3′ N 2° 02.8′ W	T 446 R 686 R 696	150	297	100	Message Types: 3,7,9,16.
90	Flamborough Head Light	54° 07.0′ N 0° 04.9′ W	T 447 R 687 R 697	100	290.5	100	Message Types: 3,7,9,16.
100	North Foreland	51° 22.5′ N 1° 26.9′ E	T 448 R 688 R 698	100	299.5	100	Message Types: 3,7,9,16.
			REPUBLIC OF IRELAND				
110	Mizen Head.	51° 27.0′ N 9° 48.8′ W	T 430 R 660 R 661	150	284	100	Message Types: 3,7,9,16.
120	Tory Island Light.	55° 16.4′ N 8° 14.9′ W	T 435 R 670 R 671	200	288.5	100	Message Types: 3,7,9,16.
130	Loop Head Light	52° 33.6′ N 9° 55.9′ W	T 432 R 665 R 666	150	293	100	Message Types: 3,7,9,16.

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A0620.7	820
A0621	828
A0621.2	832
A0626	844
A0628	852
A0628.6	854
A0629	856
A0629.1	860
A0630	864
A0630.1	868
A0632	872
A0632.2	873
A0632.3	874
A0633	884
A0637	888
A0637.1	892
A0640	896
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A0644	908
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A0646	916
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A0654	924
A0658	928
A0658.5	932
A0664	942
A0665.8	942.1
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A0684	1024
A0686	952
A0688	948
A0691	956
A0692.5	960
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A0696	964
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A0701	974
A0704	980
A0705	984
A0707.4	988
A0719	1012
A0719.2	1016
A0720	992
A0722.2	996
A0726	1000
A0730	1004
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A0768	1052
A0770	1056
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CROSS REFERENCE - INTERNATIONAL vs. U.S. LIGHT NUMBER

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A0800.5	1078
A0801	1080
A0801.1	1084
A0804	1088
A0808	1092
A0808.2	1096
A0809	1098
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A0814	1112
A0814.1	1116
A0820	1118
A0822	1120
A0825	1122
A0825.2	1123
A0826	1121
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A0832	1132
A0839	1128
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A0846	1148
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A0848.1	1153
A0848.2	1154
A0848.5	1152
A0854	1176
A0856	1172
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A0858.1	1168
A0864	1216
A0864.5	1212
A0866	1192
A0866.3	1200
A0866.5	1204
A0866.7	1208
A0867	1196
A0876	1220
A0892	1228
A0894	1229
A0894.1	1229.1
A0896	1232
A0898	1234
A0898.2	1234.1
A0900	1236
A0902	1268
A0906	1256
A0912	1248
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A0924	1272
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A0958.1	1356
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A1127.4	8960
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A1146	8908
A1148	8912
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A1160	8900
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A1246	8756
A1248	8744
A1248.1	8748
A1250	8740
A1250.2	8727
A1250.21	8727.1
A1250.8	8704
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A1251.62	8712
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A1264	8656
A1266	8652
A1274	8660
A1274.4	8664
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A1280.7	8702
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A1378	8556
A1379	8560
A1381	8568
A1381.1	8572
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A1391	8544
A1396	8532
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A1404	8528
A1406	8512
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A1411.1	8500
A1412	8484
A1412.1	8488
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A1418.1	8480
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A1444.1	8436
A1448	8440
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A1454	8428
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A1458.1	8424
A1462	8416
A1463	8412
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A1466.1	8408
A1469	8316
A1470	8344
A1471.5	8356.1
A1472	8348
A1476	8340
A1478	8336
A1480	8332
A1482	8320
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A1484.1	8328
A1486	8352
A1486.1	8356
A1488	8364
A1488.1	8368
A1490	8400
A1491	8392
A1492	8396
A1493	8398
A1493.1	8398.1
A1495	8372
A1496	8380
A1498	8376
A1498.5	8384
A1499	8388
A1499.5	8386
A1508	8308
A1512	8304
A1514	8312
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CROSS REFERENCE - INTERNATIONAL vs. U.S. LIGHT NUMBER

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A1544	8260
A1545	8261
A1545.5	8262
A1546	8208
A1546.4	8200
A1546.6	8204
A1546.7	8205
A1548	8184
A1548.5	8188
A1550	8196
A1552	8192
A1554	8228
A1557	8216
A1558	8220
A1558.1	8224
A1559	8212
A1560	8232
A1560.1	8236
A1562	8252
A1566	8244
A1567	8246
A1567.2	8246.5
A1569	8248
A1569.1	8248.5
A1570	8249
A1574	8256
A1580	8180
A1584	8164
A1585	8168
A1585.1	8172
A1586	8160
A1588	8152
A1588.1	8156
A1594	8144
A1594.1	8148
A1598	8140
A1604	8120
A1604.1	8124
A1606	8128
A1609	8132
A1609.1	8136
A1614	8112
A1614.2	8116
A1616	8108
A1620	8100
A1621	8104
A1622	8176
A1632	8092
A1638	8080
A1640	8084
A1641	8088
A1644	8068
A1644.1	8072
A1646	8076
A1648	8064
A1649	8054
A1650	8056

Inter.	— U.S.
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A1654	8020
A1655	8024
A1656	8028
A1660	8036
A1662	8044
A1664	8048
A1666	8040
A1668	8052
A1670	8012
A1672	8016
A1673	8006
A1673.1	8006.1
A1674	7976
A1675	7988
A1676	7980
A1676.1	7984
A1680	7972
A1682	8008
A1686	8000
A1686.1	8004
A1695	7996
A1697	7964
A1698	7960
A1701	7954
A1702	7956
A1703	7952
A1704	7948
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A1710	7936
A1712	7928
A1713	7932
A1713.55	7926
A1714	7924
A1716	7920
A1720	7916
A1722	7904
A1724	7908
A1724.1	7912
A1726	7856
A1730	7852
A1734	7848
A1738	7844
A1740	7860
A1742	7864
A1744	7868
A1745	7884
A1745.4	7888
A1746	7872
A1748	7876
A1748.1	7880
A1752	7892
A1752.1	7896
A1758	7900
A1760	7832
A1762	7836
A1762.1	7840
A1768	7824
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A1774.1	7812
A1780	7816
A1782	7804
A1784	7800
A1786	7796

Inter.	— U.S.
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A1791	7790
A1792	7780
A1794	7784
A1794.1	7788
A1796	7772
A1796.1	7776
A1799.9	7768
A1800	7764
A1800.1	7760
A1804	7758
A1805	7756
A1808	7740
A1810	7744
A1812	7748
A1812.1	7752
A1816	7732
A1818	7724
A1818.1	7728
A1820	7720
A1822	7716
A1826	7704
A1826.1	7708
A1831	7712
A1836	7692
A1837	7696
A1838	7700
A1971	1368
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A1976	1376
A1977	1378
A1978	1380
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A2009.7	1400
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A2192	1444
A2194	1448
A2196	1451
A2201	1456
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A2203	1464
A2203.2	1468
A2203.4	1472
A2203.6	1476
A2204	1484
A2204.15	1488
A2204.2	1492
A2204.62	1500
A2206	1504
A2208	1508
A2213.3	1512.5
A2213.35	1512.6
A2213.5	1513
A2214	1536
A2217.4	1470
A2217.42	1471
A2222	1516
A2222.5	1520
A2222.6	1524

Inter.	— U.S.
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A2248	1560
A2250	1540
A2250.1	1544
A2258	1564
A2265	1568
A2265.2	1572
A2265.3	1573
A2265.35	1573.1
A2265.4	1574
A2265.6	1574.1
A2272	1588
A2273	1576
A2273.3	1580
A2274	1584
A2280	1620
A2282	1596
A2284	1604
A2286	1600
A2288	1612
A2290	1608
A2290.8	1614
A2292	1616
A2304	1624
A2306	1632
A2306.1	1636
A2308	1628
A2318	1652
A2320	1640
A2322	1644
A2324	1648
A2325	1650
A2332	1660
A2336	1668
A2342	1676
A2344	1680
A2346	1688
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A2379	1720
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A2392	1724
A2394	1728
A2397	1744
A2398	1740
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A2400.1	1752
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A2410	1756
A2420	1764
A2421	1766
A2421.45	1771.7
A2422	1772
A2423	1804
A2425	1788
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A2487	1888
A2489	1892
A2489.4	1896
A2491	1900
A2491.6	1904
A2496	1909
A2496.4	1909.5
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A2508	1932
A2515	1946
A2515.1	1946.1
A2516	1944
A2518	1952
A2518.5	1953
A2520	1954
A2520.1	1954.1
A2530.2	1957
A2580	1960
A2582	1964
A2586	1968
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A2590	1972
A2592	1976
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A2599	1984
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A2616.1	2004
A2620	2008
A2620.1	2012
A2626	2020
A2626.5	2016
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A2627.1	2028
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A2636	2030
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A2667.8	2061
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A2682	2080
A2684	2094
A2686	2092
A2690	2095
A2692	2096
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A2760	2184
A2762	2188
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A2818	2264
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A2824	2276
A2834	2292
A2836	2296
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A2846.1	2316
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A2866	2348
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A2915.5	2395
A2915.51	2395.1
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A2916.5	2408
A2916.9	2409.1
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A3090	2600
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A3108	2616
A3126	2626
A3129	2624
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A3212.1	2634
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A3220	2636
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A3222.1	2644
A3223	2648
A3223.1	2652
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A3226.1	2660
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A3228.1	2668
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A3230	2676
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A3250	2704
A3252	2700
A3253	2708
A3254	2712
A3256	2716
A3258	2720
A3258.1	2724
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A3274	2736
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A3282.1	2756
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A3368.1	2832
A3391	2836
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A3408	2856

CROSS REFERENCE - INTERNATIONAL vs. U.S. LIGHT NUMBER

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A3493	2952
A3493.2	2956
A3493.3	2960
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A3498.2	2968
A3498.4	2972
A3499	2976
A3499.2	2980
A3503	2982
A3506	2984
A3508	2985
A3521	2992
A3522	2988
A3524	2996
A3527	3002
A3528	3000
A3534	3004
A3534.1	3008
A3544	3012
A3558	3016
A3562	3020
A3564	3024
A3565	3028
A3566	3076
A3566.4	3080
A3568	3032
A3570	3036
A3574	3040
A3578	3044
A3580	3052
A3582	3056
A3582.1	3060
A3583	3068
A3583.5	3066
A3584	3064
A3586	3072
A3590	3048
A3600	3084
A3602	3088
A3604	3092
A3606	3096
A3610	3100
A3610.2	3104
A3610.4	3108
A3610.6	3112
A3610.8	3116
A3610.9	3120
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A3610.94	3128
A3610.96	3132
A3611	3136
A3611.2	3140
A3612	3144
A3612.5	3146
A3614	3160
A3615	3148
A3616	3152
A3616.1	3156
A3626	3164
A3632	3168
A3635	3172
A3636	3176
A3640	3180
A3640.1	3184
A3641	3188
A3642	3192
A3644	3196
A3644.1	3200
A3650	3204
A3654	3220
A3656	3212
A3656.1	3216
A3662	3208
A3676	3228
A3680	3232
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A3688.5	3246
A3693	3248
A3694	3252
A3700	3224
A3706	3268
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A3795.6	3406.5
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CROSS REFERENCE - INTERNATIONAL vs. U.S. LIGHT NUMBER

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A3930	3764
A3930.2	3768
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A4019	3944
A4019.1	3948
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A4020.3	3954
A4020.5	3955
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A4052	3968
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A4132	4080
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A4150	4093
A4150.2	4094
A4151	4095
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A4174.5	4058
A4175.4	4096
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A4208	4152
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A4230.6	4176
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A4355	4348.2
A4355.2	4348.4
A4358	4348.6
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A4412.71	4436.1
A4412.8	4432
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A4413.7	4452
A4413.72	4456
A4413.9	4457
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A4421.2	4472
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CROSS REFERENCE - INTERNATIONAL vs. U.S. LIGHT NUMBER

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A4511	4652
A4511.2	4654
A4512	4656
A4513	4660
A4515	4668
A4516	4672
A4518	4676
A4519	4680
A4520	4684
A4521	4688
A4526	4692
A4527	4693
A4527.2	4694
A4527.4	4695
A4527.6	4696
A4532	4700
A4536	4708
A4538	4704
A4544	4720
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A4548.1	4728
A4554	4732
A4558	4740
A4562	4744
A4566	4764
A4568	4760
A4574	4752
A4574.1	4756
A4580	4772
A4582	4768
A4586	4780
A4588	4776
A4588.4	4778
A4592	4784
A4594	4786
A4598	4788
A4604	4796
A4606	4800
A4607	4804
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A4624.2	4823.5
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A4672	4852
A4672.6	4856
A4676	4860
A4677	4861
A4688	4864
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A4892.1	5156
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A4975	5240
A4977	5244
A4978	5248
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A4979	5256
A4979.2	5260
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A4980.3	5268
A4980.6	5272
A4980.7	5273
A4981	5276
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A4994	5300
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A4998	5304
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A5063	5336
A5091	5344
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A5092	5348
A5092.1	5350
A5093	5352
A5093.1	5354
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A5102.1	5360
A5104	5364
A5104.1	5368
A5115	5380
A5116	5384
A5117	5385
A5117.1	5385.1
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A5125	5396
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A5182	5496
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A5256	5564
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A5257.2	5566.5
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A5266.1	5584
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CROSS REFERENCE - INTERNATIONAL vs. U.S. LIGHT NUMBER

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A5294.9	5660
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A5876	6608
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A5894	6648
A5898	6652
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A5900	6656
A5900.3	6657
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A5904	6664
A5906	6668

CROSS REFERENCE - INTERNATIONAL vs. U.S. LIGHT NUMBER

Inter.	U.S.
A5908	6672
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