make dashes 5 seconds long for one minute, making their call letters three times between each 5-second dash, and terminating with the conventional signal " K " (go ahead).

At the expiration of the direction determining signals the the vessel, make "QTE," and send the bearing in degrees (0 to 359) and the name of the compass-station which obtained the bearing, or "QTF," and the position in latitude and longi-tude. Bearings and positions will always be transmitted to the mean is no static area. the vessel in words, to avoid error. The vessel acknowledges receipt of bearings and positions

by making the call letters of the station transmitting the bearing or position once, "DE," vessel's radio call letters, and then repeats the bearing or position received, using numerals.

Independent radio compass-stations keep watch on 600 metres, and this wave-length should always be used to call these stations; but as soon as they answer naval vessels will shift to tune "M" (952 metres), all transmission from the vessel being carried out thereafter on this wave-length.

The control stations for harbour-entrance radio compass-stations keep watch on 600 and 952 metres. Naval vessels will call these stations on 952 metres and carry out all tests

and communication with them thereafter on 952 metres. Merchant vessels will call all radio compass and compass-control stations on 600 metres and carry out all tests and communication with them thereafter on this wave-length. Vessels should note that shore radio compass-stations can

not distinguish between the bearing of a ship and its reciprocal unless the reciprocal bears inland. There is, therefore, a possi-bility of an error of 180 degrees; in such cases the decision is

subject to the foregoing, bearings should be accurate within 1 degree of arc. When bearings from three or more compass-stations are not over 1 degree of arc in error but do not meet at a fixed point, the centre of an area enclosed by the bearings can generally be taken as the approximate position of the vessel. The primary object of these radio compass-stations is to

assist in the navigation of vessels during atmosphere of low visibility. They are operated by the Navy Department, and there is no charge for the service.

There follows a complete list of shore radio compass-stations on the Atlantic and Gulf coasts and their corrected positions. All of these stations are not, however, in operation as yet.

			1
Radio Compass Station.	Posit	tion.	
Cross Island, Me	Lat. 44° 36′ 22″ N.	Lon. 67° 16′ 49″ W.	
Bar Harbour, Me	Lat. 44° 18′ 36″ N.	Lon. 68° 11′ 27″ W.	
Damiscove Island,			
Me	Lat. 43° 45′ 17″ N.	Lon. 69° 36′ 47″ W.	l
Appledore Island,			
<b>M</b> e	Lat. 42° 59′ 12″ N.	Lon. 70° 36′ 42″ W.	
Gloucester, Mass	Lat. 42° 35′ 19″ N.	Lon. 70° 41′ 8″ W.	
Deer Island, Mass.	Lat. 42° 21′ 15″ N.	Lon. 70° 57′ 30″ W.	
Fourth Cliff, Mass.	Lat. 42° 9′ 40″ N.	Lon. 70° 42′ 22″ W.	
Cape Cod, Mass	Lat. 42° 2′ 58″ N.	Lon. 70° 4′ 32″ W.	
Nantucket, Mass	Lat. 41° 14′ 42″ N.	Lon. 70° 5′ 56″ W.	ì
Prices Neck, R.I	Lat. 41° 27′ 6″ N.	Lon. 71° 20′ 15″ W.	
Watch Hill, R.I	(Under construction.)		
Montauk, L.I.	Lat. 41° 3′ 9″ N.	Lon. 71° 57′ 27″ W.	
Fire Island, N.Y	Lat. 40° 38′ 7″ N.	Lon. 73° 12′ 32″ W.	
Rockaway Beach,			
N.Y	Lat. 40° 33′ 52″ N.	Lon. 73° 52′ 40″ W.	L
Sandy Hook, N.J.	Lat. 40° 28′ 12″ N.	Lon. 74° 1′ 6″ W.	ì
Mantoloking, N.J.	Lat. 40° 1′ 30″ N.	Lon. 74° 3′ 10″ W.	
Cape May, N.J.	Lat. 38° 56′ 41″ N.	Lon. 74° 53′ 10″ W.	
Cape Henlopen, Del.	Lat. 38° 47′ 26″ N.	Lon. 75° 5′ 16″ W.	
Bethany Beach, Del.	Lat. 38° 32′ 45″ N.	Lon. 75° 3′ 20″ W.	
Hog Island, Va	Lat. 37° 22′ 36″ N.	Lon. 75° 42′ 37″ W.	ł
Smith Island, Va	Lat. 37° 7′ 8″ N.	Lon. 75° 53′ 42″ W.	
Cape Henry, Va	Lat, 36° 55′ 16″ N.	Lon. 75° 59′ 51″ W.	ŀ
Cape Hatteras, N.C.	Lat. 35° 14′ 22″ N.	Lon. 75° 31′ 42″ W.	
Cape Lookout, N.C.	(Proposed.)		
Cape Fear, N.C	,,		ł
North Island, S.C	,,		L
Bull Island, S.C.	,,		L
Morris Island, S.C.	,,		L
St. Augustine, Fla.	,,		1
Key West, Fla	,,		
Burrwood, La.	,,		
Pass a Loutre, La.	,,		
Grand Island, La.	,,		1
			L

### RADIO TIME-SIGNALS.

On 30th March, 1919, at 2 a.m., 75th meridian time, clocks in the United States will be set alread one hour in accordance with the provisions of the Daylight Saving Act. Clocks on all naval vessels in United States territorial waters and at naval stations will be regulated accordingly.

 ${\bf x}$  The Greenwich mean time of watch-standing periods for radio operators and for radio broadcast schedules, except radio time-signals, will not be changed and are not affected by the foregoing change of clock time. The Greenwich mean time of radio time-signal broadcasts

will be one hour earlier than at present from all radio stations concerned, except Washington. The Greenwich mean time of the Washington radio time-

signal will remain unchanged.

## CROWN LANDS NOTICES.

#### Land in Otago Land District forfeited.

Department of Lands and Survey, Wellington. 4th August, 1919. N OTICE is hereby given that the lease of the under-mentioned laud having been declared forfeited by resolution of the Otago Land Board, the said land has thereby reverted to the Crown under the provisions of the Lead Act 1908 Land Act, 1908.

## SCHEDULE.

## OTAGO LAND DISTRICT.

#### Section 10s, Clifton Settlement.

RENEWABLE LEESE No. 300s. Formerly held by James request.

#### D. H. GUTHRIE, Minister of Lands.

Land in the Auckland Land District for Sale or Lease to Discharged Soldiers.

# District Lands and Survey Office,

Auckland, 6th August, 1919. OTICE is hereby given that the undermentioned lands N are open for sale or lease under the Discharged Soldiers Settlement Act, 1915, and the regulations there-under; and applications will be received at the District Lands and Survey Office, Auckland, up to 4 o'clock p.m. on Monday, the 15th September, 1919.

The lands may be purchased for cash or on deferred pay-ments, or selected on lease for thirty-three years, with right of renewal for further successive terms of thirty-three years and a right to acquire the freehold.

Applicants must appear personally before the Land Board for examination at the District Lands and Survey Office, Auckland, on Thursday, the 18th September, 1919, at 10 o'clock a.m.

The ballot will be held at the conclusion of the examination of applicants.

SCHEDULE.

AUCKLAND LAND DISTRICT .--- FIRST-CLASS LAND. Whakatane County.-Matuky Settlement

Section.	Area.	Capital Value.	Instalment on Deferred Payment (excluding Interest).	Half-yearly Rent on Lease.	
	A. R. P.	£	£ s. d.	£ s. d	
1s	90 0 0	2,560	$135 \ 10 \ 0$	57 12 (	
		150*		†12 19 :	
2s	$139 \ 2 \ 19$	2,220	111 0 0	49 19 (	
4s	113 1 33	1,980	99 0 0	44 11 (	
6s	85 2 0	2,180	109 0 0	49 1 (	
9s	$71 \ 2 \ 22$	2,580	129 0 0	58 1 (	
10s	81 0 0	2,600	130 0 0	58 10 (	
11s	79 3 24	3.240	168 0 0	72 18 0	
	_	120*		†10 7 k	

\* Buildings. † Half-yearly payment on buildings. NOTE .- The deferred payment instalment includes the value of the buildings.

The Matuku Settlement, formerly the property of E. S. Smith, Esq., is situated in the Rangitaiki Swamp, about five miles from Te Teko, to which there is a good road. The land was originally swamp, but there is a ridge of higher land running through the block from north to south. The soil is of very good quality, with the exception of about 200 acres near the north-castern end of the settlement, which is of lighter nature. A dairy factory is situated close to the settlement.