



Lighthouses and Beacons

In New Caledonian waters, the passages, channels and ports are marked with lighthouses, beacons or buoys in accordance with IALA system, zone A.

Navigators will find the following mark:

- cardinal marks showing the direction where a danger lies;
- lateral marks staking inner routes and adjacent channels;
- isolated danger buoys and junction buoys;
- leading lights.

A total of 310 units divides into:

- 219 blind marks.
- 91 lighted marks being:
*4 lighthouses; 38 coast lights;
 13 offshore towers; 29 lighted spar buoys; 7 lighted buoys.*

Peculiarities:

On the east and the west coasts, the inner routes are marked with lateral buoys and beacons from Southeast to Northwest, the origin being GORO lighthouse.

A ship navigating the channel from PORO to THIO, for example, will find red cylindrical marks on her starboard side and green conical marks on her port side.

Adjacent channels leading into the inner route are marked with lateral buoys and beacons from there of passage towards the land.

In passages through the reef, a gate has been defined whenever possible, with a lateral buoy and a cardinal spar buoy or beacon, as quick white flashes are visible on a long range. During the past few years, most conventional buoys have been replaced with spar buoys.

Principle of a spar buoy:

The buoy body is made of a steel tube, held in a vertical position with an underwater float. The lower part of the tube is shackled to a concrete mooring block lying on the seabed. The upper part of the apparatus holds the topmark, the reflector and the light.

The laying of a spar buoy is subject to the following conditions:

- low tidal range;
- weak currents in the vicinity;
- no direct exposure to ocean swell.

The advantages of the spar buoy over the conventional buoy are:

- better marking accuracy (no swinging space),
- lack of vertical movement resulting in better stability, good visibility and easier maintenance;
- higher focal plane of the light, about 7 meters over tidal datum;
- no anchorage maintenance.



Above documents published by courtesy of:

Subdivision des Phares et Balises

14, rue des frères Terrasson - Baie de Numbo - Nouméa - B.P. A2 - Nouméa cedex

Tél. (687) 23 21 00 - Fax : (687) 23 21 01 - E-mail: pharesetbalises.dittt@gouv.nc