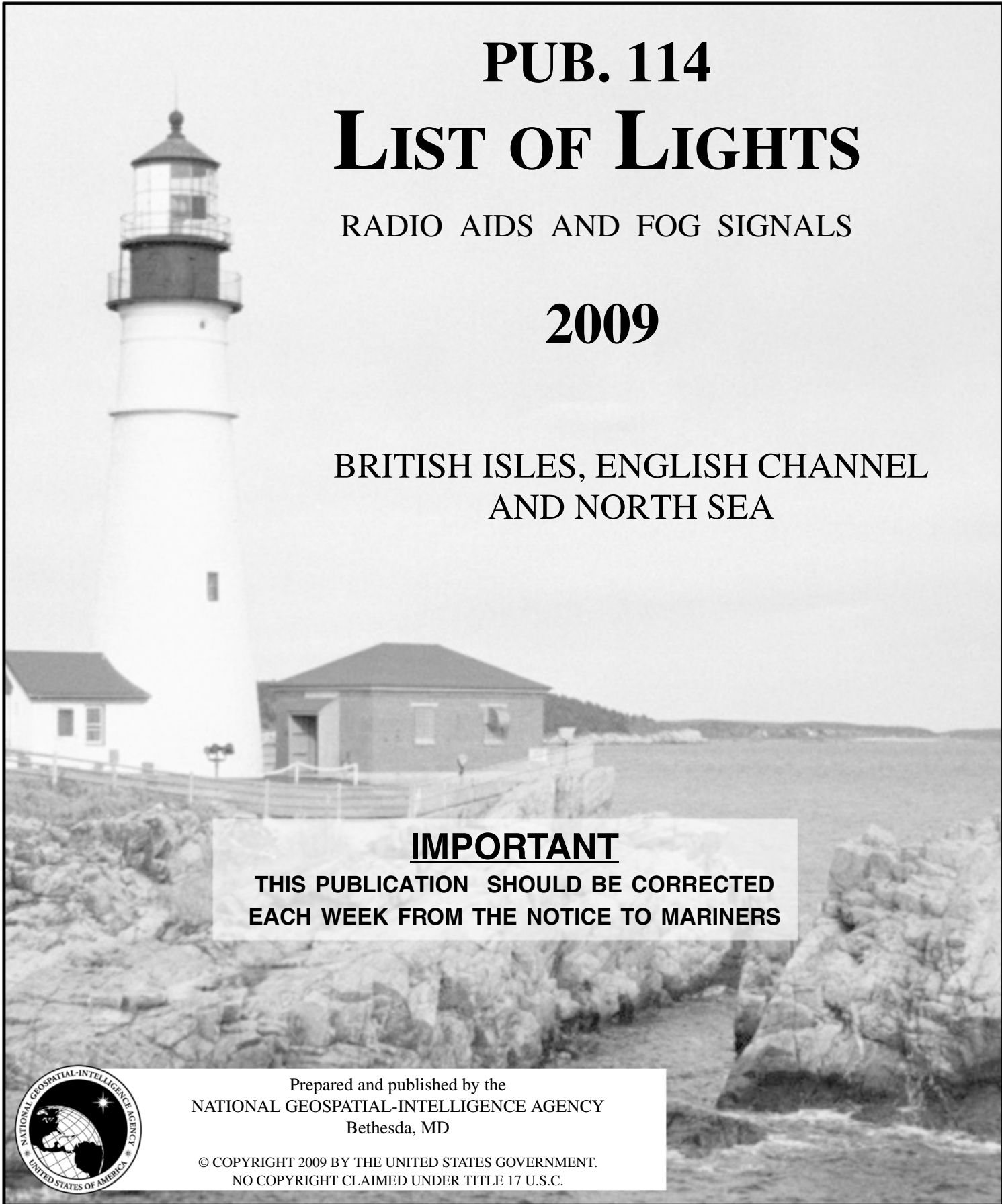




PUB. 114

LIST OF LIGHTS

RADIO AIDS AND FOG SIGNALS

2009

BRITISH ISLES, ENGLISH CHANNEL
AND NORTH SEA

IMPORTANT

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



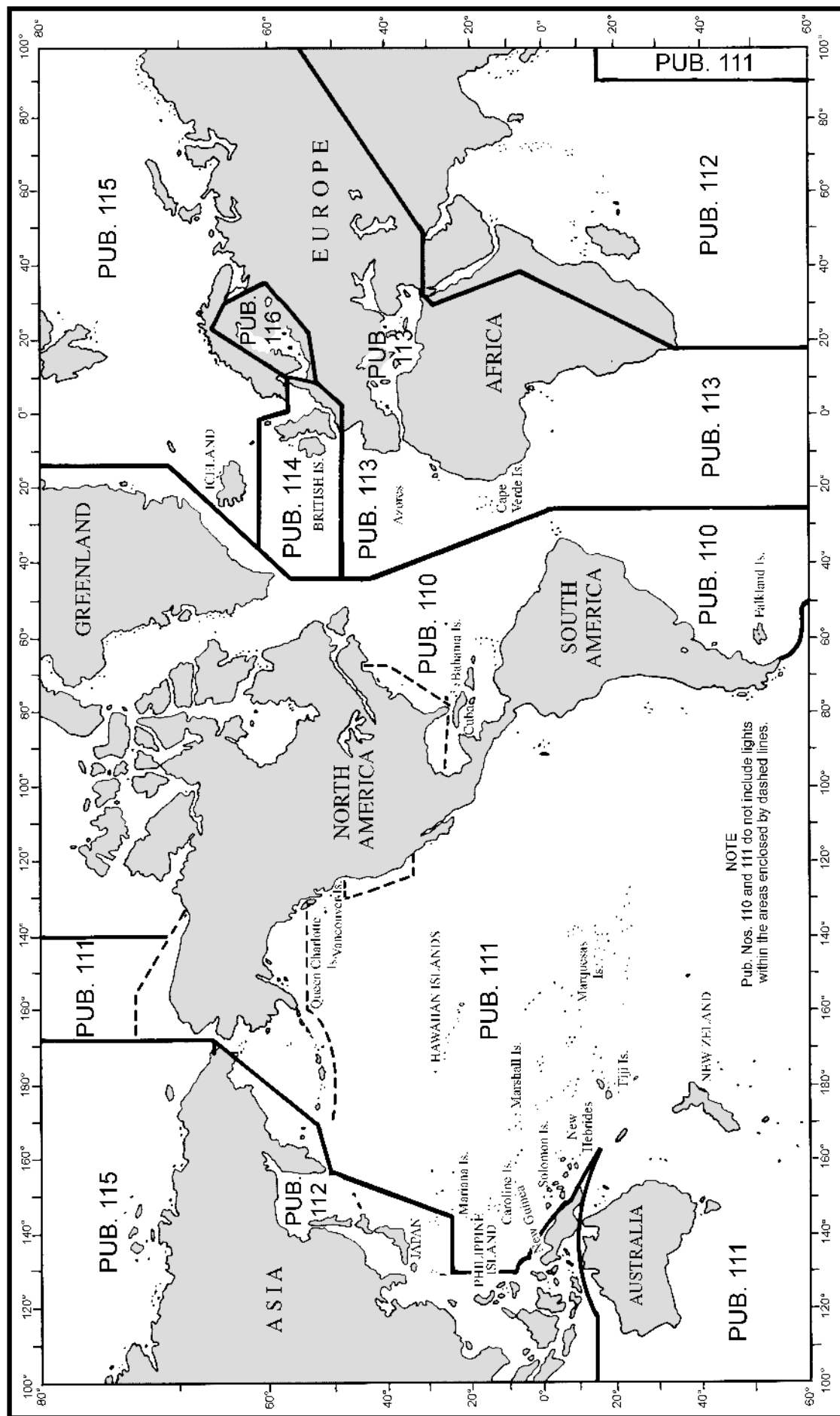
Prepared and published by the
NATIONAL GEOSPATIAL-INTELLIGENCE AGENCY
Bethesda, MD

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LIST OF LIGHTS LIMITS NATIONAL GEOSPATIAL-INTELLIGENCE AGENCY



114

LIGHTS

BRITISH ISLES

2009

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 2009 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 7 March 2009, including Notice to Mariners No. 10 of 2009.

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 2009				YEAR 2010			
1.....	14.....	27.....	40.....	1.....	14.....	27.....	40.....
2.....	15.....	28.....	41.....	2.....	15.....	28.....	41.....
3.....	16.....	29.....	42.....	3.....	16.....	29.....	42.....
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6.....	19.....	32.....	45.....	6.....	19.....	32.....	45.....
7.....	20.....	33.....	46.....	7.....	20.....	33.....	46.....
8.....	21.....	34.....	47.....	8.....	21.....	34.....	47.....
9.....	22.....	35.....	48.....	9.....	22.....	35.....	48.....
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11.....	24.....	37.....	50.....	11.....	24.....	37.....	50.....
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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:

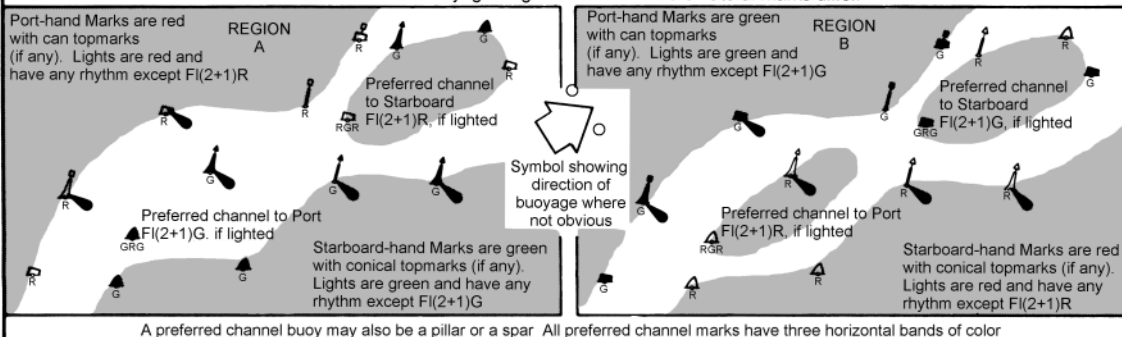
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NATIONAL GEOSPATIAL-INTELLIGENCE AGENCY
4600 SANGAMORE ROAD
BETHESDA, MD 20816-5003

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 LANTY'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.

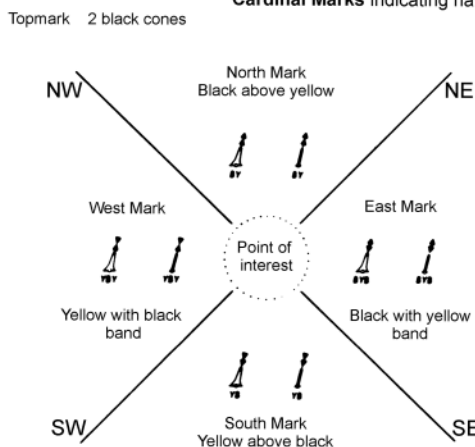
Lateral Marks (used in conjunction with a conventional direction of buoyage) are generally for well-defined channels. There are two international Buoyage Regions-A and B-where Lateral marks differ.



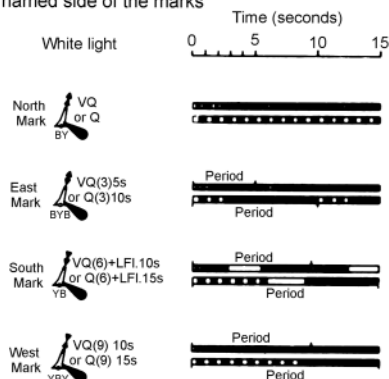
All marks other than Lateral Marks are the same in REGIONS A and B

UNLIGHTED MARKS

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



LIGHTED MARKS



* 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



White light

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

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



White light

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

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



Fl. Y etc

Yellow light

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 DOMAIN WEB SITE

The National Geospatial-Intelligence Agency (NGA) Maritime Domain Web site 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 Notice to Mariners, Publications, Broadcast Warnings, Office of Naval Intelligence (ONI) Reports, Anti-Shipping Activity Messages (ASAMs), Arctic Maritime Safety Information (AMSI) Reports, Mobile Offshore Drilling Units (MODUs), Product Catalog and Miscellaneous Products. 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 Domain Web site can be accessed via the NGA Homepage (**www.nga.mil**) under the Products and Services link or directly at <http://www.nga.mil/maritime>. Any questions concerning the Maritime Domain Web site should be directed to:

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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

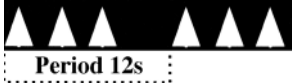
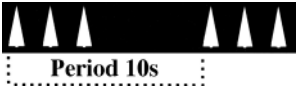
Where the lights of different countries intermingle in the list they are distinguished by the following letters:

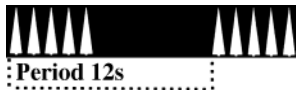
(Bm.)	Belgium
(F.)	Norway
(G.)	Germany
(N.)	Netherlands
(U.K.)	United Kingdom

Other abbreviations:

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

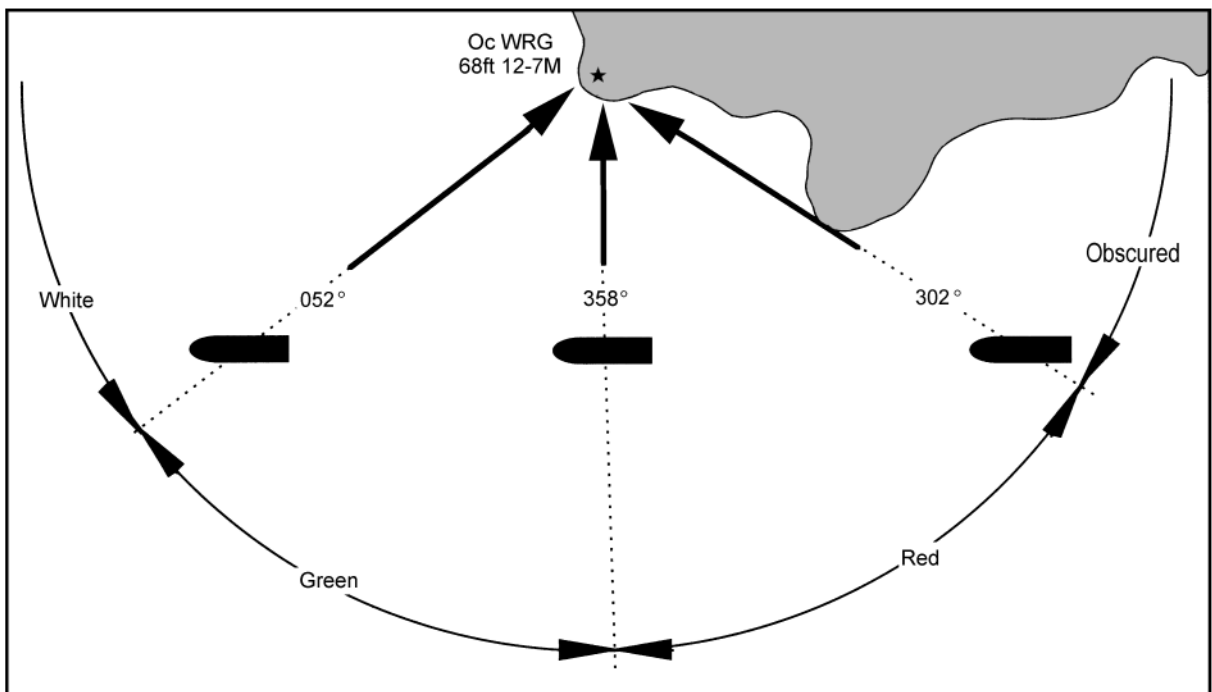
Aeromarine lights—marine-type lights for which part of the beam is deflected to an angle of 10 to 15 degrees above the horizon to facilitate use by aircraft.

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.



LIGHTSHIPS, SUPERBUOYS, AND OFFSHORE LIGHT STATIONS

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 for 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 for 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 for 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 vessel 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)	<u>16.5</u>
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 operator, 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—multiply 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 1 1/4 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 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.

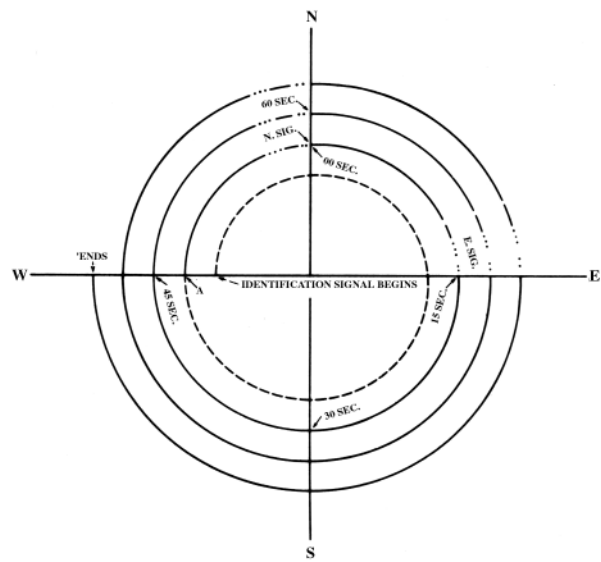
(A correction must, of course, be made for convergency; this should be applied as if the beacon were a shore radio direction-finder station.)

(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 reference 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** denotes 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° 19.4' W	Fl.W. period 10s fl. 0.4s, ec. 9.6s	180 55	18	White round tower; 63.	Visible 021°-288° and between islands. Shown by day during reduced visibility. 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	Fl.(2)W.R. period 10s fl. 1s, ec. 1.5s fl. 1s, ec. 6.5s	115 35	W. 15 R. 11	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° 48.6' W	Fl.W. period 15s fl. 0.2s, ec. 14.8s	112 34	16	Gray round granite tower, black lantern; 135. Helicopter platform.	Nautophone: 1 bl. ev. 30s (bl. 1s, sl. 29s).
	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.
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	<i>-Southover Scorpio Lighted Buoy.</i>	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.R.	16 5	3	Tower; 7.	
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.

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
ENGLAND-SOUTH COAST							
102 A 0080	Charlestown, N. breakwater, head.	50° 19.8' N 4° 45.3' W	2 F.G. (vert.)	16 5	1		
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°.

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
ENGLAND-SOUTH COAST							
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.
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		

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
ENGLAND-SOUTH COAST							
208 A 0147	--Phoenix wharf.	50° 21.8' N 4° 08.0' W	2 F.R. (vert.)		19 6	Green metal column; 10.	
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.

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
ENGLAND-SOUTH COAST							
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.
	-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.)				

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ENGLAND-SOUTH COAST							
336 A 0237	-Kettle Point.	50° 20.6' N 3° 33.7' W	F.W.	18 5	9	Red lantern.	Visible 102°-107°.
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.	
350 A 0246.5	-Fairway, 159°.	50° 23.8' N 3° 30.6' W	Dir.Iso.W.R.G. period 5s	13 4	6	Lantern box on metal column; 10.	G.145°-157°, W.-161°, R.- 173°.
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.	

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ENGLAND-SOUTH COAST							
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.	
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° 42.6' N 2° 45.8' W	Fl.G. period 8s	16 5	4	On pier capping.	
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.
449 A 0293	--Bill of Portland, calibration range.	50° 30.9' N 2° 27.5' W	Oc.(2)Y. period 10s lt. 1s, ec. 1s lt. 7s, ec. 1s	66 20	10		Visible 305°-125°. Occasional, shown when range in use.
-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.	

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ENGLAND-SOUTH COAST							
--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.
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.	
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°.
517 A 0324	-East Ship Channel, front.	50° 34.1' N 2° 25.9' W	F.R.	20 6	3	Stone wall.	
517.1 A 0324.1	--Rear, 120 meters 210° from front.	50° 34.0' N 2° 25.9' W	F.R.	56 17	3	White building.	
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, beacon tower, topmark.	

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ENGLAND-SOUTH COAST							
572 A 0506	-N. Haven Point.	50° 41.1' N 1° 57.1' W	Q.(9)W. period 15s	15 5		W. CARDINAL YBY, beacon tower, 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.
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°48'-040°48', W.-041°48', R.-043°48'.
			By day.		W. 7 R. 5 G. 5		
600 A 0542	-Lyminster, 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	-Lyminster 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.

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
ENGLAND-SOUTH COAST							
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.
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.

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
ENGLAND-SOUTH COAST							
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.	
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.

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
ENGLAND-SOUTH COAST							
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.)				
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°.

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
ENGLAND-SOUTH COAST							
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.
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	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 bearing, F.R.-011°30'. Shown 24 hours.
960 A 0692.5	-Fort Blockhouse, 320°.	50° 47.3' N 1° 06.6' W	Dir.W.R.G.		19 6	W. 13 R. 5 G. 5	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.

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ENGLAND-SOUTH COAST							
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.)				
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 Entrance.	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.	
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.	

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
ENGLAND-SOUTH COAST							
1044 A 0783.4	Chichester Bar.	50° 45.9' N 0° 56.4' W	Fl.(2)R. period 10s	23 7	4	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.	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		
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	<i>Owers Lightbuoy.</i>	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) G, 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.	

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
ENGLAND-SOUTH COAST							
1100 <i>A 0810</i>	Worthing, on pier.	50° 48.4' N 0° 22.0' W	2 F.R. (vert.)	20 6	1	Post; 13.	
SHOREHAM:							
1104 <i>A 0813</i>	-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 <i>A 0812</i>	-W. breakwater, head.	50° 49.4' N 0° 14.8' W	Fl.R. period 5s	23 7	7	Concrete column; 10.	
1112 <i>A 0814</i>	-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 <i>A 0814.1</i>	--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.
1118 <i>A 0820</i>	-W. pier.	50° 49.1' N 0° 09.0' W	Fl.R. period 10s	42 13	2	Mast.	Bell: (when vessels expected).
1120 <i>A 0822</i>	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 <i>A 0826</i>	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 <i>A 0825</i>	-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 <i>A 0825.2</i>	-Breakwater, head.	50° 48.6' N 0° 06.3' W	Q.G.	26 8	7		
1124	<i>CS1 Buoy.</i>	50° 34.0' N 0° 04.0' W	Fl.Y. period 2.5s			SPECIAL Y, pillar, topmark.	Whistle.
1128 <i>A 0839</i>	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 <i>A 0832</i>	-E. Pier, head.	50° 46.8' N 0° 03.7' E	Iso.G. period 10s	41 12	6	White metal framework tower; 39.	
1136 <i>A 0830</i>	-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 <i>A 0840</i>	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 <i>A 0843</i>	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 <i>A 0846</i>	Eastbourne, pier, head.	50° 45.9' N 0° 17.8' E	2 F.R. (vert.)	26 8	2	Metal column; 10.	
1150 <i>A 0848</i>	Sovereign Harbor Marina.	50° 47.1' N 0° 19.9' E	Fl.(3)W. period 15s	39 12	7	Concrete tower.	

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
ENGLAND-SOUTH COAST							
1152 <i>A 0848.5</i>	-258°.	50° 47.2' N 0° 19.7' E	Dir.FI.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 <i>A 0848.1</i>	-S. breakwater, head.	50° 47.3' N 0° 20.1' E	Fl.(4)R. period 12s	10 3	6		
1154 <i>A 0848.2</i>	-N. breakwater, head.	50° 47.3' N 0° 20.1' E	Fl.G. period 5s	10 3	6		
1160	<i>CS2 Buoy.</i>	50° 39.0' N 0° 32.7' E	Fl.Y. period 5s			SPECIAL Y, pillar, topmark.	Whistle.
HASTINGS:							
1164 <i>A 0858</i>	-Beach Range, front.	50° 51.3' N 0° 35.5' E	F.R.	46 14	4	White metal column; 25.	
1168 <i>A 0858.1</i>	--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.	
1172 <i>A 0856</i>	-W. breakwater, head.	50° 51.2' N 0° 35.7' E	Fl.R. period 2.5s	16 5	4	Mast; 13.	
1176 <i>A 0854</i>	-Hastings Pier, head	50° 51.0' N 0° 34.5' E	2 F.R. (vert.)	25 8	5	White hut; 10.	
1188	<i>-Fairway Buoy.</i>	50° 54.0' N 0° 48.0' E	L.FI.W. period 10s fl. 2s, ec. 8s			SAFE WATER RW, spherical.	Radar reflector.
1192 <i>A 0866</i>	-E. bank No. 3.	50° 55.9' N 0° 46.3' E	Q.G.	10 3	2	STARBOARD (A) G, tripod, topmark.	
1196 <i>A 0867</i>	--W. bank No. 6.	50° 55.7' N 0° 46.5' E	Q.R.	10 3	2	Red wooden pile.	Lights shown upstream.
1200 <i>A 0866.3</i>	--No. 7.	50° 56.0' N 0° 46.3' E	Q.G.	10 3	2	Wooden piles, green triangular daymark, point up.	
1204 <i>A 0866.5</i>	--No. 9.	50° 56.1' N 0° 46.2' E	Q.G.	10 3	2	Wooden piles, green triangular daymark, point up.	
1208 <i>A 0866.7</i>	--No. 11.	50° 56.2' N 0° 46.0' E	Q.G.	10 3	6	Wooden structure, green triangular daymark; 10.	Traffic signals.
1212 <i>A 0864.5</i>	-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 <i>A 0864</i>	-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 <i>A 0876</i>	-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 <i>A 0970</i>	-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		

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
ENGLAND-SOUTH COAST							
-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 Fl.W. period 2s	46 14	22	Tower; 43.	Five F.R. lights about 2.9 miles NE. Berthing signals. Diaphone: (close SW.) 4 bl. ev. 60s. 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				
-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.

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
ENGLAND-SOUTH COAST							
1305 <i>A 0929</i>	---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 <i>A 0950</i>	-Deal pier, head.	51° 13.4' N 1° 24.6' E	2 F.R. (vert.)	23 7	5	Structure on top of building.	
1316	- <i>"CS4" Buoy.</i>	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:							
1324 A 0984	-- EAST GOODWIN LIGHT FLOAT , 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.	
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°.

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
ENGLAND-EAST COAST							
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	<i>Sea Reach Buoy "1".</i>	51° 29.4' N 0° 52.7' E	Fl.Y. period 2.5s			SPECIAL Y, pillar, topmark.	
	RACON		T(-) period 90s		10		
1417	<i>Sea Reach Buoy "7".</i>	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 CENTRE LIGHTFLOAT.	51° 50.1' N 1° 46.0' 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; 39.	Shown by day when fog signal is operating. Horn: 2 bl. ev. 60s. AIS (MMSI No 992351034).
	RACON		C(- • - •)		10		
1421 A 2172	SUNK INNER LIGHTFLOAT.	51° 51.0' N 1° 34.9' E	Iso.W. period 3s	36 11	12	Red hull, light tower amidships; 36.	Horn: 1 bl. ev. 30s AIS (MMSI No992351027).
	RACON		T(-)		10		
1422	<i>Buoy Barrow No. "3".</i>	51° 42.0' N 1° 20.3' E	Q.(3)W. period 10s			E. CARDINAL BYB, pillar, topmark.	Bell.
	RACON		M(- -) period 30s		10		
1424 A 1956	Long Sand Bank, Meteorological Mast.	51° 35.6' N 1° 23.1' E	Mo.(U)W. period 15s	39 12	10	Yellow metal framework tower.	Horn: Mo.(U) ev. 30s. Radar reflector.
	INNER GABARD						
1427 A 2168	Greater Gabbard Offshore Wind Farm, meteorological mast.	51° 56.6' N 1° 55.3' E	Mo.(U)W. period 15s	39 12	10	Gray framework mast on yellow pile; 262.	Horn: Mo.(U) ev. 30s. Radar reflector.
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.	

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
ENGLAND-EAST COAST							
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.)				
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.F.Y.	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		

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
ENGLAND-EAST COAST							
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.	
	RACON		O(— — —) period 30s		10		
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	Fl.R. period 5s	16 5	3	White metal column; 7.	

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ENGLAND-EAST COAST							
1600 <i>A 2286</i>	-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 <i>A 2284</i>	---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 <i>A 2290</i>	-Inner harbor, N. pier, head.	52° 28.3' N 1° 45.3' E	2 F.Y. (vert.)	20 6	1	Metal column; 13.	
1612 <i>A 2288</i>	---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 <i>A 2290.8</i>	-Lake Lothing.	52° 28.4' N 1° 43.3' E	2 F.R. (vert.)				
1616 <i>A 2292</i>	-Sladdens Pier, new jetty, head.	52° 28.3' N 1° 45.3' E	2 F.G. (vert.)				
1620 <i>A 2280</i>	-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 <i>A 2304</i>	--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 <i>A 2308</i>	--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 <i>A 2306</i>	--Range, front.	52° 34.3' N 1° 44.1' E	Oc.W. period 3s lt. 2s, ec. 1s	20 6	10	Column.	
1636 <i>A 2306.1</i>	---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 <i>A 2320</i>	-Wellington Pier, head.	52° 35.9' N 1° 44.4' E	2 F.R. (vert.)	26 8	3	Post; 13.	
1644 <i>A 2322</i>	-Jetty, head.	52° 36.1' N 1° 44.5' E	2 F.R. (vert.)	23 7	2	Metal column; 13.	
1648 <i>A 2324</i>	-Britannia Pier, head.	52° 36.5' N 1° 44.6' E	2 F.R. (vert.)	36 11	4	White metal column; 10.	
1650 <i>A 2325</i>	-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 <i>A 2318</i>	-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	<i>Cross Sand Buoy.</i>	52° 37.0' N 1° 59.3' E	L.Fl.W. period 10s		5	SAFE WATER RW, pillar, topmark.	
	RACON		T(-) period 30s		10		

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ENGLAND-EAST COAST							
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		
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		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, Dolyppeg.	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.	

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ENGLAND-EAST COAST							
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.
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.	
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		
1765 A 2352	RACE BANK. Offshore Wind Farm, Meteorological mast.	53° 18.8' N 0° 14.8' E	Mo.(U)W. period 15s	39 12	10	Yellow Mast.	Horn: Mo(U) ev. 30s. Radar reflector.
			F.R.	285 87			
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.
1767 A 2351.5	DOCKING SHOAL. Offshore Wind Farm, Meteorological mast.	53° 09.5' N 0° 38.9' E	Mo.(U)W. period 15s	39 12	10	Yellow mast.	Horn: Mo(U) ev. 30s. Radar reflector.
			F.R.	285 87			
1769 A 7562.5	Anglia Field Platform "A 48/19-B", RACON.	53° 22.0' N 1° 39.2' E	Q(— • —)		15		
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.	
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.

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
ENGLAND-RIVER HUMBER APPROACHES							
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.FI.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	FI.(2)R. period 10s			Red hull.	
1808 A 2442	Haile Sand Fort.	53° 32.1' N 0° 02.1' E	FI.R. period 5s	69 21	3	Mast, on fort; 20.	
1816	MIDDLE NO. "7" LIGHT FLOAT.	53° 35.8' N 0° 01.4' W	V.Q.(6)+L.FI.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	FI.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	FI.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	FI.(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.	
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" LIGHT FLOAT.	53° 37.5' N 0° 08.6' W	FI.(2)R. period 6s	16 5	4	Red hull.	

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ENGLAND-RIVER HUMBER							
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.	
1901 A 2491.5	--291°.	53° 38.4' N 0° 11.9' W	Dir.W.R.G.	56 17	3	On building.	G. 287°30'-288°30', Al. W.G.-290°30', W.-291°30', Al. W.R.-293°30', R.-294°30'. Shown 24 hours.
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	Fl.W.R. period 5s fl. 0.8s, ec. 4.2s	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.

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
ENGLAND-EAST COAST							
2030 A 2636	-Jetty, N. head.	54° 36.6' N 1° 09.1' W	2 F.R. (vert.)				2 meters apart.
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			
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°.
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.	

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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 20s fl. 0.1s, ec. 3.3s fl. 0.1s, ec. 3.3s fl. 0.1s, ec. 13.1s	82 25	W. 19 R. 15	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°, obs.-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	6	White round stone tower, red cupola and base; 43.	Visible 201°-009°.
			F.G.	26 8	1		Visible 009°-155°.
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.	
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.
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.

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
SCOTLAND-EAST COAST							
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			Pole, on dolphin, triangular daymark, point up.	Shown for vessels using terminal.
2 F.G. (vert.)							
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.
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'.

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
SCOTLAND-EAST COAST							
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.
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	Q.G.	16 5	7	Green round structure; 40.	
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.	
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.

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
SCOTLAND-EAST COAST							
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.F.I.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	3	White tower; 23.	
2504 A 3030	--W. pier, inner head.	56° 03.3' N 3° 14.2' W	2 F.R. (vert.)	13 4	3	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.G. period 5s	39 12	3	Column; 23.	
	-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.	
	-Pittweem:						
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°.

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
SCOTLAND-EAST COAST							
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°.
2614 A 3106	-St Andrews, pier.	56° 20.4' N 2° 46.8' W	Fl.G. period 5s	26 8	3	Metal post; 9.	
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	<i>Abertay Buoy.</i>	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.	
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		

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
SCOTLAND-EAST COAST							
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.
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		

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SCOTLAND-EAST COAST							
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.W. period 10s	30 9	6	Black beacon; 26. Floodlit.	
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.
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.	

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
SCOTLAND-EAST COAST							
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°.
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.
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.
BURGHHEAD:							
2876 A 3424	-N. pier, head.	57° 42.1' N 3° 30.0' W	Oc.W. period 8s	23 7	5	Concrete tower; 19.	

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
SCOTLAND-EAST COAST							
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.	
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.	

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
SCOTLAND-EAST COAST							
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.	
2968 A 3498.2	--Off E. head.	57° 41.2' N 4° 09.5' W	Q.G.	16 5	3	Dolphin.	
2972 A 3498.4	--Off W. head.	57° 41.2' N 4° 09.7' W	Fl.G. period 4s	16 5	3	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'.
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.

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
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° 55.5' 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.	
3024 A 3608	Lothar Rock.	58° 43.8' N 2° 58.7' W	Fl.W. period 2s fl. 0.6s, ec. 1.4s	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.	
	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.	
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.	
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°.

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
SCOTLAND-ORKNEY ISLANDS							
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.W. period 10s	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 G.	W. R. G.	7 5 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. R.	9 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.
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.	

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
SCOTLAND-ORKNEY ISLANDS							
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 White round tower; 29. R. 8	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 White tower; 108. R. 16	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 Platform on white concrete column; 33. G. 4	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.	
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.	

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
SCOTLAND-ORKNEY ISLANDS							
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	Fl.(4)W. period 20s fl. 0.4s, ec. 1.6s fl. 0.4s, ec. 1.6s fl. 0.4s, ec. 1.6s fl. 0.4s, ec. 13.6s	27 8	9	White metal framework tower; 16.	
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.	
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.	
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.	

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
SCOTLAND-ORKNEY ISLANDS							
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	20	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. 0.2s, ec. 3.6s fl. 0.2s, ec. 3.6s fl. 0.2s, ec. 3.6s fl. 0.2s, ec. 18.4s	105 32	24	Balcony of white tower; 85.	Visible 260°-146°, but obscured close inshore 260°-282°.
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.	
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.	

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SCOTLAND-SHETLAND ISLANDS							
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		
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.	

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
SCOTLAND-SHETLAND ISLANDS							
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		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		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.
3417 A 3804.2	-Wether Holm.	60° 22.3' N 1° 01.3' W	Fl.W. period 5s	20 6		9 White metal framework tower; 16.	
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	-Ulstá 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	Oc.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, 195 meters 150°30' from front.	60° 29.0' N 1° 16.7' W	Oc.W. period 5s	115 35	8	White round tower, fluorescent orange strip near top; 16.	Visible 145°-156°.
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°.
3530.3 A 3830.4	Unst, Head of Mula.	60° 40.8' N 0° 57.6' W	Fl.W.R.G. period 5s	157 48	W. 10 R. 7 G. 7	Metal framework tower; 10.	G. 292°-357°, W.-002°, R.-157°, W.-161°30'.
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.
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°, obs.-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°, obs.-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 4° 59.9' W	Fl.(4)W. period 30s fl. 0.2s, ec. 3.6s fl. 0.2s, ec. 3.6s fl. 0.2s, ec. 3.6s fl. 0.2s, ec. 18.4s	400 122	22	White tower; 65.	Wind generator.
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	Dir.Oc.W.R.G. period 2.8s lt. 2.7s, ec. 0.1s	52 16	9	Metal pole.	R. 136°30'-146°30', W.- 147°30', G.-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° 08.5' N 5° 19.6' W	Fl.(2)W. period 10s fl. 0.3s, ec. 1s fl. 0.3s, ec. 8.4s	112 34	6	Yellow pedestal.	
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.	

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
SCOTLAND-WEST COAST							
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.	
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 Chuilteirbh.	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.	

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
SCOTLAND-WEST COAST							
SKYE:							
3720 A 3908	-Portree pier, head.	57° 24.7' N 6° 11.3' W	2 F.R. (vert.)	21 6	4	Post.	Occasional.
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.	
3735 A 3920	Broadford Bay, pier, head.	57° 14.9' N 5° 54.3' W	Fl.G. period 4s	13 4	3	Metal post; 6.	
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.	
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		

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
SCOTLAND-WEST COAST							
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.	
	-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	Tiumpán 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.	

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
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, Breascleith 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)G. period 6s fl. 0.2s, ec. 0.6s fl. 0.2s, ec. 0.6s fl. 0.2s, ec. 4.2s	20 6	5	White concrete column, green bands; 26.	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.	

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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	-Watnish 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° 06.9' W	Fl.W. period 10s fl. 0.5s, ec. 9.5s	150 46	23	Gray granite tower; 158.	
	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°.
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.	

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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°.

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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.	
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° 04.1' N 6° 11.0' W	Iso.G. period 4s	26 8	2	Concrete column; 19.	For use of ferries only.
4148 A 4202.1	--Rear, 60 meters 262° from front.	56° 04.1' N 6° 11.1' W	Iso.G. period 4s	34 10	2	Concrete column; 27.	
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.	
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.	

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SCOTLAND-WEST COAST							
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 Cuiltèan, 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. period 15s	148 45	19	White tower; 113.	
4212 A 4237	Carragh an t'Struih.	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.
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°.

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
SCOTLAND-WEST COAST							
4236 A 4254	Loch Indaal, Ruhda an Duin, 726 meters N. of Port Charlotte.	55° 44.7' N 6° 22.3' W	Fl.(2)W.R. period 7s fl. 0.5s, ec. 1.5s fl. 0.5s, ec. 4.5s	50 15	W. 11 R. 8	White stone 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°.
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	Davaar.	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°.
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°.
4273 A 4291	Loch Ranza, ferry terminal. NW corner.	55° 42.5' N 5° 18.1' W	2 F.G. (vert.)	13 4	3	Metal Pole.	
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'Chioic.	55° 52.0' N 5° 24.3' W	Q.G.	10 3	2	Green column.	
4296 A 4304	-Ardrihaig, 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.	

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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°.
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.	
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.	

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SCOTLAND-FIRTH OF CLYDE							
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	-MAIN PIER, E. head.	55° 50.3' N 5° 03.1' W	Fl.G. period 3s	23 7	2	Metal column; 26.	
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.	
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.	

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
SCOTLAND-FIRTH OF CLYDE							
GOUROCK BAY:							
4416 A 4414	-Kempock Point.	55° 57.8' N 4° 49.0' W	Fl.G. period 6s	36 11	3	Metal column; 12.	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 Dir.W.R.G.	39 12 29 9	10	White metal framework tower on white column;	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 Dornaiqe.	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 206°-026°.
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. Fl.R. period 3s	9 3 9 3	5 3	Metal column, orange rectangular daymark.	G. 311°-317°, W.-320°, R.-322°. 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.	
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.	

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SCOTLAND-FIRTH OF CLYDE							
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.	
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.

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SCOTLAND-FIRTH OF CLYDE							
4544 A 4428.6	-Garelochhead, 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.	
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.	

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
SCOTLAND-FIRTH OF CLYDE							
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.	
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.
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.

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
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°.
4734 A 4555	- Traffic signal.	55° 33.0' N 4° 41.1' W	VQ.Y.	26 8	3	Gray lattice tower; 16.	Occas. Displayed when the fast ferry is about to arrive or depart the W pier and indicates harbor is temporarily closed.
4740 A 4558	-E. pier, head.	55° 33.0' N 4° 40.9' W	Q.R.	19 6	3	Red column; 13.	
4744 A 4562	Lady Isle.	55° 31.6' N 4° 44.0' W	Fl.W. period 2s fl. 0.5s, ec. 1.5s	63 19	11	White tower, red stripes.	
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.	
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°.

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
SCOTLAND-WEST COAST							
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°. AIS (MMSI No 992351018).
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. R. 6 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.
4827 A 4633.99	Little Ross, front.	54° 46.1' N 4° 05.0' W	Fl.(2)W. period 5s	69 21	5	Stone beacon; 33.	
4828 A 4634	-Rear.	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.	

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
ENGLAND-WEST COAST-ISLE OF MAN							
RACON		M(— —)		13			
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°.
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.	
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.	
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.	
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.	

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
ENGLAND-WEST COAST-ISLE OF MAN							
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.	
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	--Range light, front.	54° 03.2' N 3° 09.1' W	Q.W.	23 7	14	Orange rectangular daymark on pile.	Visible 035°12'-046°12'.
5068 A 4822.1	--Rear, 0.61 mile 040°42', from front.	54° 03.6' N 3° 08.5' W	Iso.W. period 2s	43 13	14	Orange rectangular daymark on pile.	Visible 035°12'-046°12'.
5072 A 4824	--Range light, front.	54° 04.4' N 3° 09.7' W	Q.W.	29 9	14	White round tower.	Visible 359°36'-010°36'.
5076 A 4824.1	---Rear, 0.77 mile 005°06' from front.	54° 05.2' N 3° 09.6' W	Iso.W. period 2s	46 14	14	Red brick column, white face.	Visible 359°36'-010°36'.
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	<i>Gut Buoy.</i>	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:							
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.
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.

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
ENGLAND-WEST COAST							
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		
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.	
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.
-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.

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
ENGLAND-WEST COAST							
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.	
5384 A 5116	-West Hoyle Spit (Earwig). Outer 096°30'.	53° 21.2' N 3° 24.1' W	Dir.Iso.W.R.G. period 2s	W. 10 R. 7 G. 7	10	Perch pile.	G. 094°-096°, W.-097°, R.-099°. Occasional.
By day.				W. 3 R. 2 G. 2			
Q.G.				5			
5384.1 A 5116.05	-Port of Mostyn. Inner 180°.	53° 19.3' N 3° 16.0' W	Dir.Iso.W.R.G. period 2s	W. 10 R. 7 G. 7	10	Yellow framework tower.	G. 177°30'-179°30', W.-180°30', R.-182°30'.
By day.				W. 3 R. 2 G. 2			
5385 A 5117	-Range, front.	53° 19.2' N 3° 16.2' W	F.R.	39 12		Black mast, white diamond daymark; 36.	

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
ENGLAND-WEST COAST							
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) ev. 15s.
LIVERPOOL BAY:							
5395 A 5120	GWYNT Y MOR, Offshore Wind Farm. Meteorological mast, east.	53° 28.8' N 3° 30.5' W	Mo.(U)W. period 15s	39 12	10	Yellow concrete pile.	Horn: Mo(U) ev. 30s. Radar reflector.
			2 F.R. (vert.)	262 80	2		
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 A 5139	West Constable Buoy.	53° 23.1' N 3° 49.2' W	Q.(9)W. period 15s			W. CARDINAL YBY, pillar, topmark.	
	RACON		M(— —) period 30s		10		
5416 A 5138	Conwy River, entrance.	53° 18.1' N 3° 50.8' W	L.Fl.G. period 15s	16 5	2	Perch; 36.	
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. Nauphone: 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. 0.2s, ec. 9.8s	197 60	24	White round tower; 92.	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
WALES-WEST COAST							
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	The Smalls.	51° 43.3' N 5° 40.2' W	Fl.(3)W. period 15s fl. 0.1s, ec. 2.5s fl. 0.1s, ec. 2.5s fl. 0.1s, ec. 9.7s	118 36	18	Granite tower, red lantern; 135.	Shown 24 hours. Nautophone: 2 bl. ev. 60s (bl. 2s, si. 2s, bl. 2s, si 54s).
			Iso.R. period 4s	108 33	13		Visible 253°-285°.
	RACON		T(—) period 30s		18		
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'.

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
WALES-WEST COAST							
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°.
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			

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
WALES-BRISTOL CHANNEL							
5724 A 5317.2	---Elbow.	51° 41.9' N 4° 57.4' W	2 F.G. (vert.)		49 15		
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.

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
WALES-BRISTOL CHANNEL							
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.
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.	

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
WALES-BRISTOL CHANNEL							
5809	<i>Cabenda Buoy.</i>	51° 33.3' N 3° 52.4' W	V.Q.(6)+L.FI.W. period 10s			S. CARDINAL YB, pillar, topmark.	
	RACON		Q(— • —)				
5810	<i>W. Scarweather Buoy.</i>	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.	
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. 11 R. 10 G. 10	White round tower; 44.	R. 324°-017°, W.-037°, G.-115°.
			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.)				
5972 A 5478	-Newport Bridge, center.	51° 35.4' N 2° 59.6' W	F.Y.				
5976	<i>English and Welsh Grounds Buoy.</i>	51° 26.9' N 3° 00.1' W	L.Fl.W. period 10s			SAFE WATER RW, pillar, topmark.	Whistle.
	RACON		T(-) period 30s		7		
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.	

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
ENGLAND-BRISTOL CHANNEL							
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 FG (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°.
-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°.

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
ENGLAND-BRISTOL CHANNEL							
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°.
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.

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
ENGLAND-BRISTOL CHANNEL							
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° 19.8' W	Oc.G. period 3s lt. 2.5s, ec. 0.5s	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.(2)G. period 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.	
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°.

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
ENGLAND-BRISTOL CHANNEL							
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° 04.0' N 4° 11.4' W	Fl.W.R. period 2.5s fl. 0.5s, ec. 2s	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	Trevoze 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.	
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.

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
ENGLAND-WEST COAST							
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° 32.0' W	Fl.(2)W. period 10s fl. 0.1s, ec. 1.6s fl. 0.1s, ec. 8.2s	236 72	20	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	<i>Cork Buoy.</i>	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 30s fl. 0.1s, ec. 3.7s fl. 0.1s, ec. 3.7s fl. 0.1s, ec. 3.7s fl. 0.1s, ec. 18.5s	285 87	20	White tower, black band; 69.	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 <i>A 5801</i>	--E. breakwater extension.	52° 08.9' N 6° 59.3' W	Fl.R. period 2s	20 6	4		Visible 000°-310°.
6472 <i>A 5802</i>	--West wharf.	52° 08.9' N 6° 59.4' W	Fl.G. period 2s	20 6	4		Visible 165°-246°.
6476 <i>A 5806</i>	--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 <i>A 5808</i>	-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 <i>A 5810</i>	-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 <i>A 5812</i>	-Kilmokea.	52° 16.4' N 6° 58.9' W	Fl.W. period 5s fl. 0.5s, ec. 4.5s				
6496 <i>A 5814</i>	-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 <i>A 5814.1</i>	--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 <i>A 5818</i>	--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 <i>A 5820</i>	--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 <i>A 5822</i>	--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 <i>A 5826</i>	-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 <i>A 5828</i>	-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 <i>A 5830</i>	-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°, obs.- 127°.
6528	<i>Coninbeg LANBY.</i>	52° 03.2' N 6° 38.6' W	Q.(6)+L.Fl.W. period 15s		9	S. CARDINAL YB, topmark.	AIS.
	RACON		G(— — •)				
6532 <i>A 5836</i>	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 <i>A 5837</i>	-Carne, pier, head.	52° 11.9' N 6° 20.8' W	Fl.R. period 3s	20 6	4	Metal column.	
IRELAND-EAST COAST							
6540 <i>A 5838</i>	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	<i>-Dublin Bay Buoy.</i>	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.R. 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.

(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 8s	36 11	7	Granite tower, white lantern; 29.	
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	Fl.R. period 4s fl. 1s, ec. 3s	66 20	10	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.G. period 4s fl. 1s, ec. 3s	50 15	10	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		
6658 A 5900.5	--Trawler pier, head.	53° 23.5' N 6° 04.0' W	Q.R.	23 7	6	Red mast on square concrete base; 16.	
6660 A 5902	AVIATION LIGHT.	53° 25.7' N 6° 14.7' W	Al.FI.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. 17 R. 13	White tower, black band; 105.	W.178°-329°, R.-178°.
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°.

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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. Aero.F.R. Aero.F.R.	489 149 381 116 266 81	11	Chimney; 351.	
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. period 15s fl. 0.4s, ec. 14.6s	33 10	21	White house on green piles; 33.	Horn: 3 bl. ev. 60s.
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. 0.2s, ec. 1.5s fl. 0.2s, ec. 1.5s fl. 0.2s, ec. 6.4s	105 32	17	Gray granite tower; 111.	
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.	
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.	

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
IRELAND AND NORTHERN IRELAND-EAST COAST							
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.	
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.

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
IRELAND AND NORTHERN IRELAND-EAST COAST							
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.)				
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.	

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IRELAND AND NORTHERN IRELAND-EAST COAST							
-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			
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.	

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
IRELAND AND NORTHERN IRELAND-EAST COAST							
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:							
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.	
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°.

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
IRELAND AND NORTHERN IRELAND-EAST COAST							
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°.
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	-Salt pans, 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.	
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.	

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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				
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.	

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NORTHERN IRELAND AND IRELAND-NORTH COAST							
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.	
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.	

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IRELAND-WEST COAST							
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	Inishsirr 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.	
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.	

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
IRELAND-WEST COAST							
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.R. period 5s fl. 0.3s, ec. 4.7s	78 24	W 10 R 8	White tower, black band; 83.	W. 130°-107°, R.-130°.
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.
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.

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
IRELAND-WEST COAST							
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.
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°.

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
IRELAND-WEST COAST							
7452 A 6292	Croaghnaekeela 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. 8 R. 6	White metal column on concrete structure; 49.	W. 216°-000°, R.-069°, obsc.- 216°.
7462 A 6304.5	-Lion Point, 010°.	53° 15.8' N 9° 33.9' W	Dir.Iso.W.R.G. period 5s	20 6	W. 8 R. 6 G. 6	White square concrete tower, red stripe; 12.	G. 005°-008°30', W.-011°30', R.-015°. Shown 24 hours.
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	18	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.
7494 A 6301	-Kilkieran. Pier.	53° 19.3' N 9° 43.8' W	Fl.R. period 3s	13 4	4	Red metal pole.	
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°.
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'.

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
IRELAND-WEST COAST							
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	<i>Ballybunnion Buoy.</i>	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° 42.6' W	Fl.W. period 6s fl. 0.1s, ec. 5.9s	133 41	15	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	-Rineal 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.	
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'.

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
IRELAND-WEST COAST							
7580 A 6350	-Shannon Airport, AVIATION LIGHT.	52° 41.7′ N 8° 55.6′ W	Aero Al.Fl.W.G. period 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. 0.1s, ec. 4.9s fl. 0.1s, ec. 14.9s	275 84	19	White tower; 56.	Visible 318°-221°.
	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)
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′.

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
IRELAND-WEST COAST							
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.	
7659 A 6441	-Bearhaven, Beal Lough	51° 39.2' N 9° 51.2' W	Fl.G. period 3s	16 5	2	STARBOARD (A) G, beacon, topmark; 23.	
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'ABERWRACH:							
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	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	Iso.G. period 4s	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°, obs.-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° 43.4' N 3° 58.8' W	Oc.(3)W. period 12s lt. 1.5s, ec. 1.5s lt. 1.5s, ec. 1.5s lt. 4.5s, ec. 1.5s	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° 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° 55.3' N 3° 08.0' W	V.Q.W.			N. CARDINAL BY, pillar.	
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. 8 R. 6 G. 6	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	24	Pink tower on dwelling, green roof; 197.	
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 Kerno 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	Q.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 Murette 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	Iso.W. period 4s			SAFE WATER RW, pillar, topmark.	
7972 A 1680	-Le Buron.	48° 39.4' N 2° 03.7' W	Fl.(4)G. period 15s fl. 1s, ec. 1.5s fl. 1s, ec. 1.5s fl. 1s, ec. 1.5s fl. 1s, ec. 6.5s	49 15	7	Green tower; 75.	
7976 A 1674	-Les Courtis.	48° 40.5' N 2° 05.8' W	Fl.G. period 4s fl. 1s, ec. 3s	46 14	7	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 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'.

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
FRANCE-NORTH COAST							
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.
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	Fl.(2)W.R. period 6s fl. 0.5s, ec. 1.5s fl. 0.5s, ec. 3.5s	33 10	W. 9 R. 6	Black tower, white band; 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.	Horn: 4 bl. ev. 60s.
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	Fl.R. period 2.5s fl. 0.5s, ec. 2s	39 12	6	Red pylon; 30.	Synchronized with E. jetty.
8048 A 1664	-E. jetty.	48° 50.0' N 1° 36.2' W	Fl.G. period 2.5s fl. 0.5s, ec. 2s	36 11	6	White pylon, green top, on hut; 26.	Synchronized with W. jetty.
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°.

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
FRANCE-NORTH COAST							
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°.
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.	
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		
8095 A 1513	La Foraine.	49° 42.9' N 1° 58.3' W	V.Q.(9)W. period 10s	39 12	6	W. CARDINAL YBY, beacon tower; 43.	
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		

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
CHANNEL ISLANDS (U.K.)							
8120 <i>A 1604</i>	--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.	
8124 <i>A 1604.1</i>	---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 <i>A 1606</i>	--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 <i>A 1609</i>	--S. end of old harbor Range, front.	49° 10.7' N 2° 06.7' W	F.G.			White column.	
8136 <i>A 1609.1</i>	---Rear, 90 meters 078° from front.	49° 10.7' N 2° 06.5' W	F.G.			White column.	
8140 <i>A 1598</i>	-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 <i>A 1594</i>	-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 <i>A 1594.1</i>	-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 <i>A 1588</i>	-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 <i>A 1588.1</i>	--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 <i>A 1586</i>	-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 <i>A 1584</i>	-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 <i>A 1585</i>	-Bonne Nuit Bay, Range, front.	49° 15.1' N 2° 07.0' W	F.G.	23 7	6		
8172 <i>A 1585.1</i>	--Rear, 170 meters 223° from front.	49° 15.1' N 2° 07.2' W	F.G.	112 34	6		
8176 <i>A 1622</i>	-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 <i>A 1580</i>	-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 <i>A 1548</i>	-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 <i>A 1548.5</i>	-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°.

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
CHANNEL ISLANDS (U.K.)							
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.	
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. R. 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.

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
CHANNEL ISLANDS (U.K.)							
SARK:							
8260 A 1544	-Point Robert.	49° 26.2' N 2° 20.7' W	Fl.W. period 15s fl. 0.2s, ec. 14.8s	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	15	Red hull, light tower amidships.	Nautophone: 1 bl. ev. 20s.
RACON		O(- - -)		10		(3 & 10 cm)	
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.

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
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°, obs.-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	--Digue 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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FRANCE-NORTH COAST							
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	Fl.(3)R. period 12s fl. 1s, ec. 1.5s fl. 1s, ec. 1.5s fl. 1s, ec. 6s	20 6	6	White column, red lantern; 20.	
8384 A 1498.5	---W. side.	49° 38.8' N 1° 37.0' W	Fl.(4)R. period 12s fl. 0.5s, ec. 2s fl. 0.5s, ec. 2s fl. 0.5s, ec. 2s fl. 0.5s, ec. 7s	10 3	3	Red post; 3.	Visible 006°-186°.
8386 A 1499.5	-Inner jetty.	49° 38.8' N 1° 37.1' 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	13 4	2	White tower, green top; 10.	
8388 A 1499	-Marina, pier, head.	49° 38.9' N 1° 37.2' W	Fl.(3)G. period 12s fl. 1s, ec. 1.5s fl. 1s, ec. 1.5s fl. 1s, ec. 6s	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	Oc.(2)W.R.G. period 6s	23 7	7	White and gray structure, white lantern; 20.	G. 055°-083°, W.-105°, R.-163°.
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).

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FRANCE-NORTH COAST							
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.	
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 HOUQUE:							
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°.

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FRANCE-NORTH COAST							
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'.
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.

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FRANCE-NORTH COAST							
8556 A 1378	-Digue 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.
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°.
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	--Digue 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.	

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FRANCE-NORTH COAST							
8620 A 1296	--Digue 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°.
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	-Digue 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	--Digue 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°.

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
FRANCE-NORTH COAST							
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'.
8708 A 1251.84	-Maurice Thieullent Digue (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	--Jeteo 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°.

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
FRANCE-NORTH COAST							
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	11	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.	
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.	
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 1¼ 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.(4)W.R. period 12s lt. 1s, ec. 1s lt. 1s, ec. 1s lt. 1s, ec. 1s lt. 4.5s, ec. 1.5s	312 95	W. 15 R. 11	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°.

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
FRANCE-NORTH COAST							
8824 <i>A 1216</i>	--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 <i>A 1202</i>	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.	
8832 <i>A 1196</i>	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 <i>A 1194</i>	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	<i>Bassurelle Buoy.</i>	50° 32.8' N 0° 58.2' E	Fl.(4)R. period 15s			PORT (A) R, pillar, topmark.	Whistle.
	RACON		B(- • • •)		6		
8842	<i>N. Vergoyer Buoy.</i>	50° 39.7' N 1° 22.3' E	V.Q.W.			N, CARDINAL BY, pillar, topmark.	
	RACON		C(- • - •)		5		
8844 <i>A 1190</i>	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.	
BOULOGNE:							
8856 <i>A 1168</i>	-Digue 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 <i>A 1170</i>	-Digue 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 <i>A 1172</i>	-Ro Ro Berths Range, front.	50° 43.7' N 1° 34.1' E	F.G.	53 16	8	Dolphin; 20.	Visible 107°-287°.
8868 <i>A 1172.1</i>	--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, point downward 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	F.R.	144 44	11	Gray building, red top; 141.	Intensified 113°-133°.
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 metal tower; 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	L.Fl.(4)W. period 30s			Gray post; 26.	Horn: 4 bl. ev. 30s (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°.

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
FRANCE-NORTH SEA							
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.
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. 1s, ec. 4s	49 15	22	Red hull; 36.	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	Iso.R. period 4s	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'.

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
FRANCE-NORTH SEA							
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'.
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.	
	-Auxiliary.		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	7	N. CARDINAL BY beacon 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 <i>B 0092</i>	-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 <i>B 0094</i>	-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 <i>B 0096</i>	-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 <i>B 0098</i>	-E. pier, close SE.	51° 14.4' N 2° 55.2' E	Q.Y.			Signal mast.	Shown whenever channel is closed.
9032 <i>B 0102</i>	-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 <i>B 0102.1</i>	--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 <i>B 0103.24</i>	-Bassin Montgomery, N. side.	51° 14.1' N 2° 55.4' E	Q.Y.				Q.Y. shown from S. side.
BLANKENBERGE:							
9044 <i>B 0112</i>	-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 <i>B 0114</i>	-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 <i>B 0113.4</i>	-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 <i>B 0113</i>	-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 <i>B 0113.1</i>	--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 <i>B 0116</i>	-Promenade Pier, head.	51° 19.4' N 3° 08.2' E	Fl.(3)Y. period 20s	26 8	4	Pylon.	
9067 <i>B 0119</i>	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 <i>B 0119.8</i>	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 <i>B 0124</i>	-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 <i>B 0124.1</i>	--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.
9073 <i>B 0123.2</i>	-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.

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
BELGIUM-NORTH SEA							
9074 <i>B 0123</i>	-E. breakwater, head.	51° 21.8' N 3° 11.9' E	Oc.R. period 7s	95 29	7	Round concrete tower.	Visible 087°-281°. Unintensified in harbor. Red strip lights on seaward side. Bell: 3 strokes ev. 25s.
9075 <i>B 0124.16</i>	-Wielingen Dock Range, front.	51° 21.5' N 3° 10.7' E	F.W.	39 12		Metal mast.	
9075.1 <i>B 0124.17</i>	--Rear, 274° from front.	51° 21.5' N 3° 10.7' E	F.W.	46 14		Metal Mast.	
9075.5 <i>B 0124.18</i>	--Jetty Range, front.	51° 21.4' N 3° 10.8' E	F.W.	46 14			
9075.51 <i>B 0124.19</i>	---Rear, 420 meters 229° from front.	51° 21.2' N 3° 10.5' E	F.W.	72 22			
9075.6 <i>B 0124.3</i>	-Albert II Dock.	51° 20.6' N 3° 10.6' E	F.W.R.	95 29			W. 232°-052°, R.-232°.
9075.7 <i>B 0124.5</i>	--Range, front.	51° 20.6' N 3° 10.6' E	2 F.W.	66 20			
9075.72 <i>B 0124.51</i>	---Rear, 155 meters 232° from front.	51° 20.5' N 3° 10.5' E	2 F.W.	92 28			
9076 <i>B 0122</i>	-Leopold II Dam , mole, head.	51° 20.9' N 3° 12.2' E	Oc.W.R. period 15s lt. 12s, ec. 3s	66 20	W. 20 R. 18	Gray round concrete tower.	W. 068°-145°, R.-212°, W.- 296°. Traffic signals. Horn: (3+1) 90s
9088 <i>B 0128</i>	-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 <i>B 0128.1</i>	--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 <i>B 0125</i>	-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 <i>B 0125.1</i>	--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	<i>Noord Hinder Buoy.</i>	52° 00.1' N 2° 51.2' E	Fl.(2)W. period 10s			SAFE WATER RW, spherical.	
	RACON		T(-)				
9106	<i>Noord Hinder Buoy "NHR-SE".</i>	51° 45.5' N 2° 40.0' E	Fl.G. period 5s			Green conical.	
	RACON		N(- •) period 120s		10		
9108	<i>Noord Hinder Buoy "NHR-N".</i>	52° 08.2' N 3° 01.3' E	L.Fl.W. period 8s			SAFE WATER RW, spherical.	
	RACON		K(- • -)				
9110 <i>B 0157</i>	Appelzak.	51° 22.8' N 3° 22.8' E	Fl.(5)Y. period 20s			Yellow post.	Wavemeter.
9116 <i>B 0166</i>	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° 24.0' N 3° 34.1' E	F.G.	23 7		White post, green bands.	F.Y. shown in fog.
THE NETHERLANDS-ENTRANCE TO WESTERSCHDELDE							
BRESKENS:							
9136 B 0214	-E. mole.	51° 24.0' N 3° 34.1' E	F.R.	16 5		Red mast, white bands.	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 WESTERSCHDELDE							
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. Iso.W.R.G. period 4s	33 10	5	Black mast; 23.	Harbor signal lights. Horn: 1 bl. ev. 15s. 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°, obsec.-248°.
THE NETHERLANDS-WESTERSCHDELDE							
WALCHEREN:							
-Sloehaven (Flushing East):							
9192 B 0204	--W. mole.	51° 26.9' N 3° 40.1' E	F.R.	26 8	5	White concrete column; 16.	Traffic signals.
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.
9212 B 0206.21	--Quarleshaven, 059°.	51° 28.4' N 3° 43.4' E	Dir.W.R.G.	82 25	3	Grey pole.	F.R. 057°36'-058°24', Al.W.R.-059°06', F.W.- 059°30', Al.W.G.-060°12', F.G.-061°.
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-WESTERSCHDELDE							
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	20 6	9	White mast, green bands, white rectangular daymark.	Intensified 13M 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	52 16	9	Green framework tower, white bands.	Intensified 13M 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	White mast, green bands.	F.Y. shown in fog.
9268 B 0252	-E. mole.	51° 20.6' N 3° 48.9' E	F.R.	29 9	5	Red mast, white bands.	Traffic Signals.
TERNEUZEN WEST HARBOR:							
9272 B 0245	-W. mole, near head.	51° 20.7' N 3° 49.7' E	F.G.			White mast, green bands.	F.Y. shown in fog.
9276 B 0246	-E. mole, near head.	51° 20.6' N 3° 49.8' E	F.R.			Red mast, white bands.	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	Green iron structure, white stripe.	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	Structure, 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	-Eendragt polder 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	Green and white mast.	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.
9300 B 0268	-Hoedekenskerke.	51° 25.1' N 3° 55.0' E	Oc.W.R.G. period 9s	26 8	W. 8 R. 5 G. 4	Red tower, white stripe.	R. 190°-203°, W.-210°30', G.-235°, W.-322°, G.-003°, W.-019°, R.-030°, W.-190°.

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
THE NETHERLANDS-WESTERSCHDELDE							
9320 <i>B 0282</i>	-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 <i>B 0282.1</i>	--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.
-Hansweert:							
9328 <i>B 0286</i>	--Entrance canal, W. side.	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 <i>B 0286.1</i>	--W. harbor, head.	51° 26.4' N 4° 00.5' E	F.R.	43 13	10		
9329 <i>B 0288</i>	--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 <i>B 0296</i>	-Oude Hooft.	51° 23.6' N 4° 02.0' E	Iso.W.R.G. period 4s	29 9	W. 8 R. 6 G. 5	Green and white beacon on dolphin.	R. 132°-172°, W.-268°, G.-325°, W.-341°, R.-012°, W.-132°. Tide Gauge.
9352 <i>B 0298</i>	-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 <i>B 0299</i>	-S. jetty.	51° 23.0' N 4° 02.2' E	F.R.	16 5		Silver-gray mast; 12.	
9360 <i>B 0300</i>	-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 <i>B 0300.1</i>	--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 <i>B 0306</i>	-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 <i>B 0306.1</i>	--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 <i>B 0315</i>	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 <i>B 0318</i>	-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 <i>B 0319.9</i>	-Middenketel Range, front.	51° 24.1' N 4° 11.3' E	Iso.W.R. period 3s	26 8	6	Red post, white band.	R. 245°-275°-30', W. elsewhere. Radar reflector.

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
THE NETHERLANDS-WESTERSCHDELDE							
9396 <i>B 0320</i>	--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 <i>B 0320.1</i>	-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 post, 2 white bands.	R. 270°-301°30', W.-325°, G.- 055°, W.-065°30', R.- 090°, W.-270°. Radar reflector.
ZUID BEVELAND:							
9404 <i>B 0330</i>	-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. 6 R. 5 G. 4	Iron post, white bands.	W. 075°-087°, R.-112°, W.- 280°, R.-343°, W.-349°, G.-075°.
BELGIUM-SCHDELDE							
9408 <i>B 0336</i>	Zuid Saaftinge.	51° 21.9' N 4° 13.2' E	Iso.W.R.G. period 10s	23 7	W. 6 R. 4 G. 4	Green post.	R. 158°-168°30', W.-240°, G.- 291°, W.-322°, R.-332°, W.-158°.
9412 <i>B 0338</i>	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 <i>B 0346</i>	Zandvliet.	51° 20.6' N 4° 16.3' E	Dir.W.R.G.	77 24	W. 4 R. 3 G. 3		FW. 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 <i>B 0346.1</i>	-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 <i>B 0346.11</i>	-Front, 200 meters 117°42' from common rear.	51° 20.6' N 4° 16.3' E	Oc.W. period 5s	30 9	9		
9424 <i>B 0346.12</i>	--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 <i>B 0346.2</i>	Entrance, S. side.	51° 20.7' N 4° 16.2' E	F.G.				
9448 <i>B 0355</i>	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 <i>B 0358</i>	-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 <i>B 0356</i>	-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 <i>B 0356.1</i>	--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 <i>B 0364</i>	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.

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
BELGIUM-SCHELDE							
9472 B 0368	Liefkenshoek Range, front.	51° 17.8' N 4° 17.2' E	Oc.W.R.G. period 3s lt. 2s, ec. 1s	13 4	W. R. G. 8 6 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.
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	-Meestooft.	51° 16.6' N 4° 19.3' E	Fl.W.R.G. period 4s fl. 1s, ec. 3s	16 5	W. R. G. 9 7 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. R. G. 9 7 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. R. G. 9 7 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. R. G. 7 5 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. R. G. 9 7 6		R. shore-317°30', W.-336°, G.-080°, W.-102°, R.-115°, obscured elsewhere. 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. R. G. 7 5 4	White concrete post, black bands, red lantern, 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.

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
BELGIUM-SCHelde							
9544 <i>B 0392.1</i>	--Rear, 170 meters from front.	51° 14.3' N 4° 24.1' E	F.R. (neon)	26 8	2	Red triangular daymark, point down; 13.	
THE NETHERLANDS-NORTH SEA							
SCHOUWEN EN DUIVELAND:							
9576 <i>B 0500</i>	-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 <i>B 0408</i>	-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 <i>B 0506</i>	-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 <i>B 0514</i>	--W. mole, head.	51° 47.9' N 3° 56.3' E	F.R.	10 3		Post; 8.	
9596 <i>B 0515</i>	--E. mole, head.	51° 47.9' N 3° 56.2' E	F.G.	10 3		Post; 7.	
9600 <i>B 0518</i>	-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 <i>B 0536</i>	-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 <i>B 0540</i>	-W. mole, head.	51° 49.2' N 4° 07.9' E	F.R.	19 6		Column; 13.	
9632 <i>B 0542</i>	-E. mole, head.	51° 49.2' N 4° 08.0' E	F.G.	19 6		Column; 13.	F.Y. shown in fog.
9636 <i>B 0630</i>	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 platform.	Reserve light: Mo.(U)W. Horn: 4 bl. ev. 30s.
RACON				T(-)			
9637	Rijn Field, Platform "P15-B" RACON.	52° 18.5' N 3° 46.7' E	B(- • • •)	12			
9637.5	<i>Ijmuiden Channel Buoy.</i>	52° 22.2' N 3° 46.6' E	V.Q.(9)W. period 10s	W. CARDINAL YBY, pillar, topmark.			
RACON				D(- • •)			

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
THE NETHERLANDS-NORTH SEA							
HOEK VAN HOLLAND:							
9640 <i>B 0633</i>	-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. 7.9s	221 67	28	Octagonal concrete tower, orange and black bands; 203.	Obscured 267°-340°.
9644 <i>B 0635</i>	-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.FI.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 <i>B 0634</i>	-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.FI.W.R. period 6s			Same structure.	Obscured 255°-278°.
9652 <i>B 0636</i>	-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 <i>B 0637</i>	-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 <i>B 0637.1</i>	--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 <i>B 0638</i>	--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 <i>B 0638.1</i>	---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 <i>B 0642</i>	--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 <i>B 0642.1</i>	---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 <i>B 0646</i>	---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 <i>B 0646.1</i>	---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 <i>B 0647</i>	-Petroleum Port, No. "6".	51° 56.8' N 4° 05.2' E	Iso.G. period 4s			White platform.	
9696 <i>B 0648</i>	-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 <i>B 0648.31</i>	--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'.
9702 <i>B 0647.7</i>	--Einde Amazonehaven, front.	51° 56.7' N 4° 02.3' E	Iso.W. period 6s				

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
THE NETHERLANDS-NORTH SEA							
9703 B 0647.701	--Rear, 258°.	51° 56.7' N 4° 02.2' E	Iso.W. period 6s				Synchronized with front.
ROTTERDAMSCH WATERWEG:							
9704 B 0662	-Poortershaven Range, No. "8", front.	51° 56.1' N 4° 13.1' E	L.F.I.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.	
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.	

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
THE NETHERLANDS-NORTH SEA							
HAVEN VAN IJMUIDEN:							
9792 <i>B 0766</i>	-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 <i>B 0766.1</i>	-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 <i>B 0768</i>	-N. breakwater, outer head.	52° 28.1' N 4° 32.6' E	F.R.	50 15	10	White tower, red bands.	
9804 <i>B 0769</i>	--Inner head.	52° 28.0' N 4° 33.3' E	Iso.R. period 8s	40 12	9	White tower, red band, black base; 33.	Visible 263°-096°. F.W. shown in fog.
9808 <i>B 0767</i>	-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 <i>B 0770</i>	--Inner head.	52° 27.7' N 4° 33.3' E	Iso.G. period 8s	40 12	9	White tower, green band.	Visible 096°-295°. F.W. shown in fog.
-Zuider Buitenkanal:							
9824 <i>B 0777</i>	--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 <i>B 0777.1</i>	--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 <i>B 0783</i>	-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 <i>B 0784</i>	--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.
9839 <i>B 0786</i>	--W. side Fort Island.	52° 27.8' N 4° 34.4' E	Iso.R. period 6s				
9840 <i>B 0785</i>	--S. side entrance.	52° 27.7' N 4° 33.8' E	Iso.G. period 6s				
-Noorder Buitenkanal:							
9844 <i>B 0789</i>	--Entrance Range, front.	52° 28.3' N 4° 35.7' E	Iso.W. period 3s	28 9		Green wooden mast.	Visible 031°-121°.
9848 <i>B 0789.1</i>	--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 <i>B 0800</i>	-Foundry Basin Range, front.	52° 28.5' N 4° 36.1' E	Iso.G. period 2s	39 12		Post; 15.	
9860 <i>B 0800.1</i>	--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 <i>B 0842</i>	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(-)				

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
THE NETHERLANDS-NORTH SEA							
9870	Logger "L-16" Platform, RACON.	53° 00.9' N 4° 13.0' E	X(- • • -)		12		Azimuth coverage 240°-090°.
9876 <i>B 0849</i>	-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	<i>Schulpengat Fairway Buoy</i> "SG".	52° 52.9' N 4° 38.0' E	Mo.(A)W. period 8s			SAFE WATER RW, pillar, topmark.	
	RACON		Z(- - • •)				
9880 <i>B 0856</i>	-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 <i>B 0858</i>	- 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.
ZEEGAT VAN TEXEL:							
9900 <i>B 0864</i>	-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 <i>B 0864.1</i>	--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 <i>B 0864.5</i>	-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 <i>B 0865</i>	--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 <i>B 0867</i>	---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 <i>B 0867.5</i>	-Nieuwe Haven.	52° 57.8' N 4° 47.4' E	Q.R.	33 10	4	Square concrete post, red lantern; 16.	
9930 <i>B 0867.3</i>	-"/MH6".	52° 58.0' N 4° 47.4' E	Iso.R. period 4s			Red pile.	Radar reflector.
9931 <i>B 0867.2</i>	-"/MH8".	52° 57.9' N 4° 47.4' E	Iso.R. period 8s			Red pile.	
9936 <i>B 0870</i>	-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 <i>B 0852</i>	-- 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 <i>B 0852.1</i>	---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:							
9950 <i>B 0876</i>	-- W. mole, head.	53° 00.1' N 4° 47.0' E	F.R.	23 7	5	Red-white pole; 10.	LED light.
9951 <i>B 0876.2</i>	--E. mole, head.	53° 00.1' N 4° 47.1' E	F.G.	23 7	4	Green-white pole; 10.	F.Y. shown in fog. LED Light.
9952 <i>B 0859</i>	-- 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.

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
THE NETHERLANDS-NORTH SEA							
-Oudeschild:							
9956 <i>B 0881</i>	--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 <i>B 0886</i>	-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 <i>B 0889</i>	--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 <i>B 0894</i>	Vuurduin.	53° 17.8' N 5° 03.6' E	Iso.W. period 4s	177 54	20	Dark red round metal tower; 55.	
9972 <i>B 0896</i>	-E. mole, head.	53° 17.8' N 5° 05.6' E	F.G.	13 4		Lamppost.	
9976 <i>B 0898</i>	-W. mole, head.	53° 17.7' N 5° 05.6' E	F.R.			Lamppost.	
9977 <i>B 0890</i>	-VL-CENTER LANBY.	53° 27.0' N 4° 40.0' E	Fl.W. period 5s		12	SAFE WATER RW.	
	-RACON		C(- • - •)		12		
9979 <i>A 7581.85</i>	-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 <i>B 0904</i>	-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 <i>B 0904.5</i>	-N. Terschelling, metering station.	53° 25.8' N 5° 20.1' E	Fl.(5)Y. period 20s				
-West Terschelling:							
9984 <i>B 0908</i>	--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 <i>B 0912</i>	--E. mole, head.	53° 21.3' N 5° 13.2' E	F.G.	16 5	4	Green mast, white bands; 16.	
AMELANDER GAT:							
9996 <i>B 0920</i>	-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 <i>B 0924</i>	-Nes, mole, head.	53° 26.0' N 5° 46.5' E	Iso.W. period 6s	13 4	8	Red lantern on masonry structure.	
10004 <i>B 0926</i>	-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.	

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
THE NETHERLANDS-NORTH SEA							
FRIESCHE GAT:							
10008 <i>B 0938</i>	-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(— —)				
10013 <i>A 7682</i>	Elf Petroland Platform, "F15- A", RACON.	54° 13.0' N 4° 49.7' E	U(• • —)				
10013.1 <i>A 7682.5</i>	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 <i>A 7697</i>	"GNSC-H-7" Platform, RACON.	54° 30.6' N 6° 02.1' E	D(— • •)				
10014 <i>B 1051</i>	"GW/EMS" LIGHT FLOAT.	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	<i>Borkumriff Buoy.</i>	53° 47.5' N 6° 22.1' E	Oc.W. period 4s			SAFE WATER RW, pillar, topmark.	
	RACON		T(-) period 48s				
10024	<i>Westerems Buoy.</i>	53° 37.2' N 6° 19.5' E	Iso.W. period 4s			SAFE WATER RW, pillar, topmark.	
	RACON		T(-)		8		
10028	<i>Osterems Buoy.</i>	53° 42.0' N 6° 36.0' E	Iso.W. period 4s			SAFE WATER RW, pillar, topmark.	
10030 <i>B 0980.5</i>	Horsbornzand.	53° 31.5' N 6° 39.9' E	Fl.(5)Y. period 20s			Post.	Tide gauge.
10032 <i>B 0970</i>	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 <i>B 0972</i>	-Borkum, Kleiner Leuchtrum.	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 <i>B 0976</i>	-Fischer Balje.	53° 33.2' N 6° 43.0' E	Oc.(2)W. period 16s lt. 3s, ec. 1s lt. 11s, ec. 1s	49 15	3	White round tower, red top and lantern, on 3 black piles; 52.	Visible 260°-123°. Fog detector light.
10042 <i>B 0987.2</i>	-Werkhaven, N. mole, head.	53° 26.7' N 6° 52.9' E	Fl.(3)Y. period 12s				
10043 <i>B 0987</i>	--S. mole, head.	53° 26.5' N 6° 53.1' E	Fl.(3)Y. period 12s				
10044 <i>B 0987.4</i>	--Pier, head.	53° 26.6' N 6° 53.0' E	Q.W.			N. CARDINAL BY, beacon, topmark.	
10045 <i>B 0989</i>	--Tide gauge.	53° 26.0' N 6° 55.6' E	Fl.Y. period 4s	36 11	7	Yellow metal mast.	

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
GERMANY-NORTH SEA							
10048 <i>B 0983</i>	Campen.	53° 24.4' N 7° 01.0' E	F.W. Fl.W. period 5s fl. 0.7s, ec. 4.3s 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	203 62	30	Red metal framework tower, two galleries, white central column, green cupola; 213.	Visible 126°48'-127°06'. Visible 126°18'-126°48'. Visible 127°06'-127°36'.
10052 <i>B 1010</i>	-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 <i>B 1046</i>	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°.
10056 <i>B 1012</i>	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 <i>B 1052</i>	GERMAN BIGHT LIGHT FLOAT.	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 <i>B 1054</i>	-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 <i>B 1074</i>	-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 <i>B 1074.1</i>	--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 <i>B 1078</i>	-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 <i>B 1080</i>	-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 <i>B 1082</i>	-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 <i>B 1082.1</i>	--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 <i>B 1084</i>	-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 <i>B 1084.1</i>	--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 <i>B 1092</i>	-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.

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
GERMANY-NORTH SEA							
10128 <i>B 1096.5</i>	-Spiekeroog.	53° 45.0' N 7° 41.3' E	F.R.		19 6	4 Red post with platform; 23.	Visible 197°-114°.
10136 <i>B 1312</i>	-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 <i>B 1326</i>	-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 <i>B 1326.1</i>	--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 <i>B 1318</i>	--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 <i>B 1318.2</i>	--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.
10164 <i>B 1320</i>	--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 <i>B 1324</i>	--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 <i>B 1324.1</i>	--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 <i>B 1325</i>	--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 <i>B 1325.2</i>	--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 <i>B 1328</i>	-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 <i>B 1112</i>	Wangerooe.	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 <i>B 1113</i>	-W. embankment, head.	53° 46.4' N 7° 52.0' E	F.R.	10 3	4	Red mast, red lantern; 10.	
10194 <i>B 1113.2</i>	--E. embankment, head.	53° 46.5' N 7° 52.2' E	F.G.	10 3	3	Green mast, green lantern; 10.	
10212 <i>B 1138</i>	-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 <i>B 1138.1</i>	--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.

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
GERMANY-NORTH SEA							
10220 <i>B 1139</i>	-Niedersachsenbrücke Range, front.	53° 34.9' N 8° 09.5' E	F.W.	33	4	Framework tower, white and red triangular daymark, point up; 36.	
10224 <i>B 1139.1</i>	--Rear, 15 meters 298° from front.	53° 34.9' N 8° 09.5' E	F.W.	42	4	Framework tower, white and red triangular daymark, point down; 46.	Range lit for arrival and departure maneuvers only.
10248 <i>B 1134</i>	-Tossens Range, front.	53° 34.5' N 8° 12.4' E	Oc.W. period 6s	49	20	White round tower, red band, red lantern; 56.	
10248.1 <i>B 1134.1</i>	--Rear, about 3860 meters 146° from front.	53° 32.8' N 8° 14.4' E	Oc.W. period 6s	167	20	Red round tower, 2 white bands, 3 galleries; 171.	
10256 <i>B 1141</i>	-Eckwarden Range, front.	53° 32.5' N 8° 13.1' E	Iso.W.R.G. period 3s	49	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 <i>B 1141.1</i>	--Rear, 2.35 km. 154° from front.	53° 31.3' N 8° 14.0' E	Iso.W. period 3s	135	21	Red pyramidal framework tower; lantern; 121.	Synchronized with front.
10264 <i>B 1156</i>	-Vorhafen, Entrance Range, front.	53° 31.9' N 8° 09.7' E	Iso.W. period 4s	57	11	Black mast, red lantern; 30.	Intensified on range line.
10268 <i>B 1156.1</i>	--Rear, 180 meters 207°48' from front.	53° 31.8' N 8° 09.6' E	Iso.W. period 4s	76	11	Yellow square building; 72.	
10272 <i>B 1158</i>	-W. mole, head.	53° 32.5' N 8° 10.2' E	Oc.G. period 6s lt. 4.5s, ec. 1.5s	49	4	Green mast; 39.	
10276 <i>B 1159</i>	-E. mole, head.	53° 32.5' N 8° 10.3' E	Oc.R. period 6s lt. 4.5s, ec. 1.5s	49	5	Red mast; 39.	
10284 <i>B 1163</i>	-N. mole, head.	53° 30.9' N 8° 09.4' E	F.W.G.	29	W. 6 G. 3	Green metal framework tower; 33.	W. 216°-280°, G.-010°, W.-020°, G.-130°.
10288 <i>B 1164</i>	-Mole, head.	53° 30.8' N 8° 09.2' E	F.R.	20	5	Red post on platform.	
10292 <i>B 1166</i>	-N. mole, angle.	53° 30.9' N 8° 08.9' E	F.G.	20	3	Black post; 16.	
10296 <i>B 1168</i>	-S. mole, head.	53° 30.8' N 8° 08.8' E	F.R.	15	4	Red post; 13.	Signal station. Fog detector light.
10300 <i>B 1152</i>	-Arngast Sand.	53° 28.9' N 8° 11.0' E	F.W.R.G.	99	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		

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
GERMANY-NORTH SEA							
WESER RIVER:							
10304	<i>-Jade 2 Buoy.</i>	53° 52.1' N 7° 47.3' E	Fl.(2+1)G. period 15s			PREFERRED CHANNEL (A) GRG, pillar, topmark.	
	-RACON		T(-)		7		
10308 <i>B 1188</i>	-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.
10316 <i>B 1122</i>	-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 <i>B 1196</i>	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 <i>B 1198</i>	-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 <i>B 1225</i>	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 <i>B 1225.1</i>	--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 <i>B 1210</i>	-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 <i>B 1214</i>	-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 <i>B 1214.1</i>	--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 <i>B 1228</i>	-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 <i>B 1228.1</i>	--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 <i>B 1224</i>	-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 <i>B 1224.1</i>	--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.

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
GERMANY-NORTH SEA							
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 <i>B 1239.1</i>	--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 <i>B 1240</i>	-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 <i>B 1240.1</i>	--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.
BREMERHAVEN:							
10388 <i>B 1257</i>	-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 <i>B 1258</i>	-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 <i>B 1260</i>	--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 <i>B 1262</i>	--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 <i>B 1264</i>	--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 <i>B 1268</i>	--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 <i>B 1268.1</i>	--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 <i>B 1274</i>	-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 <i>B 1275</i>	-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	<i>-Elbe Buoy.</i>	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 <i>B 1344</i>	-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°.
10438	Nienstedten.	53° 32.7' N 9° 50.4' E	Iso.W. period 8s			Dolphin.	
CUXHAVEN:							
10440 <i>B 1360.9</i>	-Baumronne Range, front, 151°12', 3 km. from common rear.	53° 51.2' N 8° 44.2' E	Iso.W. period 4s	82 25	17	White round tower, black band and gallery; 72.	Visible 149°12'-154°12'.

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
GERMANY-NORTH SEA							
10444 <i>B 1361</i>	-- 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.
10445 <i>B 1361.1</i>	-- 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 <i>B 1361.2</i>	--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 <i>B 1363</i>	-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 <i>B 1363.2</i>	-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 <i>B 1360</i>	--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 <i>B 1368</i>	--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 <i>B 1370</i>	--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 <i>B 1374</i>	--Steubenhof.	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 <i>B 1392</i>	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 <i>B 1396</i>	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 <i>B 1395.9</i>	-- 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 <i>B 1396.1</i>	-- Otterndorf , 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.	

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
GERMANY-NORTH SEA							
OSTE RIVER:							
10508 <i>B 1402</i>	-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 <i>B 1402.1</i>	--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.	
10520 <i>B 1412</i>	Balje Range, front.	53° 51.4' N 9° 02.7' E	Iso.W. period 8s	79 24	17	White tower, red bands.	
10524 <i>B 1412.1</i>	-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 <i>B 1416</i>	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 <i>B 1416.1</i>	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 <i>B 1438</i>	--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 <i>B 1431</i>	--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 <i>B 1431.1</i>	---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 <i>B 1436</i>	---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 <i>B 1442</i>	--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 <i>B 1444</i>	---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 <i>B 1352</i>	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 <i>B 1606</i>	-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°, obsec.-248°, W.-317°, R.-024°.
10584 <i>B 1609</i>	-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 <i>B 1610</i>	--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.	

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
GERMANY-NORTH SEA							
10596 <i>B 1624</i>	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 <i>B 1652</i>	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°.
10604 <i>B 1672</i>	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 <i>B 1676</i>	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 <i>B 1676.1</i>	-Rear, about 1.5 km. 041° from front.	54° 29.8' N 8° 40.0' E	Oc.W. period 5s Oc.W.R. period 5s lt. 4s, ec. 1s	125 38	 W. 14 R. 6	Red tower, white band; 115.	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 <i>B 1685</i>	-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 <i>B 1685.1</i>	--Amrum, rear.	54° 37.9' N 8° 21.4' E	Fl.W. period 7.5s fl. 1s, ec. 6.5s Iso.R. period 4s	207 63 108 33	23 15	Red tower, white bands; 134.	
10628 <i>B 1688</i>	-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 <i>B 1728</i>	-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 <i>B 1700</i>	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 <i>B 1704</i>	-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 <i>B 1706</i>	--Wyk, pier, head.	54° 41.6' N 8° 34.7' E	F.R.	30 9	4	Red mast.	
10652 <i>B 1714</i>	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°.

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
GERMANY-NORTH SEA							
SYLT:							
10676 <i>B 1735</i>	-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 <i>B 1738</i>	-N. mole.	54° 45.6' N 8° 17.9' E	F.G.	20 6	3	Black mast; 10.	Visible 024°-260°.
10696 <i>B 1738.6</i>	--Outer S. mole, head.	54° 45.6' N 8° 18.0' E	F.R.	20 6	3	Red mast.	Mole floodlit.
10700 <i>B 1740</i>	-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 <i>B 1746</i>	-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 <i>B 1748</i>	-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 <i>B 1749</i>	-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 <i>B 1848</i>	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.
10716.1 <i>B 1848.7</i>	-Munk S. Wind Farm.	55° 30.5' N 7° 52.5' E	2 Mo.(U)W. period 15s fl. 0.7s, ec. 0.7s fl. 0.7s, ec. 2.1s fl. 0.7s, ec. 10.1s	49 15	5	Transformer platform.	Lights synchronized.
10716.2 <i>B 1848.5</i>	-Horns Rev, meteorological mast.	55° 31.3' N 7° 47.3' E	2 Mo.(U)W. period 15s fl. 0.7s, ec. 0.8s fl. 0.7s, ec. 0.8s fl. 2.2s, ec. 9.8s	26 8	3	Gray mast; 197.	Lights synchronized.
10716.3	<i>Regnar Field TANKER Superbuoy.</i>	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				
10717	Kraka Field, Platform "A", RACON.	55° 24.0' N 5° 05.1' E	U(• • -) period 90s				
10717.1 <i>A 7784</i>	"GNSSC-B-11" Platform, RACON.	55° 27.8' N 4° 33.0' E	D(- • •)				

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
DENMARK-NORTH SEA							
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. RACON	55° 24.7' N 8° 11.7' E	L.F.I.W. period 10s G(- - •)			SAFE WATER RW, pillar, topmark.	(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.
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° 22.0' E	Fl.G. period 3s fl. 0.7s, ec. 2.3s	23 7	6	STARBOARD (A) G, tower.	
10736 B 1780.4	-Fovrfelt.	55° 29.0' N 8° 23.7' E	Fl.(2)R. period 10s fl. 1.5s, ec. 1.5s fl. 1.5s, ec. 5.5s	30 9	6	PORT (A) R, 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.

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
DENMARK-NORTH SEA							
10760 <i>B 1782</i>	-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 <i>B 1784</i>	-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 <i>B 1784.4</i>	--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 <i>B 1786</i>	-Konsumfiskerihaven, W. mole.	55° 28.3' N 8° 25.3' E	Fl.R. period 3s fl. 0.7s, ec. 2.3s	20 6		PORT (A) R, tower; 10.	Visible 203°-119°.
10780 <i>B 1788</i>	--E. mole.	55° 28.3' N 8° 25.4' E	Fl.G. period 3s fl. 0.7s, ec. 2.3s	20 6		STARBOARD (A) G, tower; 7.	Visible 023°-256°.
10784 <i>B 1792</i>	--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 <i>B 1794</i>	-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 <i>B 1796</i>	--S. mole, head.	55° 28.1' N 8° 25.6' E	F.G.	26 8	4	Green conical metal building; 16.	Visible 045°-276°.
ESBJERG HARBOR:							
10796 <i>B 1804</i>	-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 <i>B 1805</i>	--E. mole, head.	55° 27.5' N 8° 26.4' E	F.G.	29 9	4	Green post on concrete foundation; 18.	
10802 <i>B 1818.5</i>	-Western Excavation Limit Range, front.	55° 27.6' N 8° 25.9' E	F.R.	33 10	3	Gray steel framework mast; 13.	Visible 047°-077°.
10802.1 <i>B 1818.51</i>	--Rear, 140 meters 062° from front.	55° 27.6' N 8° 26.0' E	F.R.	43 13	3	Gray steel framework mast; 20.	Visible 047°-077°.
10806 <i>B 1817.4</i>	-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 <i>B 1817.41</i>	--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 <i>B 1822</i>	-Nordby Range, front.	55° 26.9' N 8° 24.5' E	F.R.	23 7	4	White stake, white triangular daymark.	Visible 123°42'-303°42'.
10820 <i>B 1822.1</i>	--Rear, 84 meters 214° from front.	55° 26.9' N 8° 24.4' E	F.R.	31 9	4	Gray framework mast, white triangular daymark point down; 30.	Visible 123°42'-303°42'.
10840 <i>B 1819.6</i>	-Kremer Sand S.	55° 27.3' N 8° 24.9' E	F.G.	17 5	3	Green post; 13.	
HVIDE SANDE KANAL:							
10848 <i>B 1858</i>	-Hvide Sande.	56° 00.1' N 8° 07.3' E	F.W.	89 27	14	Gray framework mast; 62.	
10852 <i>B 1860</i>	-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 <i>B 1861</i>	-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.

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
DENMARK-NORTH SEA							
10860 <i>B 1862</i>	--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 <i>B 1862.4</i>	-Innerhead, S. mole, head.	56° 00.1' N 8° 07.4' E	F.G.	16 5	4	Gray metal structure; 7.	
10868 <i>B 1862.2</i>	--Innerhead, N. mole, head.	56° 00.1' N 8° 07.3' E	F.R.	16 5	3	Gray metal structure; 7.	
10872 <i>B 1868</i>	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 <i>B 1879</i>	-Torsminde.	56° 22.6' N 8° 07.1' E	F.W.	98 30	14	Gray framework mast; 82.	
10880 <i>B 1880</i>	-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 <i>B 1881</i>	--S. mole, head.	56° 22.3' N 8° 07.0' E	Iso.G. period 2s	30 9	4	Green round mast; 20.	
10892 <i>B 1885</i>	-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 <i>B 1885.2</i>	-E. side of bridge.	56° 22.4' N 8° 07.3' E	Iso.W. period 4s	16 5	4	On bridge.	Visible 200°-340°.
10900 <i>B 1884.4</i>	-E. Range, front.	56° 22.3' N 8° 07.3' E	F.G.	16 5	4	Gray post on dolphin.	
10904 <i>B 1884.6</i>	--Rear.	56° 22.3' N 8° 07.3' E	F.G.	16 5	4	Gray post on dolphin.	
10908 <i>B 1886</i>	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	<i>Thyboron Buoy.</i>	56° 42.8' N 8° 08.5' E	L.Fl.W. period 10s			SAFE WATER RW, pillar, topmark.	
	RACON		T(-) period 120s		10		
10912 <i>B 1890</i>	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 <i>B 1894</i>	-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 <i>B 1894.1</i>	--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 <i>B 1897</i>	-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 <i>B 1897.1</i>	--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 <i>B 1900</i>	-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.

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
DENMARK-NORTH SEA							
10936 <i>B 1902</i>	-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 <i>B 1903</i>	-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 <i>B 2070</i>	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 <i>B 2072</i>	-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 <i>B 2072.1</i>	--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 <i>B 2074</i>	-Mole, head.	56° 57.8' N 8° 21.7' E	Fl.G. period 5s	19 6	4	Gray framework structure; 10.	
10960 <i>B 2080</i>	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 <i>B 2080.1</i>	-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.
HANSTHOLM:							
10968 <i>B 2084</i>	-Hansthholm.	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 <i>B 2087</i>	-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 <i>B 2087.1</i>	--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 <i>B 2086</i>	-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 <i>B 2085</i>	--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 <i>B 2088</i>	-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 <i>B 2089</i>	--E. section, head.	57° 07.4' N 8° 35.7' E	F.R.	20 6	6	Red column; 10.	
10996 <i>B 2090</i>	-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 <i>B 2098</i>	Lildstrand Ranges.	57° 09.2' N 8° 57.9' E	3 F.W.	71 22 40 12 12	8 7 7	Unpainted wooden masts.	Visible 127°-149°. Range lights. Occasional.
11004 <i>B 2102</i>	Lokken.	57° 22.4' N 9° 42.2' E	Fl.W. period 5s fl. 1s, ec. 4s	16 5	5	Tubular mast.	

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
DENMARK-NORTH SEA							
11008 <i>B 2106</i>	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 <i>B 2107</i>	-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 <i>B 2107.1</i>	--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 <i>B 2108</i>	-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 <i>B 2110</i>	-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 <i>B 2112</i>	--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 <i>B 2113</i>	-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 Oilfield, platform, RACON	56° 38.5' N 3° 19.8' E	N(- •)		16		
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 Schiffsamt 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 Schiffsamt Bremerhaven through Bremerhaven Weser Revier on VHF Ch 5 or 7.
530	Hollerwetter Calibration Radiobeacon	53° 50.4' N 9° 21.2' E	HB (• • • • - • • •).			313.5, 2168 A2A.	Transmits on request to Revierzentrale Brunsbüttel to all district radio channels of the Wasser and Schiffsamt 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 Brunsbüttel to all district radio channels of the Wasser and Schiffsamt 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							
650	Port-en-Bessin Rear Light	49° 21.0' N 0° 45.6' W	BS (- • • • • • • •).	5		290 A1A.	
720	Roscoff, Blosson Jetty 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	52° 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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B Blavands Huk. 10 Butt Of Lewis Light. 60	Loop Head Light 130	S St. Catherine's Point Light. 20 Sumburgh Head Light 70
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G Girdle Ness Light..... 80	N Nash Point Light 40 North Foreland..... 100	W Wormleighton DGPS Station..... 25
L Lizard Point Light..... 30	P Point Lynas Light..... 50	

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

Inter.	—	U.S.	Inter.	—	U.S.	Inter.	—	U.S.	Inter.	—	U.S.
A0002	.....	4	A0164	.....	240	A0324	.....	517	A0612	.....	.784
A0006	.....	8	A0166	.....	244	A0324.1	.....	517.1	A0612.2	.....	.788
A0008	.....	12	A0166.2	.....	245	A0326.2	.....	508	A0612.4	.....	.792
A0018	.....	16	A0166.4	.....	246	A0326.5	.....	512	A0614	.....	.800
A0020	.....	20	A0167	.....	248	A0326.7	.....	515	A0618	.....	.804
A0028	.....	24	A0168	.....	252	A0327	.....	492	A0618.2	.....	.808
A0030	.....	28	A0170	.....	256	A0327.5	.....	496	A0618.4	.....	.812
A0032	.....	32	A0172	.....	260	A0327.6	.....	500	A0620.5	.....	.816
A0038	.....	40	A0173	.....	264	A0330	.....	488	A0620.7	.....	.820
A0040	.....	44	A0174	.....	268	A0332	.....	484	A0621	.....	.828
A0045	.....	46	A0176	.....	272	A0334	.....	480	A0621.2	.....	.832
A0046	.....	48	A0178	.....	274	A0339	.....	520	A0626	.....	.844
A0048	.....	52	A0182	.....	276	A0340	.....	524	A0628	.....	.852
A0051	.....	56	A0184	.....	280	A0346	.....	540	A0628.6	.....	.854
A0056	.....	60	A0185	.....	282	A0348	.....	532	A0629	.....	.856
A0060	.....	64	A0186	.....	284	A0348.1	.....	536	A0629.1	.....	.860
A0062	.....	68	A0186.2	.....	286	A0354	.....	528	A0630	.....	.864
A0064	.....	72	A0192	.....	292	A0496	.....	544	A0630.1	.....	.868
A0065	.....	80	A0193	.....	294	A0498	.....	548	A0632	.....	.872
A0066	.....	84	A0204	.....	300	A0506	.....	572	A0632.2	.....	.873
A0068	.....	88	A0220	.....	308	A0508	.....	564	A0632.3	.....	.874
A0069	.....	92	A0221	.....	309	A0520.6	.....	573	A0633	.....	.884
A0070	.....	96	A0222	.....	312	A0520.61	.....	574	A0637	.....	.888
A0078	.....	100	A0222.1	.....	316	A0521	.....	576	A0637.1	.....	.892
A0080	.....	102	A0224	.....	320	A0522	.....	580	A0640	.....	.896
A0080.2	.....	102.5	A0228	.....	324	A0528	.....	584	A0642	.....	.900
A0082	.....	104	A0236	.....	328	A0534	.....	588	A0642.1	.....	.904
A0084	.....	108	A0237	.....	336	A0538.1	.....	596	A0644	.....	.908
A0086	.....	112	A0238	.....	340	A0541	.....	606	A0645	.....	.912
A0090	.....	118	A0242	.....	332	A0542	.....	600	A0646	.....	.916
A0092	.....	120	A0244	.....	344	A0542.1	.....	604	A0652	.....	.936
A0093	.....	124	A0246	.....	348	A0543	.....	608	A0652.1	.....	.940
A0094	.....	128	A0246.5	.....	350	A0544	.....	607	A0654	.....	.924
A0098	.....	132	A0247.4	.....	357	A0552	.....	612	A0658	.....	.928
A0110.8	.....	137	A0247.6	.....	358	A0554	.....	616	A0658.5	.....	.932
A0111.2	.....	140	A0248	.....	360	A0554.5	.....	620	A0664	.....	.942
A0112	.....	144	A0248.5	.....	362	A0555	.....	624	A0665.8	.....	.942.1
A0114	.....	148	A0249	.....	364	A0558	.....	636	A0680	.....	.920
A0114.5	.....	150	A0249.2	.....	368	A0560	.....	640	A0684	.....	1024
A0115.5	.....	153	A0249.5	.....	372	A0560.5	.....	641	A0686	.....	.952
A0116	.....	156	A0250	.....	376	A0562	.....	628	A0688	.....	.948
A0117	.....	160	A0252	.....	388	A0562.1	.....	632	A0691	.....	.956
A0119	.....	164	A0254	.....	380	A0576	.....	660	A0692.5	.....	.960
A0119.1	.....	168	A0256	.....	384	A0577	.....	664	A0692.8	.....	.998
A0122	.....	172	A0262	.....	392	A0581.9	.....	744	A0696	.....	.964
A0124	.....	176	A0262.1	.....	396	A0582	.....	748	A0698	.....	.968
A0126	.....	202.5	A0263	.....	400	A0582.1	.....	752	A0700	.....	.972
A0131	.....	182	A0263.5	.....	402	A0586	.....	740	A0701	.....	.974
A0132	.....	184	A0270	.....	416	A0587	.....	740.5	A0704	.....	.980
A0134	.....	180	A0274	.....	408	A0587.1	.....	740.7	A0705	.....	.984
A0136	.....	192	A0274.1	.....	412	A0588	.....	741	A0707.4	.....	.988
A0137	.....	188	A0278	.....	418	A0590.14	.....	688	A0720	.....	.992
A0138	.....	196	A0280	.....	420	A0590.16	.....	692	A0722.2	.....	.996
A0140	.....	200	A0284	.....	424	A0590.2	.....	696	A0726	.....	1000
A0141	.....	201	A0284.1	.....	428	A0590.22	.....	698	A0730	.....	1004
A0141.1	.....	202	A0288	.....	432	A0590.26	.....	680	A0731	.....	1008
A0146	.....	204	A0290	.....	436	A0590.42	.....	712	A0734	.....	1020
A0147	.....	208	A0290.2	.....	440	A0594	.....	728	A0750	.....	1028
A0148	.....	209	A0293	.....	449	A0596	.....	732	A0752	.....	1032
A0148.5	.....	210	A0294	.....	448	A0599	.....	756	A0760	.....	.944
A0152	.....	216	A0302	.....	452	A0601	.....	760	A0762	.....	.943
A0154	.....	220	A0310	.....	456	A0602	.....	768	A0768	.....	1052
A0156	.....	224	A0314	.....	464	A0604	.....	772	A0770	.....	1056
A0161	.....	254	A0320	.....	468	A0605	.....	780	A0774	.....	1064
A0162	.....	255	A0322	.....	472	A0605.5	.....	776	A0780	.....	1048

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

Inter.	—	U.S.	Inter.	—	U.S.	Inter.	—	U.S.	Inter.	—	U.S.
A0782		1036	A0935		1284	A1222		8792	A1396		8532
A0782.08		1037	A0936		1288	A1224		8796	A1400		8516
A0783.4		1044	A0950		1312	A1226		8797	A1400.1		8520
A0783.5		1046	A0957		1348	A1228		8788	A1403		8524
A0784		1040	A0957.1		1340	A1230		8776	A1404		8528
A0790		1066	A0958		1352	A1232.1		8784	A1406		8512
A0794		1072	A0958.1		1356	A1234		8768	A1408		8504
A0797		1068	A0959		1349	A1238		8760	A1409		8508
A0800		1076	A0959.5		1350	A1239		8764	A1410		8492
A0800.5		1078	A0959.8		1351	A1244		8752	A1411		8496
A0801		1080	A0964		1360	A1245		8755	A1411.1		8500
A0801.1		1084	A0966		1364	A1246		8756	A1412		8484
A0804		1088	A0970		1224	A1248		8744	A1412.1		8488
A0808		1092	A0984		1324	A1248.1		8748	A1418		8476
A0808.2		1096	A0984.2		1326	A1250		8740	A1418.1		8480
A0809		1098	A0992		1336	A1250.2		8727	A1424		8472
A0810		1100	A0994		8932	A1250.21		8727.1	A1428		8464
A0812		1108	A1000		8936	A1250.8		8704	A1428.1		8468
A0813		1104	A1114		8964	A1251		8728	A1434		8460
A0814		1112	A1114.9		8968	A1251.2		8736	A1436		8452
A0814.1		1116	A1115		8972	A1251.4		8732	A1438		8456
A0820		1118	A1115.1		8976	A1251.6		8716	A1442		8448
A0822		1120	A1116		8996	A1251.62		8712	A1444		8432
A0825		1122	A1118		8992	A1251.7		8720	A1444.1		8436
A0825.2		1123	A1121		8988	A1251.8		8724	A1448		8440
A0826		1121	A1122		8980	A1251.84		8708	A1450		8444
A0830		1136	A1123		8984	A1254		8608	A1454		8428
A0832		1132	A1126		8948	A1256		8628	A1458		8420
A0839		1128	A1126.1		8952	A1260		8632	A1458.1		8424
A0840		1140	A1127		8956	A1260.1		8636	A1462		8416
A0843		1144	A1127.4		8960	A1261		8640	A1463		8412
A0846		1148	A1127.6		8963	A1261.1		8644	A1466		8404
A0848		1150	A1129		8961	A1262		8648	A1466.1		8408
A0848.1		1153	A1129.2		8962	A1264		8656	A1469		8316
A0848.2		1154	A1132		8928	A1266		8652	A1470		8344
A0848.5		1152	A1132.2		8924	A1274		8660	A1471.5		8356.1
A0854		1176	A1144		8904	A1274.4		8664	A1472		8348
A0856		1172	A1146		8908	A1274.6		8700	A1476		8340
A0858		1164	A1148		8912	A1276		8668	A1478		8336
A0858.1		1168	A1157		8913	A1276.1		8672	A1480		8332
A0864		1216	A1157.4		8914	A1277		8676	A1482		8320
A0864.5		1212	A1158		8905	A1277.1		8680	A1484		8324
A0866		1192	A1160		8900	A1278		8684	A1484.1		8328
A0866.3		1200	A1166		8896	A1278.1		8688	A1486		8352
A0866.5		1204	A1168		8856	A1279		8692	A1486.1		8356
A0866.7		1208	A1170		8860	A1279.1		8696	A1488		8364
A0867		1196	A1172		8864	A1280.7		8702	A1488.1		8368
A0876		1220	A1172.1		8868	A1282		8592	A1490		8400
A0892		1228	A1174		8872	A1282.2		8588	A1491		8392
A0894		1229	A1175		8876	A1283		8600	A1492		8396
A0894.1		1229.1	A1178		8892	A1283.1		8604	A1493		8398
A0896		1232	A1180		8888	A1284		8584	A1493.1		8398.1
A0898		1234	A1182		8880	A1285		8596	A1495		8372
A0898.2		1234.1	A1182.1		8884	A1286		8612	A1496		8380
A0900		1236	A1190		8844	A1289		8618	A1498		8376
A0902		1268	A1194		8840	A1290		8616	A1498.5		8384
A0906		1256	A1196		8832	A1296		8620	A1499		8388
A0912		1248	A1202		8828	A1374		8580	A1499.5		8386
A0914		1252	A1208		8804	A1377		8552	A1508		8308
A0915		1260	A1210		8808	A1378		8556	A1512		8304
A0916		1264	A1211		8812	A1379		8560	A1513		8095
A0924		1272	A1214		8820	A1381		8568	A1514		8312
A0926		1276	A1215		8816	A1381.1		8572	A1520		8268
A0928		1304	A1216		8824	A1390		8540	A1521		8272
A0929		1305	A1220		8800	A1391		8544	A1523		8280

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

Inter.	—	U.S.	Inter.	—	U.S.	Inter.	—	U.S.	Inter.	—	U.S.
A1532	.....	8264	A1654	.....	8020	A1791	.....	7790	A2222.5	.....	1520
A1536	.....	8300	A1655	.....	8024	A1792	.....	7780	A2222.6	.....	1524
A1537	.....	8296	A1656	.....	8028	A1794	.....	7784	A2223	.....	1532
A1538	.....	8288	A1660	.....	8036	A1794.1	.....	7788	A2248	.....	1560
A1538.1	.....	8292	A1662	.....	8044	A1796	.....	7772	A2250	.....	1540
A1538.5	.....	8292.5	A1664	.....	8048	A1796.1	.....	7776	A2250.1	.....	1544
A1539	.....	8293	A1666	.....	8040	A1799.9	.....	7768	A2258	.....	1564
A1544	.....	8260	A1668	.....	8052	A1800	.....	7764	A2265	.....	1568
A1545	.....	8261	A1670	.....	8012	A1800.1	.....	7760	A2265.2	.....	1572
A1545.5	.....	8262	A1672	.....	8016	A1804	.....	7758	A2265.3	.....	1573
A1546	.....	8208	A1673	.....	8006	A1805	.....	7756	A2265.35	.....	1573.1
A1546.4	.....	8200	A1673.1	.....	8006.1	A1808	.....	7740	A2265.4	.....	1574
A1546.6	.....	8204	A1674	.....	7976	A1810	.....	7744	A2265.6	.....	1574.1
A1546.7	.....	8205	A1675	.....	7988	A1812	.....	7748	A2272	.....	1588
A1548	.....	8184	A1676	.....	7980	A1812.1	.....	7752	A2273	.....	1576
A1548.5	.....	8188	A1676.1	.....	7984	A1816	.....	7732	A2273.3	.....	1580
A1550	.....	8196	A1680	.....	7972	A1818	.....	7724	A2274	.....	1584
A1552	.....	8192	A1682	.....	8008	A1818.1	.....	7728	A2280	.....	1620
A1554	.....	8228	A1686	.....	8000	A1820	.....	7720	A2282	.....	1596
A1557	.....	8216	A1686.1	.....	8004	A1822	.....	7716	A2284	.....	1604
A1558	.....	8220	A1695	.....	7996	A1826	.....	7704	A2286	.....	1600
A1558.1	.....	8224	A1697	.....	7964	A1826.1	.....	7708	A2288	.....	1612
A1559	.....	8212	A1698	.....	7960	A1831	.....	7712	A2290	.....	1608
A1560	.....	8232	A1701	.....	7954	A1836	.....	7692	A2290.8	.....	1614
A1560.1	.....	8236	A1702	.....	7956	A1837	.....	7696	A2292	.....	1616
A1562	.....	8252	A1703	.....	7952	A1838	.....	7700	A2304	.....	1624
A1566	.....	8244	A1704	.....	7948	A1956	.....	1424	A2306	.....	1632
A1567	.....	8246	A1708	.....	7940	A1971	.....	1368	A2306.1	.....	1636
A1567.2	.....	8246.5	A1710	.....	7936	A1972	.....	1372	A2308	.....	1628
A1569	.....	8248	A1712	.....	7928	A1976	.....	1376	A2318	.....	1652
A1569.1	.....	8248.5	A1713	.....	7932	A1977	.....	1378	A2320	.....	1640
A1570	.....	8249	A1713.55	.....	7926	A1978	.....	1380	A2322	.....	1644
A1574	.....	8256	A1714	.....	7924	A1979	.....	1384	A2324	.....	1648
A1580	.....	8180	A1716	.....	7920	A1996	.....	1404	A2325	.....	1650
A1584	.....	8164	A1720	.....	7916	A2009.7	.....	1400	A2336	.....	1668
A1585	.....	8168	A1722	.....	7904	A2050.4	.....	1392	A2342	.....	1676
A1585.1	.....	8172	A1724	.....	7908	A2050.5	.....	1388	A2344	.....	1680
A1586	.....	8160	A1724.1	.....	7912	A2168	.....	1427	A2346	.....	1688
A1588	.....	8152	A1726	.....	7856	A2170	.....	1420	A2351.5	.....	1767
A1588.1	.....	8156	A1730	.....	7852	A2172	.....	1421	A2352	.....	1765
A1594	.....	8144	A1734	.....	7848	A2184	.....	1432	A2362	.....	1700
A1594.1	.....	8148	A1738	.....	7844	A2184.1	.....	1436	A2379	.....	1720
A1598	.....	8140	A1740	.....	7860	A2187	.....	1440	A2390	.....	1732
A1604	.....	8120	A1742	.....	7864	A2192	.....	1444	A2391	.....	1736
A1604.1	.....	8124	A1744	.....	7868	A2194	.....	1448	A2392	.....	1724
A1606	.....	8128	A1745	.....	7884	A2196	.....	1451	A2394	.....	1728
A1609	.....	8132	A1745.4	.....	7888	A2201	.....	1456	A2397	.....	1744
A1609.1	.....	8136	A1746	.....	7872	A2202	.....	1460	A2398	.....	1740
A1614	.....	8112	A1748	.....	7876	A2203	.....	1464	A2400	.....	1748
A1614.2	.....	8116	A1748.1	.....	7880	A2203.2	.....	1468	A2400.1	.....	1752
A1616	.....	8108	A1752	.....	7892	A2203.4	.....	1472	A2408	.....	1684
A1620	.....	8100	A1752.1	.....	7896	A2203.6	.....	1476	A2410	.....	1756
A1621	.....	8104	A1758	.....	7900	A2204	.....	1484	A2420	.....	1764
A1622	.....	8176	A1760	.....	7832	A2204.15	.....	1488	A2421	.....	1766
A1632	.....	8092	A1762	.....	7836	A2204.2	.....	1492	A2421.45	.....	1771.7
A1638	.....	8080	A1762.1	.....	7840	A2204.62	.....	1500	A2422	.....	1772
A1640	.....	8084	A1768	.....	7824	A2206	.....	1504	A2423	.....	1804
A1641	.....	8088	A1770	.....	7820	A2208	.....	1508	A2425	.....	1788
A1644	.....	8068	A1774	.....	7808	A2213.3	.....	1512.5	A2426	.....	1780
A1644.1	.....	8072	A1774.1	.....	7812	A2213.35	.....	1512.6	A2427.2	.....	1784
A1646	.....	8076	A1780	.....	7816	A2213.5	.....	1513	A2430	.....	1792
A1648	.....	8064	A1782	.....	7804	A2214	.....	1536	A2440	.....	1912
A1649	.....	8054	A1784	.....	7800	A2217.4	.....	1470	A2440.1	.....	1916
A1650	.....	8056	A1786	.....	7796	A2217.42	.....	1471	A2442	.....	1808
A1651	.....	8060	A1790	.....	7792	A2222	.....	1516	A2450	.....	1824

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

Inter.	—	U.S.	Inter.	—	U.S.	Inter.	—	U.S.	Inter.	—	U.S.
A2452	.....	1828	A2667.6	.....	2060	A2860	.....	2332	A3082	.....	2592
A2454	.....	1832	A2667.8	.....	2061	A2864	.....	2344	A3084	.....	2596
A2456	.....	1836	A2669	.....	2064	A2866	.....	2348	A3090	.....	2600
A2460	.....	1840	A2674	.....	2072	A2868	.....	2352	A3100	.....	2604
A2472	.....	1844	A2675	.....	2068	A2872	.....	2356	A3100.1	.....	2608
A2474	.....	1848	A2676	.....	2076	A2874	.....	2360	A3102	.....	2612
A2479	.....	1856	A2681	.....	2084	A2878	.....	2364	A3106	.....	2614
A2481	.....	1864	A2682	.....	2080	A2884	.....	2368	A3108	.....	2616
A2483	.....	1868	A2684	.....	2094	A2885.5	.....	2372	A3126	.....	2626
A2484	.....	1872	A2686	.....	2092	A2887	.....	2374	A3129	.....	2624
A2484.2	.....	1876	A2690	.....	2095	A2888	.....	2376	A3129.5	.....	2628
A2484.4	.....	1880	A2692	.....	2096	A2904	.....	2380	A3142	.....	2620
A2484.6	.....	1882	A2700	.....	2104	A2912	.....	2388	A3212	.....	2633
A2487	.....	1888	A2702	.....	2108	A2915	.....	2390	A3212.1	.....	2634
A2489	.....	1892	A2702.5	.....	2112	A2915.1	.....	2390.1	A3216	.....	2632
A2489.4	.....	1896	A2708	.....	2116	A2915.4	.....	2393	A3220	.....	2636
A2491	.....	1900	A2724	.....	2140	A2915.41	.....	2394	A3222	.....	2640
A2491.5	.....	1901	A2725	.....	2144	A2915.5	.....	2395	A3222.1	.....	2644
A2491.6	.....	1904	A2726	.....	2148	A2915.51	.....	2395.1	A3223	.....	2648
A2496	.....	1909	A2727	.....	2152	A2916	.....	2392	A3223.1	.....	2652
A2496.4	.....	1909.5	A2728	.....	2156	A2916.5	.....	2408	A3226	.....	2656
A2496.6	.....	1910	A2744	.....	2160	A2916.9	.....	2409.1	A3226.1	.....	2660
A2496.8	.....	1910.5	A2744.1	.....	2164	A2917	.....	2409.2	A3228	.....	2664
A2498	.....	1920	A2754	.....	2180	A2917.1	.....	2409	A3228.1	.....	2668
A2499.5	.....	1922	A2760	.....	2184	A2920	.....	2412	A3229	.....	2672
A2501	.....	1924	A2762	.....	2188	A2922	.....	2416	A3230	.....	2676
A2506	.....	1928	A2763	.....	2192	A2934	.....	2420	A3234	.....	2680
A2508	.....	1932	A2764	.....	2196	A2938	.....	2424	A3238	.....	2684
A2515	.....	1946	A2766	.....	2172	A2940	.....	2432	A3240	.....	2688
A2515.1	.....	1946.1	A2766.1	.....	2176	A2941	.....	2436	A3240.1	.....	2692
A2516	.....	1944	A2770	.....	2200	A2942	.....	2428	A3246	.....	2696
A2518	.....	1952	A2770.1	.....	2204	A2945	.....	2444	A3250	.....	2704
A2518.5	.....	1953	A2775	.....	2208	A2947	.....	2448	A3252	.....	2700
A2520	.....	1954	A2775.2	.....	2212	A2949	.....	2452	A3253	.....	2708
A2520.1	.....	1954.1	A2775.5	.....	2216	A2949.1	.....	2456	A3254	.....	2712
A2530.2	.....	1957	A2776	.....	2224	A2951	.....	2460	A3256	.....	2716
A2580	.....	1960	A2778	.....	2226	A2951.5	.....	2464	A3258	.....	2720
A2582	.....	1964	A2780	.....	2228	A2954	.....	2466	A3258.1	.....	2724
A2586	.....	1968	A2784	.....	2232	A2956	.....	2468	A3264	.....	2728
A2588	.....	1980	A2785	.....	2236	A2960	.....	2472	A3274	.....	2736
A2590	.....	1972	A2802	.....	2248	A2962	.....	2480	A3280	.....	2740
A2592	.....	1976	A2804	.....	2244	A2964	.....	2488	A3282	.....	2752
A2596	.....	1992	A2810	.....	2252	A2968	.....	2489	A3282.1	.....	2756
A2598	.....	1988	A2812	.....	2256	A2978	.....	2492	A3284	.....	2744
A2599	.....	1984	A2814	.....	2260	A3018	.....	2396	A3286	.....	2748
A2616	.....	2000	A2816	.....	2262	A3026	.....	2508	A3291	.....	2760
A2616.1	.....	2004	A2816.5	.....	2263	A3028	.....	2496	A3304	.....	2776
A2620	.....	2008	A2818	.....	2264	A3030	.....	2504	A3308	.....	2784
A2620.1	.....	2012	A2819	.....	2268	A3032	.....	2500	A3312	.....	2788
A2626	.....	2020	A2820	.....	2272	A3036	.....	2512	A3312.2	.....	2792
A2626.5	.....	2016	A2822	.....	2284	A3048	.....	2548	A3314	.....	2796
A2627	.....	2024	A2822.1	.....	2288	A3049	.....	2544	A3316	.....	2800
A2627.1	.....	2028	A2823	.....	2280	A3050	.....	2532	A3316.1	.....	2804
A2634	.....	2029	A2824	.....	2276	A3052	.....	2536	A3332	.....	2808
A2636	.....	2030	A2834	.....	2292	A3054	.....	2540	A3348	.....	2812
A2636.2	.....	2031	A2836	.....	2296	A3060	.....	2552	A3350	.....	2816
A2644	.....	2032	A2840	.....	2300	A3064	.....	2556	A3350.1	.....	2820
A2657	.....	2044	A2840.1	.....	2304	A3066	.....	2560	A3364	.....	2824
A2663	.....	2056	A2841	.....	2308	A3068	.....	2564	A3368	.....	2828
A2664	.....	2052	A2846	.....	2312	A3070	.....	2568	A3368.1	.....	2832
A2664.85	.....	2055	A2846.1	.....	2316	A3070.1	.....	2572	A3391	.....	2836
A2666	.....	2057	A2850	.....	2320	A3073	.....	2576	A3392	.....	2848
A2667	.....	2058	A2852	.....	2324	A3073.2	.....	2580	A3394	.....	2840
A2667.2		2059	A2856		2336	A3078		2588	A3394.1		2844
A2667.4		2062	A2856.1		2340	A3080		2584	A3408		2856

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Inter.	—	U.S.	Inter.	—	U.S.	Inter.	—	U.S.	Inter.	—	U.S.
A3414		2860	A3610.8		3116	A3782		3356	A3828		3524
A3416	.....	2864	A3610.9	.....	3120	A3783	.....	3364	A3829	.....	3526
A3418	.....	2868	A3610.92	.....	3124	A3783.4	.....	3368	A3830	.....	3528
A3418.1	.....	2872	A3610.94	.....	3128	A3784	.....	3372	A3830.4	.....	3530.3
A3424	.....	2876	A3610.96	.....	3132	A3786	.....	3376	A3830.5	.....	3530.5
A3426	.....	2880	A3611	.....	3136	A3787	.....	3377	A3830.8	.....	3530
A3428	.....	2884	A3611.2	.....	3140	A3787.1	.....	3378	A3830.85	.....	3530.1
A3434	.....	2896	A3612	.....	3144	A3787.2	.....	3380	A3832	.....	3540
A3436	.....	2892	A3612.5	.....	3146	A3787.4	.....	3384	A3834	.....	3542
A3440	.....	2900	A3614	.....	3160	A3787.7	.....	3388	A3838	.....	3544
A3442	.....	2908	A3615	.....	3148	A3788	.....	3392	A3840	.....	3548
A3444	.....	2912	A3616	.....	3152	A3789	.....	3394	A3844	.....	3552
A3446	.....	2916	A3616.1	.....	3156	A3790	.....	3396	A3844.5	.....	3553
A3447.7	.....	2922	A3626	.....	3164	A3792	.....	3400	A3844.9	.....	3554.5
A3448	.....	2920	A3632	.....	3168	A3793	.....	3402	A3845	.....	3554
A3449	.....	2924	A3635	.....	3172	A3793.5	.....	3403	A3845.5	.....	3555
A3454	.....	2928	A3636	.....	3176	A3794	.....	3404	A3847	.....	3556
A3457	.....	2932	A3640	.....	3180	A3795	.....	3405	A3850	.....	3560
A3460	.....	2936	A3640.1	.....	3184	A3795.5	.....	3406	A3854.7	.....	3561
A3490	.....	2940	A3641	.....	3188	A3795.6	.....	3406.5	A3858	.....	3564
A3492	.....	2944	A3642	.....	3192	A3795.7	.....	3407	A3860	.....	3562
A3492.2	.....	2948	A3644	.....	3196	A3796	.....	3408	A3868	.....	3568
A3493	.....	2952	A3644.1	.....	3200	A3802	.....	3412	A3869	.....	3574
A3493.2	.....	2956	A3650	.....	3204	A3803.8	.....	3413	A3870	.....	3572
A3493.3	.....	2960	A3654	.....	3220	A3804	.....	3416	A3874	.....	3580
A3498.2	.....	2968	A3656	.....	3212	A3804.2	.....	3417	A3880	.....	3576
A3498.4	.....	2972	A3656.1	.....	3216	A3805	.....	3418	A3880.6	.....	3584
A3499	.....	2976	A3662	.....	3208	A3807	.....	3420	A3881	.....	3585
A3499.2	.....	2980	A3676	.....	3228	A3810	.....	3424	A3881.3	.....	3588
A3503	.....	2982	A3680	.....	3232	A3811	.....	3426	A3881.4	.....	3592
A3506	.....	2984	A3684	.....	3236	A3812	.....	3428	A3881.5	.....	3596
A3508	.....	2985	A3685	.....	3240	A3812.5	.....	3429	A3881.7	.....	3598
A3521	.....	2992	A3688	.....	3244	A3813	.....	3430	A3882	.....	3600
A3522	.....	2988	A3688.5	.....	3246	A3813.5	.....	3431	A3882.7	.....	3602
A3524	.....	2996	A3693	.....	3248	A3814	.....	3432	A3883	.....	3604
A3527	.....	3002	A3694	.....	3252	A3815	.....	3436	A3883.2	.....	3606
A3528	.....	3000	A3700	.....	3224	A3815.3	.....	3437	A3883.7	.....	3608
A3534	.....	3004	A3706	.....	3268	A3815.6	.....	3438	A3885	.....	3616
A3534.1	.....	3008	A3708	.....	3264	A3816	.....	3440	A3885.5	.....	3620
A3544	.....	3012	A3715	.....	3270	A3817	.....	3444	A3886	.....	3612
A3558	.....	3016	A3716	.....	3272	A3817.5	.....	3448	A3886.2	.....	3612.5
A3562	.....	3020	A3718	.....	3276	A3818	.....	3452	A3887	.....	3624
A3565	.....	3028	A3722	.....	3280	A3819	.....	3456	A3887.5	.....	3626
A3566	.....	3076	A3724	.....	3284	A3820	.....	3460	A3888	.....	3628
A3566.4	.....	3080	A3728	.....	3288	A3820.5	.....	3464	A3888.2	.....	3632
A3568	.....	3032	A3729	.....	3254	A3821	.....	3468	A3888.3	.....	3636
A3570	.....	3036	A3734	.....	3290	A3822	.....	3476	A3900	.....	3640
A3574	.....	3040	A3736	.....	3292	A3822.1	.....	3480	A3902	.....	3644
A3580	.....	3052	A3737.2	.....	3296	A3822.29	.....	3488	A3903	.....	3648
A3582	.....	3056	A3737.4	.....	3300	A3822.3	.....	3484	A3904	.....	3660
A3582.1	.....	3060	A3738	.....	3304	A3822.31	.....	3492	A3905	.....	3668
A3583	.....	3068	A3740	.....	3308	A3822.5	.....	3472	A3905.3	.....	3664
A3583.5	.....	3066	A3750	.....	3312	A3822.6	.....	3504	A3905.35	.....	3678
A3584	.....	3064	A3753	.....	3314	A3822.61	.....	3505	A3905.4	.....	3672
A3586	.....	3072	A3756	.....	3316	A3822.8	.....	3512	A3905.6	.....	3676
A3590	.....	3048	A3766	.....	3320	A3823	.....	3508	A3905.8	.....	3680
A3600	.....	3084	A3767	.....	3322	A3823.2	.....	3496	A3906	.....	3684
A3602	.....	3088	A3772	.....	3324	A3823.3	.....	3497	A3906.2	.....	3688
A3604	.....	3092	A3774	.....	3326	A3823.32	.....	3498	A3906.4	.....	3692
A3606	.....	3096	A3776	.....	3340	A3823.34	.....	3499	A3906.6	.....	3696
A3608	.....	3024	A3776.5	.....	3342	A3823.6	.....	3516	A3907	.....	3700
A3610	.....	3100	A3778	.....	3344	A3823.64	.....	3501	A3908	.....	3720
A3610.2	.....	3104	A3779	.....	3348	A3823.7	.....	3502	A3910	.....	3724
A3610.4		3108	A3780		3352	A3823.8		3503	A3910.2		3725
A3610.6		3112	A3781		3360	A3824		3520	A3911		3710

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Inter.	—	U.S.	Inter.	—	U.S.	Inter.	—	U.S.	Inter.	—	U.S.
A3912		3708	A4028		3912	A4202		4144	A4361		4354
A3912.5		3712	A4030		3914	A4202.1		4148	A4362		4356
A3916		3704	A4032		3916	A4205		4150	A4368		4360
A3920		3735	A4036		3920	A4206		4151	A4370		4364
A3925		3744	A4038		3922	A4208		4152	A4374		4372
A3926		3748	A4044		3956	A4212		4156	A4374.2		4376
A3927		3772	A4047		3958	A4214		4160	A4392		4392
A3927.5		3774	A4047.1		3959	A4218		4164	A4392.4		4393
A3928		3756	A4050		3960	A4226		4168	A4395		4394
A3928.2		3760	A4052		3968	A4230		4172	A4398		4380
A3928.4		3762	A4056		3964	A4230.6		4176	A4400		4384
A3930		3764	A4058		3972	A4232		4180	A4400.2		4388
A3930.2		3768	A4060		3976	A4236		4208	A4404		4404
A3934		3816	A4064		3980	A4237		4212	A4405		4396
A3938		3812	A4068		3984	A4238		4216	A4405.4		4397
A3940		3808	A4069		3986	A4240		4220	A4406		4400
A3942		3804	A4074		3988	A4242		4224	A4408		4403
A3944		3800	A4076		3992	A4248		4228	A4409		4424
A3946		3796	A4080		4012	A4252		4240	A4410.3		4429
A3948		3792	A4082		4016	A4254		4236	A4410.32		4430
A3952		3788	A4084		4020	A4256		4232	A4411		4428
A3956		3790	A4087		4024	A4259		4182	A4411.4		4440
A3960		3780	A4092		4004	A4260		4184	A4411.6		4441
A3968		3820	A4093		4005	A4262		4188	A4411.61		4441.1
A3972		3824	A4093.1		4005.5	A4263		4192	A4411.8		4442
A3976		3828	A4096		3996	A4264		4196	A4412		4444
A3977		3836	A4098		4000	A4265		4200	A4412.1		4444.1
A3978		3832	A4102		4008	A4266.4		4204	A4412.7		4436
A3979		3840	A4107		4028	A4268		4206	A4412.71		4436.1
A3980		3844	A4109		4030	A4272		4244	A4412.8		4432
A3981		3848	A4112		4032	A4274		4248	A4413.6		4448
A3984		3860	A4122		4036	A4276		4252	A4413.7		4452
A3986		3864	A4124		4040	A4279		4256	A4413.72		4456
A3990		3868	A4125		4042	A4279.1		4260	A4414		4416
A3992		3872	A4125.3		4043	A4282		4268	A4416		4412
A3993		3876	A4125.31		4043.1	A4284		4264	A4417		4408
A3994.25		3881	A4126		4044	A4290		4272	A4420		4464
A3995		3882	A4127		4048	A4291		4273	A4421		4466
A3995.6		3884	A4127.1		4052	A4293		4274	A4421.2		4472
A3995.8		3885	A4132		4080	A4296		4276	A4422		4475
A3996		3888	A4132.4		4082	A4297		4280	A4422.1		4476
A3996.4		3892	A4133		4084	A4297.5		4282	A4422.5		4508
A3996.6		3894	A4140		4092	A4298		4284	A4423		4492
A3997		3896	A4150		4093	A4299		4288	A4423.5		4490
A3998		3897	A4150.2		4094	A4304		4296	A4425		4518
A3999.2		3898	A4151		4095	A4308		4300	A4425.5		4504
A3999.21		3898.1	A4160		4076	A4310		4304	A4426		4519
A3999.5		3899	A4164		4060	A4314		4308	A4426.5		4524
A4000		3904	A4165		4064	A4326		4316	A4427.4		4528
A4000.1		3908	A4170		4072	A4330		4320	A4427.45		4530
A4004		3900	A4172		4068	A4332		4328	A4427.5		4532
A4008		3924	A4174		4056	A4336		4324	A4427.6		4536
A4009.5		3932	A4174.5		4058	A4344		4332	A4427.9		4542
A4010		3928	A4175.4		4096	A4346		4336	A4428.6		4544
A4011.5		3933	A4176		4100	A4346.5		4338	A4428.7		4548
A4011.51		3934	A4178		4104	A4348		4340	A4428.8		4549
A4011.7		3935	A4179		4105	A4350		4344	A4438		4552
A4012		3936	A4180		4108	A4352		4348	A4440		4556
A4012.5		3937	A4182		4116	A4355		4348.2	A4442		4564
A4014		3940	A4183		4112	A4355.2		4348.4	A4442.1		4568
A4019		3944	A4186		4120	A4358		4348.6	A4444		4560
A4019.1		3948	A4190		4128	A4358.2		4348.8	A4458		4572
A4020		3952	A4192		4132	A4359		4349	A4470		4580
A4020.3		3954	A4196		4136	A4359.2		4350	A4472		4584
A4020.5		3955	A4200		4140	A4360		4352	A4476		4588

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Inter.	—	U.S.	Inter.	—	U.S.	Inter.	—	U.S.	Inter.	—	U.S.
A4478		4592	A4633.99		4827	A4852.1		5100	A5116.05		5384.1
A4484	.....	4596	A4634	.....	4828	A4860	.....	5124	A5117	.....	5385
A4486	.....	4600	A4640	.....	4832	A4862	.....	5116	A5117.1	.....	5385.1
A4488	.....	4604	A4652	.....	4836	A4862.1	.....	5120	A5118	.....	5388
A4490	.....	4608	A4670	.....	4844	A4863	.....	5132	A5119	.....	5392
A4494	.....	4612	A4671	.....	4848	A4863.3	.....	5136	A5120	.....	5395
A4496	.....	4616	A4672	.....	4852	A4864	.....	5128	A5121	.....	5394
A4498	.....	4620	A4672.6	.....	4856	A4876	.....	5144	A5125	.....	5396
A4500	.....	4624	A4676	.....	4860	A4876.1	.....	5148	A5126	.....	5400
A4501	.....	4628	A4677	.....	4861	A4892	.....	5152	A5132	.....	5408, 5412
A4504	.....	4636	A4688	.....	4864	A4892.1	.....	5156	A5138	.....	5416
A4506	.....	4640	A4692	.....	4868	A4893	.....	5160	A5140	.....	5420
A4508	.....	4648	A4692.1	.....	4872	A4896	.....	5172	A5146	.....	5428
A4510	.....	4644	A4698	.....	4880	A4900	.....	5168	A5155	.....	5440
A4511	.....	4652	A4700	.....	4884	A4902	.....	5164	A5156.5	.....	5444
A4511.2	.....	4654	A4702	.....	4888	A4918	.....	5176	A5157	.....	5448
A4512	.....	4656	A4710	.....	4892	A4920	.....	5180	A5157.1	.....	5452
A4513	.....	4660	A4720	.....	4896	A4922	.....	5184	A5157.2	.....	5456
A4515	.....	4668	A4722	.....	4900	A4927.6	.....	5192	A5160	.....	5464
A4516	.....	4672	A4728.8	.....	4912	A4940	.....	5200	A5164.4	.....	5465
A4518	.....	4676	A4729	.....	4916	A4942.5	.....	5208	A5164.5	.....	5466
A4519	.....	4680	A4730	.....	4928	A4944	.....	5212	A5166	.....	5468
A4520	.....	4684	A4732	.....	4932	A4952	.....	5213	A5168	.....	5472
A4521	.....	4688	A4734	.....	4924	A4952.2	.....	5214	A5174	.....	5476
A4526	.....	4692	A4740	.....	4936	A4952.4	.....	5215	A5174.5	.....	5478
A4527	.....	4693	A4740.1	.....	4940	A4952.5	.....	5215.2	A5178	.....	5484
A4527.2	.....	4694	A4744	.....	4944	A4952.6	.....	5215.4	A5181	.....	5492
A4527.4	.....	4695	A4745	.....	4952	A4954	.....	5216	A5182	.....	5496
A4527.6	.....	4696	A4748	.....	4956	A4956	.....	5220	A5184	.....	5500
A4532	.....	4700	A4752	.....	4960	A4958	.....	5224	A5186	.....	5504
A4536	.....	4708	A4754	.....	4968	A4972	.....	5232	A5198	.....	5512
A4538	.....	4704	A4756	.....	4964	A4974	.....	5236	A5204	.....	5520
A4544	.....	4720	A4760	.....	4972	A4974.5	.....	5238	A5205	.....	5522
A4546	.....	4716	A4760.5	.....	4980	A4975	.....	5240	A5210	.....	5528
A4548	.....	4724	A4761	.....	4976	A4977	.....	5244	A5212	.....	5532
A4548.1	.....	4728	A4762	.....	4984	A4978	.....	5248	A5213	.....	5536
A4554	.....	4732	A4764	.....	4988	A4978.2	.....	5252	A5214	.....	5540
A4555	.....	4734	A4770	.....	4992	A4979	.....	5256	A5220	.....	5544
A4558	.....	4740	A4771	.....	4996	A4979.2	.....	5260	A5234	.....	5548
A4562	.....	4744	A4772	.....	5000	A4980.7	.....	5273	A5238	.....	5552
A4566	.....	4764	A4773	.....	5008	A4981	.....	5276	A5246	.....	5556
A4568	.....	4760	A4773.1	.....	5012	A4983	.....	5278	A5254	.....	5560
A4574	.....	4752	A4774	.....	5004	A4985	.....	5280	A5256	.....	5564
A4574.1	.....	4756	A4776	.....	5020	A4990	.....	5296	A5257	.....	5566
A4580	.....	4772	A4780	.....	5016	A4994	.....	5300	A5257.2	.....	5566.5
A4582	.....	4768	A4782	.....	5024	A4996	.....	5308	A5258	.....	5568
A4586	.....	4780	A4784	.....	5028	A4998	.....	5304	A5258.5	.....	5569
A4588	.....	4776	A4785	.....	5032	A500	.....	560	A5258.6	.....	5569.1
A4588.4	.....	4778	A4786	.....	5036	A5020	.....	5324	A5259	.....	5570
A4592	.....	4784	A4796	.....	5040	A5024	.....	5320	A5262	.....	5572
A4594	.....	4786	A4798	.....	5044	A5026	.....	5328	A5264	.....	5576
A4598	.....	4788	A4799	.....	5048	A5060	.....	5340	A5266	.....	5580
A4604	.....	4796	A4820	.....	5052	A5063	.....	5336	A5266.1	.....	5584
A4606	.....	4800	A4821	.....	5054	A5091	.....	5344	A5270	.....	5588
A4607	.....	4804	A4822	.....	5064	A5091.1	.....	5346	A5274	.....	5592
A4607.1	.....	4808	A4822.1	.....	5068	A5092	.....	5348	A5276	.....	5596
A4608	.....	4812	A4823	.....	5056	A5092.1	.....	5350	A5278	.....	5600
A4610	.....	4816	A4824	.....	5072	A5093	.....	5352	A5282	.....	5604
A4620	.....	4818	A4824.1	.....	5076	A5093.1	.....	5354	A5284	.....	5608
A4620.1	.....	4818.1	A4825	.....	5080	A5102	.....	5356	A5285	.....	5612
A4622	.....	4820	A4825.1	.....	5084	A5102.1	.....	5360	A5286	.....	5616
A4624	.....	4822	A4833.2	.....	5088	A5104	.....	5364	A5286.1	.....	5624
A4624.1	.....	4823	A4840	.....	5060	A5104.1	.....	5368	A5286.2	.....	5628
A4624.2	.....	4823.5	A4847	.....	5112	A5115	.....	5380	A5286.3	.....	5620
A4630	.....	4824	A4852	.....	5096	A5116	.....	5384	A5287	.....	5632

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

Inter.	—	U.S.	Inter.	—	U.S.	Inter.	—	U.S.	Inter.	—	U.S.
A5287.1		5636	A5418		5848	A5570		6172	A5782		6440
A5291		5640	A5420		5852	A5572		6176	A5798		6460
A5292		5644	A5426		5860	A5572.1		6180	A5800		6464
A5292.39		5648	A5428		5864	A5573		6188	A5801		6468
A5292.4		5652	A5430		5900	A5582		6168	A5802		6472
A5292.41		5656	A5440		5876	A5584		6196	A5806		6476
A5294.9		5660	A5440.3		5880	A5584.2		6200	A5808		6484
A5295		5664	A5454		5904	A5586		6204	A5810		6488
A5295.1		5668	A5460		5908	A5586.4		6204.5	A5812		6492
A5306		5684	A5462		5912	A5588		6209	A5814		6496
A5307		5672	A5467.9		5921	A5590		6208	A5814.1		6500
A5307.1		5676	A5468		5920	A5592		6212	A5818		6504
A5308		5680	A5470		5928	A5593		6216	A5820		6508
A5310.2		5692	A5470.2		5932	A5594		6220	A5822		6512
A5311		5704	A5472.5		5944	A5596		6224	A5826		6516
A5311.1		5708	A5473		5948	A5600		6228	A5828		6520
A5311.2		5696	A5474		5952	A5610		6232	A5830		6524
A5311.21		5700	A5474.2		5956	A5610.1		6236	A5836		6532
A5316		5712	A5475		5960	A5612		6240	A5837		6536
A5316.1		5716	A5475.2		5964	A5615		6242	A5838		6540
A5317		5720	A5478		5972	A5616		6244	A5842		6544
A5317.2		5724	A5480		6156	A5618		6248	A5845		6556
A5319.5		5725	A5480.5		6158	A5622		6252	A5847		6560
A5319.6		5726	A5482		6148	A5630		6256	A5848		6564
A5322		5728	A5484		6144	A5631		6268	A5849		6568
A5328		5732	A5486		6140	A5634		6260	A5850		6572
A5336		5736	A5489		5996	A5636		6264	A5854		6576
A5338		5740	A5489.1		6000	A5638		6272	A5856		6580
A5342		5744	A5490		6010	A5642		6276	A5858		6584
A5356		5748	A5490.1		6010.1	A5644		6280	A5861		6588
A5357		5752	A5490.2		6012	A5654		6284	A5865		6592
A5358		5756	A5490.4		6016	A5658		6288	A5868		6596
A5360		5760	A5490.6		6020	A5658.1		6292	A5872		6600
A5364		5764	A5490.61		6020.1	A5658.5		6294	A5874		6604
A5366		5768	A5492		6024	A5665		6296	A5876		6608
A5367		5772	A5492.21		6032	A5666		6300	A5877		6612
A5367.1		5776	A5494		6036	A5670		6304	A5878		6616
A5369		5780	A5494.1		6040	A5702		6308	A5882		6620
A5370		5769	A5497		6044	A5703		6312	A5884		6628
A5370.2		5770	A5501		6052	A5704		6316	A5886		6632
A5373		5794	A5501.1		6056	A5704.1		6320	A5886.4		6626
A5374		5784	A5504		6060	A5705		6324	A5887.9		6625
A5376		5788	A5505		6062	A5707		6328	A5888		6624
A5377		5792	A5505.1		6062.1	A5708		6332	A5889		6622
A5381		5797	A5507		6064	A5709		6336	A5891.2		6644
A5389		5805	A5508		6068	A5710		6340	A5892		6636
A5390		5806	A5511		6072	A5712		6344	A5894		6648
A5391		5800	A5512		6076	A5718		6356	A5898		6652
A5391.1		5804	A5513		6080	A5722		6360	A590.110		685
A5394		5807	A5514		6084	A5722.1		6364	A5900		6656
A5395		5808	A5515		6088	A5728		6368	A5900.3		6657
A5395.2		5808.1	A5516		6092	A5728.1		6372	A5900.5		6658
A5395.3		5808.2	A5518		6100	A5729		6384	A5902		6660
A5395.4		5808.3	A5519		6108	A5729.1		6388	A5904		6664
A5395.6		5808.4	A5520		6104	A5732		6376	A5906		6668
A5395.8		5808.5	A5521		6116	A5736		6380	A5908		6672
A5402		5812	A5522		6112	A5748		6392	A5909		6673
A5406		5816	A5523		6120	A5749		6396	A5910.5		6682
A5406.6		5820	A5525		6128	A5757		6406	A5911		6684
A5407		5824	A5526		6132	A5758		6404	A5912		6692
A5410		5832	A5535		5984	A5763		6417	A5920		6696
A5411		5856	A5536		5988	A5764		6420	A5920.4		6700
A5412		5836	A5536.1		5992	A5774		6428	A5928		6704
A5413		5844	A5541		5994	A5776		6432	A5932		6708
A5414		5840	A5566		6164	A5778		6436	A5934		6712

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

Inter.	—	U.S.	Inter.	—	U.S.	Inter.	—	U.S.	Inter.	—	U.S.
A5938	.....	6714	A6033.4	.....	6988	A6176	.....	7252	A6301	.....	7494
A5944	.....	6720	A6034	.....	6996	A6180	.....	7256	A6302	.....	7456
A5946	.....	6724	A6035	.....	6992	A6186	.....	7260	A6304	.....	7460
A5946.1	.....	6728	A6037	.....	7008	A6190	.....	7264	A6304.5	.....	7462
A5948	.....	6732	A6037.2	.....	7012	A6196	.....	7268	A6305	.....	7464
A5949	.....	6736	A6042	.....	7016	A6198.5	.....	7272	A6305.1	.....	7468
A5952	.....	6740	A6043	.....	7017	A6198.51	.....	7276	A6308	.....	7504
A5953	.....	6752	A6043.2	.....	7018	A6200	.....	7280	A6317	.....	7508
A5958	.....	6756	A6044	.....	7020	A6203	.....	7284	A6318	.....	7512
A5962	.....	6760	A6060	.....	7028	A6203.5	.....	7285	A6320	.....	7516
A5962.4	.....	6764	A6062	.....	7032	A6203.51	.....	7285.1	A6322	.....	7524
A5963.3	.....	6768	A6064	.....	7036	A6204	.....	7288	A6332	.....	7500
A5966	.....	6772	A6065	.....	7038	A6204.2	.....	7288.4	A6334	.....	7496
A5970	.....	6776	A6071	.....	7040	A6204.21	.....	7288.8	A6338	.....	7528
A5973	.....	6784	A6072	.....	7044	A6204.4	.....	7289	A6340	.....	7532
A5974	.....	6788	A6073	.....	7056	A6206	.....	7292	A6340.5	.....	7533
A5976	.....	6792	A6074	.....	7064	A6208	.....	7296	A6340.51	.....	7534
A5980	.....	6794	A6074.1	.....	7068	A6211.2	.....	7298	A6342	.....	7536
A5986	.....	6804	A6075	.....	7072	A6213.6	.....	7300	A6343	.....	7540
A5986.4	.....	6808	A6076	.....	7060	A6213.8	.....	7304	A6344.6	.....	7544
A5987	.....	6800	A6076.5	.....	7062	A6214	.....	7308	A6344.61	.....	7548
A5987.5	.....	6801	A6084	.....	7076	A6214.2	.....	7312	A6345	.....	7552
A5988	.....	6796	A6088	.....	7080	A6214.4	.....	7316	A6346	.....	7556
A5992	.....	6812	A6092	.....	7084	A6214.6	.....	7320	A6347	.....	7560
A5993	.....	6816	A6094	.....	7088	A6214.8	.....	7324	A6347.1	.....	7564
A6000	.....	6820	A6096	.....	7092	A6214.9	.....	7297	A6347.4	.....	7568
A6002	.....	6824	A6098	.....	7096	A6214.91	.....	7297.1	A6347.6	.....	7572
A6003	.....	6828	A6102	.....	7100	A6214.95	.....	7297.5	A6348	.....	7576
A6004	.....	6832	A6102.5	.....	7104	A6214.96	.....	7297.51	A6350	.....	7580
A6005	.....	6836	A6104	.....	7108	A6215	.....	7328	A6392	.....	7584
A6006	.....	6840	A6105	.....	7112	A6216	.....	7332	A6394	.....	7588
A6007	.....	6844	A6106	.....	7116	A6222	.....	7336	A6396	.....	7592
A6008	.....	6848	A6107	.....	7120	A6224	.....	7340	A6406	.....	7596
A6009	.....	6852	A6108	.....	7124	A6228	.....	7352	A6408	.....	7600
A6011	.....	6856	A6110	.....	7128	A6232	.....	7360	A6410	.....	7604
A6012	.....	6860	A6112	.....	7132	A6236	.....	7364	A6416	.....	7612
A6014	.....	6868	A6114	.....	7140	A6244	.....	7368	A6417	.....	7616
A6014.5	.....	6870	A6116	.....	7144	A6244.1	.....	7372	A6417.1	.....	7620
A6014.7	.....	6872	A6117	.....	7148	A6257	.....	7362	A6417.5	.....	7622
A6015	.....	6874	A6120	.....	7156	A6260	.....	7376	A6422	.....	7624
A6017	.....	6888	A6122	.....	7160	A6265	.....	7378	A6426	.....	7628
A6019	.....	6892	A6124	.....	7152	A6266	.....	7380	A6426.1	.....	7632
A6019.3	.....	6896	A6127	.....	7168	A6268	.....	7384	A6430	.....	7636
A6019.6	.....	6900	A6128	.....	7172	A6270	.....	7388	A6432	.....	7680
A6019.8	.....	6904	A6130	.....	7164	A6272	.....	7392	A6434	.....	7640
A6020	.....	6908	A6130.2	.....	7188	A6272.5	.....	7396	A6436	.....	7644
A6020.3	.....	6912	A6130.3	.....	7192	A6273.3	.....	7400	A6438	.....	7648
A6020.6	.....	6916	A6130.5	.....	7193	A6273.8	.....	7402	A6438.5	.....	7650
A6021	.....	6920	A6130.6	.....	7193.2	A6274	.....	7404	A6439	.....	7652
A6021.3	.....	6924	A6130.8	.....	7193.4	A6276	.....	7416	A6439.1	.....	7656
A6021.6	.....	6928	A6132	.....	7176	A6277.5	.....	7424	A6440	.....	7658
A6021.8	.....	6932	A6134.5	.....	7180	A6278	.....	7428	A6441	.....	7659
A6022	.....	6936	A6136	.....	7196	A6279	.....	7408	A6442	.....	7660
A6022.1	.....	6940	A6138	.....	7200	A6279.1	.....	7412	A6445	.....	7672
A6022.12	.....	6944	A6140	.....	7208	A6280	.....	7432	A6445.2	.....	7676
A6022.2	.....	6948	A6142	.....	7204	A6282	.....	7436	A6445.7	.....	7678
A6022.4	.....	6952	A6152	.....	7216	A6284	.....	7440	A6448	.....	7684
A6022.6	.....	6960	A6154	.....	7220	A6288	.....	7444	A6450	.....	7688
A6023	.....	6956	A6158	.....	7224	A6290	.....	7448	A7562.5	.....	1769
A6024	.....	6964	A6162	.....	7228	A6292	.....	7452	A7581.85	.....	9979
A6025	.....	6968	A6163	.....	7232	A6296	.....	7472	A7682	.....	10013
A6028	.....	6972	A6164	.....	7236	A6298	.....	7480	A7682.5	.....	10013.1
A6031	.....	6984	A6168	.....	7240	A6299	.....	7484	A7697	.....	10013.9
A6033	.....	7000	A6172	.....	7244	A6299.1	.....	7488	A7784	.....	10717.1
A6033.1	.....	7004	A6174	.....	7248	A6300	.....	7492	A8235	.....	3074

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

Inter.	—	U.S.	Inter.	—	U.S.	Inter.	—	U.S.	Inter.	—	U.S.
B0074	.....	9008	B0219	.....	9224	B0392.1	.....	9544	B0849	.....	9876
B0075	.....	9016	B0233	.....	9232	B0408	.....	9584	B0852	.....	9944
B0076	.....	9012	B0233.1	.....	9236	B0500	.....	9576	B0852.1	.....	9948
B0092	.....	9020	B0233.4	.....	9240	B0506	.....	9588	B0856	.....	9880
B0094	.....	9022	B0233.41	.....	9244	B0514	.....	9592	B0858	.....	9884
B0096	.....	9024	B0236	.....	9248	B0515	.....	9596	B0859	.....	9952
B0098	.....	9028	B0236.1	.....	9252	B0518	.....	9600	B0864	.....	9900
B0102	.....	9032	B0244	.....	9280	B0536	.....	9624	B0864.1	.....	9904
B0102.1	.....	9036	B0245	.....	9272	B0540	.....	9628	B0864.5	.....	9908
B0103.24	.....	9040	B0246	.....	9276	B0542	.....	9632	B0865	.....	9912
B0112	.....	9044	B0250	.....	9256	B0630	.....	9636	B0867	.....	9924
B0113	.....	9056	B0250.1	.....	9260	B0633	.....	9640	B0867.2	.....	9931
B0113.1	.....	9060	B0251	.....	9264	B0634	.....	9648	B0867.3	.....	9930
B0113.4	.....	9052	B0252	.....	9268	B0635	.....	9644	B0867.5	.....	9928
B0114	.....	9048	B0256	.....	9284	B0636	.....	9652	B0870	.....	9936
B0116	.....	9064	B0258	.....	9288	B0637	.....	9656	B0876	.....	9950
B0119	.....	9067	B0262	.....	9292	B0637.1	.....	9660	B0876.2	.....	9951
B0119.8	.....	9067.5	B0262.1	.....	9296	B0638	.....	9664	B0881	.....	9956
B0122	.....	9076	B0268	.....	9300	B0638.1	.....	9668	B0886	.....	9960
B0123	.....	9074	B0282	.....	9320	B0642	.....	9672	B0889	.....	9964
B0123.2	.....	9073	B0282.1	.....	9324	B0642.1	.....	9676	B0890	.....	9977
B0124	.....	9068	B0286	.....	9328	B0646	.....	9684	B0894	.....	9968
B0124.1	.....	9072	B0286.1	.....	9328.5	B0646.1	.....	9688	B0896	.....	9972
B0124.16	.....	9075	B0288	.....	9329	B0647	.....	9692	B0898	.....	9976
B0124.17	.....	9075.1	B0296	.....	9348	B0647.7	.....	9702	B0904	.....	9980
B0124.18	.....	9075.5	B0298	.....	9352	B0647.701	.....	9703	B0904.5	.....	9982
B0124.19	.....	9075.51	B0299	.....	9356	B0648	.....	9696	B0908	.....	9984
B0124.3	.....	9075.6	B0300	.....	9360	B0648.31	.....	9701	B0912	.....	9992
B0124.5	.....	9075.7	B0300.1	.....	9364	B0662	.....	9704	B0920	.....	9996
B0124.51	.....	9075.72	B0306	.....	9368	B0662.1	.....	9708	B0924	.....	10000
B0125	.....	9096	B0306.1	.....	9372	B0670	.....	9720	B0926	.....	10004
B0125.1	.....	9100	B0315	.....	9384	B0670.2	.....	9716	B0938	.....	10008
B0128	.....	9088	B0318	.....	9388	B0673	.....	9724	B0970	.....	10032
B0128.1	.....	9092	B0319.9	.....	9392	B0673.1	.....	9728	B0972	.....	10036
B0145	.....	9000	B0320	.....	9396	B0711.4	.....	9732	B0976	.....	10040
B0147	.....	9002	B0320.1	.....	9400	B0712	.....	9736	B0980.5	.....	10030
B0157	.....	9110	B0330	.....	9404	B0712.1	.....	9740	B0983	.....	10048
B0166	.....	9116	B0336	.....	9408	B0750	.....	9748	B0987	.....	10043
B0166.1	.....	9120	B0338	.....	9412	B0751	.....	9752	B0987.2	.....	10042
B0173.9	.....	9140	B0346	.....	9420	B0751.1	.....	9756	B0987.4	.....	10044
B0174	.....	9144	B0346.1	.....	9422	B0751.4	.....	9772	B0989	.....	10045
B0174.1	.....	9152	B0346.11	.....	9422.1	B0751.6	.....	9768	B1010	.....	10052
B0176	.....	9148	B0346.12	.....	9424	B0752	.....	9776	B1012	.....	10056
B0184	.....	9156	B0346.2	.....	9426	B0753	.....	9780	B1046	.....	10054
B0184.1	.....	9160	B0355	.....	9448	B0753.1	.....	9760	B1051	.....	10014
B0188	.....	9164	B0356	.....	9456	B0753.11	.....	9764	B1052	.....	10060
B0192	.....	9172	B0356.1	.....	9460	B0755	.....	9782	B1054	.....	10072
B0192.1	.....	9176	B0358	.....	9452	B0760	.....	9784	B1074	.....	10092
B0200	.....	9168	B0364	.....	9464	B0766	.....	9792	B1074.1	.....	10096
B0202	.....	9180	B0368	.....	9472	B0766.1	.....	9796	B1078	.....	10100
B0202.2	.....	9184	B0368.1	.....	9476	B0767	.....	9808	B1080	.....	10104
B0203	.....	9188	B0372	.....	9484	B0768	.....	9800	B1082	.....	10108
B0204	.....	9192	B0372.1	.....	9488	B0769	.....	9804	B1082.1	.....	10112
B0205	.....	9196	B0376	.....	9492	B0770	.....	9812	B1084	.....	10116
B0206	.....	9200	B0378	.....	9496	B0777	.....	9824	B1084.1	.....	10120
B0206.1	.....	9204	B0378.1	.....	9500	B0777.1	.....	9828	B1092	.....	10124
B0206.21	.....	9212	B0380	.....	9504	B0783	.....	9832	B1096.5	.....	10128
B0206.5	.....	9214	B0380.1	.....	9508	B0784	.....	9836	B1112	.....	10192
B0206.7	.....	9215	B0382	.....	9512	B0785	.....	9840	B1113	.....	10193
B0208	.....	9124	B0384	.....	9516	B0786	.....	9839	B1113.2	.....	10194
B0209	.....	9128	B0384.1	.....	9520	B0789	.....	9844	B1122	.....	10316
B0212	.....	9132	B0387.9	.....	9528	B0789.1	.....	9848	B1134	.....	10248
B0214	.....	9136	B0388	.....	9532	B0800	.....	9856	B1134.1	.....	10248.1
B0218	.....	9216	B0388.1	.....	9536	B0800.1	.....	9860	B1138	.....	10212
B0218.5	.....	9220	B0392	.....	9540	B0842	.....	9864	B1138.1	.....	10216

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

Inter.	—	U.S.	Inter.	—	U.S.	Inter.	—	U.S.	Inter.	—	U.S.
B1139		10220	B1326		10148	B1714		10652	B1861		10856
B1139.1		10224	B1326.1		10152	B1728		10636	B1862		10860
B1141		10256	B1328		10184	B1735		10676	B1862.2		10868
B1141.1		10260	B1344		10436	B1738		10692	B1862.4		10864
B1152		10300	B1352		10576	B1738.6		10696	B1868		10872
B1156		10264	B1360		10456	B1740		10700	B1879		10876
B1156.1		10268	B1360.9		10440	B1746		10704	B1880		10880
B1158		10272	B1361		10444	B1748		10708	B1881		10884
B1159		10276	B1361.1		10445	B1749		10712	B1884.4		10900
B1163		10284	B1361.2		10446	B1757		10719.5	B1884.6		10904
B1164		10288	B1363		10448	B1758		10719.6	B1885		10892
B1166		10292	B1363.2		10452	B1759		10719.7	B1885.2		10896
B1168		10296	B1368		10460	B1772		10720	B1886		10908
B1188		10308	B1370		10464	B1772.1		10724	B1890		10912
B1196		10320	B1374		10468	B1772.2		10728	B1894		10916
B1198		10324	B1392		10500	B1774		10730	B1894.1		10920
B1210		10336	B1395.9		10502.1	B1778		10744	B1897		10924
B1214		10340	B1396		10502	B1778.1		10748	B1897.1		10928
B1214.1		10344	B1396.1		10502.2	B1779		10752	B1900		10932
B1224		10360	B1402		10508	B1779.1		10756	B1902		10936
B1224.1		10364	B1402.1		10512	B1780		10732	B1903		10940
B1225		10328	B1412		10520	B1780.2		10740	B2070		10944
B1225.1		10332	B1412.1		10524	B1780.4		10736	B2072		10948
B1228		10352	B1416		10528	B1782		10760	B2072.1		10952
B1228.1		10356	B1416.1		10532	B1784		10768	B2074		10956
B1239.1		10372	B1431		10556	B1784.4		10772	B2080		10960
B1240		10376	B1431.1		10560	B1786		10776	B2080.1		10964
B1240.1		10380	B1436		10564	B1788		10780	B2084		10968
B1257		10388	B1438		10552	B1792		10784	B2085		10984
B1258		10392	B1442		10568	B1794		10788	B2086		10980
B1260		10396	B1444		10572	B1796		10792	B2087		10972
B1262		10400	B1606		10580	B1804		10796	B2087.1		10976
B1264		10404	B1609		10584	B1805		10800	B2088		10988
B1268		10408	B1610		10592	B1817.4		10806	B2089		10992
B1268.1		10412	B1624		10596	B1817.41		10806.1	B2090		10996
B1274		10416	B1652		10600	B1818.5		10802	B2098		11000
B1275		10420	B1672		10604	B1818.51		10802.1	B2102		11004
B1312		10136	B1676		10608	B1819.6		10840	B2106		11008
B1318		10156	B1676.1		10612	B1822		10816	B2107		11012
B1318.2		10160	B1685		10616	B1822.1		10820	B2107.1		11016
B1320		10164	B1685.1		10620	B1848		10716	B2108		11020
B1324		10168	B1688		10628	B1848.5		10716.2	B2110		11024
B1324.1		10172	B1700		10640	B1848.7		10716.1	B2112		11028
B1325		10176	B1704		10644	B1858		10848	B2113		11032
B1325.2		10180	B1706		10648	B1860		10852			