

Character.—An occulting light with white, red, and green sectors.

Elevation.—30 feet.

Visibility.—White light, 7 miles; red light, 4 miles; green light, 3 miles.

Sectors.—Green from N. 40° W. to N. 22° W.; white from N. 22° W., through north, to N. 3° E.; red from N. 3° E. to N. 46° E.; white from N. 46° E. to N. 59° E.; green from N. 59° E. to N. 74° E.; white from N. 74° E. to N. 86° E.; red from N. 86° E., through east, to S. 46° E.; white from S. 46° E., through south, to S. 3° W.; green from S. 3° W. to S. 14° W.; obscured elsewhere.

Power.—Under $\frac{1}{10}$.

Structure.—Small iron house on framework support.

Remarks.—The sectors of this light have been removed from the charts. The lighthouse has been moved to the extremity of Kvalen Point.

Variation.—14° W.

(2.) *Knarrevik Light—Alteration in Character.*

Position.—Lat. 60° 22½' N., long. 5° 10' E.

Alteration.—The alternating white and red light has been replaced by a group occulting white light, showing two eclipses in each group.

Remarks.—The new light has an elevation of 38 feet; the other characteristics are similar to those of the former light.

(3.) *Kvarven Light—Alteration in Character.*

Position.—Lat. 60° 24' N., long. 5° 14¾' E.

Alteration.—The alternating white and red light has been replaced by a light having the following characteristics.

Character.—A group occulting light, with white, red, and green sectors, showing two eclipses in each group.

Elevation.—45 feet.

Visibility.—White light, 7 miles; red light, 4 miles; green light, 3 miles.

Sectors.—White from N. 77° E. to N. 85° E.; green from N. 85° E., through east, &c., to S. 48° W.; white from S. 48° W., through west, to N. 79° W.; red from N. 79° W. to N. 65° W.; green from N. 65° W. to N. 62° W.; obscured elsewhere.

Power.—Under $\frac{1}{10}$.

Structure.—Small iron house.

Remarks.—The sectors of this light have been removed from the charts.

Variation.—14° W.

Charts affected.—No. 881, Aakre to Hisken (1); No. 2303, Approaches to Bergen (2) (3); No. 2291, Bergen, to Stav Fiord (3); No. 2304, Karmø to Bergen.

Publications.—List of Lights, Part II, 1910, Nos. 878, 931, 927; Norway Pilot, Part II, 1905, pages 128, 188.

Authority.—Christiania Notice (Lights), No. 5 of 1910.

No. 964.—MEDITERRANEAN—SPAIN, EAST COAST.

Port of Barcelona Entrance—Alterations in Lighting.

Position.—Entrance, lat. 41° 21½' N., long. 2° 10½' E.

Details.—On or about the 1st July, 1910, the unmentioned alterations were to be made in the provisional lighting of the entrance to Barcelona Harbour, in connection with the work

of lengthening the East Mole and of constructing the Morrot Basin.

1. Alterations in lights.

(a) East Mole (Dique del Este) Leading Lights : Alterations.—The elevation of the rear leading light has been increased from 49 to 59 feet. The front leading light has been moved forward on the leading line a distance of 90 yards in a S. 40° W. direction, and the elevation increased to 49 feet. A topmark, consisting of a disc, painted red and white, has been placed on each of the light-beacons to serve as a day mark.

Remarks.—The line of these leading lights indicates, as formerly, the direction of the East Mole extension works.

(b) West Mole (Dique del Oeste) Light :

Alteration.—The fixed red light, with obscured sector, has been replaced by a fixed red light visible all around the horizon from a distance of about 4 miles.

(c) Outer West Mole Light :

Alteration.—The fixed red light has been replaced by an occulting red light exhibited from an elevation of 36 feet.

2. Establishment of leading lights.

(a) Front light :

Position.—At a distance of $5\frac{1}{10}$ cables, N. 85° W., from the light on the Outer West Mole.

Character.—A fixed red light.

Elevation.—52 feet.

Structure.—Description not stated, but is surmounted by a disc, painted black and white.

(b) Rear light :

Position.—At a distance of 410 feet, north-westward, from the front light.

Character.—A fixed red light.

Elevation.—92 feet.

Structure.—Description not stated, but is surmounted by a disc, painted black and white.

Remarks.—These lights in line lead clear of the outer end of the East Mole extension works, and the position of the rear light with reference to the front light will accordingly be altered as the work progresses. The light-buoy, marking the East Mole extension works, remains in position.

Directions.—Vessels entering the port, should not cross the line of the fixed green leading lights on the East Mole until southward of the line of the above mentioned fixed red leading lights.

Variation.—13° W.

Chart affected.—No. 1195, Approach to Port of Barcelona, with inset.

Publications.—List of Lights, Part V, 1910, Nos. 125, 126, 127, 128, and page 23; Mediterranean Pilot, Vol. I, 1904, pages 189, 191; Supplement, 1908.

Authority.—Madrid Notice, No. 626a of 1910.

No. 965.—RED SEA.

Suez Bay—Front Leading Beacon Discontinued.

Position.—On shore at head of bay, westward of town; lat. 29° 57½' N., long. 32° 32¼' E.

Remarks.—The reason for the discontinuance of this beacon is not stated.

Charts affected.—No. 734, Suez Bay; No. 233 Suez Canal.

Publication.—Red Sea Pilot, 1909, pages 89, 90.

Authority.—Director-General, Egyptian Ports and Lighthouses, 16th June, 1910.