

5. What do the Roman numerals indicate that are occasionally seen on the chart near the coasts and in harbours?

6. How would you find, approximately, the time of high water at any place, the Admiralty tables not being at hand nor any other special tables available?

All the foregoing questions must be answered; but this does not preclude the Examiner from putting any other questions of a practical character or which the local circumstances of the port may require.

Additional Questions for Only and First Mates and Masters, including Masters of Home-trade Ships.

7. Find the course to steer by compass from _____ to _____ to counteract the effect of a current which set at the rate of _____ miles per hour, the ship making by the log _____ miles per hour; also the distance the ship would then make good in _____ hours towards _____

Answer.—Compass course: _____

Distance: _____

8. On _____ being off _____, took a cast of the lead: required the correction to be applied to the depth obtained by the lead-line before comparing it with the depth marked on the chart.

9. The following horizontal sextant angles were taken to determine the ship's position:—
_____ ° ' _____

Find the latitude and longitude, using a station pointer.

Answer.—Latitude: _____

Longitude: _____

All the foregoing questions, and those on form Exn. 9c, must be answered; but this does not preclude the Examiner from putting any other questions of a practical character or which the local circumstances of the port may require.

Notice to Mariners No. 50 of 1914.

Marine Department,
Wellington, N.Z., 5th May, 1914.

THE following Notice to Mariners, received from the Marine Board, Port Adelaide, South Australia, is published for general information.

GEORGE ALLPORT,
Secretary.

SOUTH AUSTRALIA.

West Coast.

MASTERS of vessels and others are hereby informed that 6th-order port lights have been established at the following places:—

Smoky Bay.—A fixed light at sea end of jetty, on cast-iron pillar painted red, the focal plane being 25 ft. above H.W., showing a white light over the deepest water between bearings 130° (S. 53° E. mag.) and 147° (S. 36° E. mag.), and a red light over the shallow water between the bearings 120° (S. 63° E. mag.) and 130° (S. 53° E. mag.). Visible in clear weather about seven miles.

This affects Admiralty Chart No. 1061.

Port Le Hunte.—A fixed light at sea end of jetty, on cast-iron pillar painted red, the focal plane being 25 ft. above H.W., showing a white light between the bearings 302° (N. 61° W. mag.) and 322° (N. 41° W. mag.), and a red light over adjacent dangers between the bearings 322° (N. 41° W. mag.) and 345° (N. 18° W. mag.). Visible in clear weather about seven miles.

This affects Admiralty Chart No. 1061.

Streaky Bay.—A 6th-order port light has been installed at the sea end of this jetty in place of the previous light.

The new light is a fixed light, displayed on a cast-iron pillar painted red, the focal plane being 25 ft. above H.W., showing a white light between the bearings of 175° (S. 8° E. mag.) and 201° (S. 19° W. mag.), and a red light over Crawford Spit between the bearings 201° (S. 19° W. mag.) and 216° (S. 33° W. mag.). Visible in clear weather about ten miles.

This affects Admiralty Chart No. 1061.

Kangaroo Island.

Hog Bay.—A fixed light at sea end of jetty, on cast-iron pillar painted red, the focal plane being 25 ft. above H.W., showing a red light over navigable waters between the bearings of 219° (S. 34° W. mag.) and 275° (W. mag.), and a white light between the bearings 95° (E. mag.) and 219° (S. 34° W. mag.). Visible in clear weather about seven miles.

This affects Admiralty Charts Nos. 2389, 25, 3641, and 1014.

Encounter Bay.

Victor Harbour.—A fixed light at sea end of screw pile jetty, on cast-iron pillar painted red, the focal plane being 26 ft. above H.W., showing a white light between the bearings 169° (S. 16° E. mag.) and 259° (S. 73° W. mag.). Visible in clear weather about ten miles.

This affects Admiralty Charts Nos. 2389, 1014, and 2493.

Marine Board Offices,
Port Adelaide, 7th April, 1914.

New Zealand Time Service Arrangements.—Notice No. 2.

The Hector Observatory,
Wellington, N.Z., 1st May, 1914.

THE following notice is published for general information, and supersedes notice No. 1 of 26th February, 1912, published in the *New Zealand Gazette* of 29th February, 1912.

C. E. ADAMS,
Government Astronomer.

POSITION OF TRANSIT INSTRUMENT.

THE adopted position of the Transit Instrument at the Hector Observatory, Wellington, is longitude 11 h. 39 m. 4.27 s. east of Greenwich, latitude 41° 17' 3.76" south; height, 418 ft. above 1909 mean sea-level.

TIME SERVICE.

1. Accurate Time Signals.

On days when accurate time signals are given, the flag T of the international code will be hoisted on the Observatory flagstaff about midday.

(a.) When the flag is flying, chronometers may be compared with a galvanometer in the public telegraph office, Featherston Street. This galvanometer is controlled by the Observatory clock, and is deflected every hour of New Zealand mean time.

(b.) Time signals are given by three electric lights erected on the Observatory flagstaff. The bottom light is green, and is 30 ft. above the ground; the middle light is red, and is 36 ft. above the ground; the top light is white, and is 42 ft. above the ground.

The green light is shown at 50 minutes, the red light at 10 minutes, and the white light at 5 minutes to the hour; all three lights are extinguished simultaneously at the hour. The switching-on of the lights must be considered as only approximately correct; the correct time is given by switching off the three lights. This signal is given at 8, 9, 10, and 11 p.m. of New Zealand mean time.

The corresponding Greenwich mean time (counted from noon) and New Zealand civil mean time (counted from midnight) of these signals are as under:—

	G.M.T.			N.Z.C.M.T.			
	H.	M.	S.	H.	M.	S.	
Green light switched on	..	19	40	0	19	10	0*
Red light switched on	..	20	20	0	19	50	0*
White light switched on	..	20	25	0	19	55	0*
All lights switched out	..	20	30	0	20	0	0†

* Approximate. † Time signal.

And similarly at each succeeding hour until 23 h. 30 m. G.M.T.

2. Approximate Time Signals.

When owing to bad weather or other causes accurate time signals cannot be given, approximate ones will be given; but in these cases the flag will not be hoisted and the green light will not be shown. On application to the Observatory the error of these signals can usually be obtained.

3. Time Signals by Telephone and by Telegraph.

Arrangements can usually be made to give time signals by telephone or by telegraph to any part of the Dominion on application being made to the Observatory.

Education Board of the District of Taranaki.—Election of Member to fill Extraordinary Vacancy.

Education Office,
New Plymouth, 1st May, 1914.

IT is hereby publicly notified that EDWARD MARFELL has been duly elected, unopposed, a member of the Education Board for the District of Taranaki, for the East Ward, to fill the extraordinary vacancy caused by the resignation of William McL. Kennedy.

P. S. WHITCOMBE,
Returning Officer.