

and will show more brightly, and the range of visibility will be slightly increased.

This affects Admiralty Charts Nos. 2389, 2389A, 2389B, 1061, 784, and 403.

INVESTIGATOR STRAIT.—ALTHORPE ISLAND.—Masters of vessels and others are hereby informed that, on and after the night of the 30th October, 1914, the first-order revolving light on Althorpe Island will show a green light over a sector of 24° (twenty-four degrees) between the bearings of 165° (S. 19° E. mag.) and 189° (S. 5° W. mag.).

Approximate position: Lat. 35° 22½' S., long. 136° 51½' E.

This affects Admiralty Charts Nos. 2389 and 2389A.

NOTE.—For about a week preceding the above date the characteristic of the light over the area mentioned may be slightly affected.

QUEENSLAND.

NORTH-WEST CHANNEL, MORETON BAY.—Notice is hereby given that, on and after 27th November, 1914, the character of the light shown from the gas-buoy marking the Western Bank, North-west Channel, Moreton Bay, will be altered from white occultating to a red fixed light.

Charts affected: Nos. 1029, 1068, and 1670A, "Australia Directory," Vol. ii.

MIDDLE CHANNEL, FITZROY RIVER, ROCKHAMPTON.—Notice is hereby given that, on and after 30th November, 1914, the Middle Channel to Broadmount and Rockhampton will be closed, and all navigation marks, with the exception of the dolphin structures, removed therefrom.

After the date mentioned the South Channel will be the only recognized waterway to Broadmount and Rockhampton.

Charts affected: Nos. 363 and 345, "Australia Directory," Vol. ii.

Notice to Mariners No. 108 of 1914.

NEW RIVER HARBOUR ENTRANCE.—ERECTION OF BEACONS.

Marine Department,
Wellington, N.Z., 4th December, 1914.

NOTICE is hereby given that beacons have been erected at New River Head about 4 cables 109° (S. 89° E. magnetic) from the flagstaff on South Head. The lower beacon is oblong in shape, and painted white, with height above high water of 25 ft. The upper beacon is oblong in shape, painted white, and 45 ft. above high water in height.

These beacons will bear when in line with one another 57° (N. 39° E. magnetic), which course will clear the Guiding Star Rock, Bombay Rock, and Middle Bank above Bombay Rock.

Vessels when entering the harbour should steer by the beacons on sandhills abreast Bombay Rock 97° (N. 79° E. magnetic) until the above-mentioned beacons are brought in line. This course will lead clear of all danger, and will lead into the anchorage pool at Sandy Point. Owing to the shifting nature of the sandbanks on the north side of the channel the bearings of these beacons will be subject to variation.

Charts, &c., affected: Admiralty Chart No. 2553; "New Zealand Pilot," eighth edition, 1908, Chapter ix, page 275.

GEORGE ALLPORT,
Secretary.

Notice to Mariners No. 109 of 1914.

AUCKLAND HARBOUR APPROACH.—TAKAPUNA WHARF LIGHT DISCONTINUED.

Marine Department,
Wellington, N.Z., 7th December, 1914.

THE Auckland Harbour Board has notified that the light on Takapuna Wharf (see Notice No. 69 of 1914) will be discontinued on and after 31st December, 1914.

Charts, &c., affected: Admiralty Charts Nos. 1896 and 2543; "New Zealand Pilot," eighth edition, 1908, Chapter ii, page 35; "New Zealand Nautical Almanac," 1914, page 248.

GEORGE ALLPORT,
Secretary.

Applications invited for the Position of Land Transfer Draughtsman, Lands and Survey Department, Invercargill.

Office of Public Service Commissioner,
Wellington, 7th December, 1914.

1. APPLICATIONS will be received by the undersigned up till noon on the 30th December, 1914, from officers of the Lands and Survey Department (licensed sur-

vveyors only) for the position of Land Transfer Draughtsman in the District Office of the Lands and Survey Department, Invercargill.

2. Applications must be made on forms obtainable from the Permanent Head of the Lands and Survey Department, or from any Commissioner of Crown Lands, and must be forwarded through the Head of that Department, addressed to the Secretary to the Public Service Commissioner, Wellington.

3. Each application must include statement of age, education, field experience, and nature of duties performed.

4. The position will be graded in the Professional Division, Class D; maximum salary, £365. Salary will be considered in connection with present salary. Consequential vacancies may also be applied for.

A. J. H. BENGE,
Secretary.

Applications invited for the Positions (Two) of Chief District Instructor for Auckland and Wellington.

Office of Public Service Commissioner,
Wellington, 5th December, 1914.

1. APPLICATIONS will be received by the undersigned up till noon on the 24th December, 1914, from the male Inspectors and Teachers of Physical Training of the Education Department for the positions of Chief District Instructor for Auckland and Wellington respectively.

2. Applications must be made on forms obtainable from the Permanent Head of the Education Department, or from this Office.

The positions will be graded in the General Division; salary, £230.

A. J. H. BENGE,
Secretary.

Result of Election of Trustees of a Drainage District.

Department of Internal Affairs,
Wellington, 8th December, 1914.

THE following result of the election of Trustees of a Drainage District has been received from the Returning Officer, and is published in accordance with the provisions of the Land Drainage Act, 1908.

J. HISLOP,
Under-Secretary.

Pyramid Block, Drainage District, County of Southland:

Joseph Smaill.
Patrick Murray.
Robert Jopp.
John McCubbin.
William Richard Jones.

Astronomical Tables.

Hector Observatory,
Wellington, N.Z., 7th December, 1914.

THE following astronomical tables are published for general information. They give the New Zealand Civil mean time when the sun is on the meridian of the Hector Observatory, Wellington, and the sun's apparent right ascension at apparent noon, Wellington; and by the use of the auxiliary tables the time when the sun is on any other meridian in New Zealand, and the times of sunrise and sunset, may be approximately obtained.

The adopted position of the transit instrument at the Hector Observatory is longitude 11 h. 39 m. 4.27 s. (= 174° 46' 4") east of Greenwich, latitude 41° 17' 3.8" south, and height 418 ft. above 1909 mean sea-level.

New Zealand mean time is for the meridian 11 h. 30 m. east of Greenwich. As Greenwich mean time is reckoned from noon to noon from 0 h. to 24 h., and New Zealand Civil mean time is reckoned from midnight to midnight, also from 0 h. to 24 h., it follows that New Zealand Civil mean time is 23 h. 30 m. in advance of Greenwich mean time. Hence the following easy rules to convert G.M.T. into N.Z.C.M.T., and conversely:—

N.Z.C.M.T. = G.M.T. + 1 d. - 30 m.
G.M.T. = N.Z.C.M.T. - 1 d. + 30 m.

Example.—Required, the N.Z.C.M.T. corresponding to—
October 2 d. 13 h. 40 m. 53 s. G.M.T.
+ 1 d. - 30 m.

= October 3 d. 13 h. 10 m. 53 s. N.Z.C.M.T.
i.e., October 3 d. 1 h. 10 m. 53 s. p.m.

C. E. ADAMS,
Government Astronomer.