



Diagram 1.1 : Extension of Pelican point in a NNE direction.

Chart SAN 1001 (INT 2611)

1.13 WALVIS BAY

1. Walvis Bay lies to the eastward of the low, sandy Walvis Peninsula, which is subject to continual change, and which terminates in Pelican Point. It forms an approximate quarter circle of 5 miles radius with the peninsula running north and south, and the entrance between the point and Bird Rock running east and west.
2. Pelican Point is extending NNE. In 1953 the high water line was some 860m further from the lighthouse than in 1928. Between 1953 and 1980 it had extended a further 400 m. By 2000 further extensions NE of approximately 1 cable were noted. Deep draft vessels are strongly advised not to navigate between the Spit Buoy and the shore line as shallower water is suspected. The diagram (Diagram 1.1) illustrates how the shape of the peninsula has changed since 1894. To the west of the peninsula, despite the changing coastline, the 20 m depth isobath has altered little, however, a sandy spit has been reported to be developing northwards from the western base of the peninsula. Mariners are strongly advised to remain in a depth of more than 30 m as shoaling is possible.
3. Mud islands, thought to be of volcanic origin, appeared off the point in June 1900 and March 1951, and may well appear again without warning. The first mentioned was 4.6 m high and approximately 46 m long by 9 m wide. It remained for a week before disappearing completely, when soundings indicated that the previous depth of 15 m had been restored. The appearance of these islands was accompanied by strong concentrations of sulphuretted hydrogen.
4. Another phenomenon occurring in this region is the periodic mortality of fish which probably happens to some extent every year during the months of December and January, when northerly winds are most frequent. On occasions the beaches have become piled with dead or dying fish and seals. It was especially bad in December 1924 when thousands upon thousands were washed ashore between Walvis Bay and Swakopmund, presenting a serious disposal problem.
5. An area, bounded approximately by the parallels of 21°30'S and 24°30'S and the 50 and 150m isobaths, is known as the Azoic Zone, because it is devoid of benthic life. The bottom in this area consists of dark green, foul smelling mud, a broad tongue of which extends into Walvis Bay.
6. The cold Benguela Current is rich in plankton which supplies food for the prolific surface fish in the area. When northerly winds blow, the flow of this current tends to become retarded or reversed, and under certain meteorological conditions

the stagnant bottom water is forced up. This mixes with the surface water and by reducing the oxygen content, effectively kills off the fish, at the same time liberating sulphuretted hydrogen.

7. It is probable that the occurrence of poisonous plankton (the notorious "red tide") is also a contributory cause of mass mortality of fish.

8. Sulphuretted hydrogen that is constantly generated from the bottom of the bay, causes serious deterioration of ship's paintwork, as well as to that on the exterior and interior of houses in the town. In addition to this, Walvis Bay is reputed to have the second highest metal corrosion factor in the world, which plays havoc with the bodywork of cars and other metal structures. Because of this, plastic road signs have been substituted for metal ones in the town.

9. Pelican Point lighthouse is a black circular tower, 34 m high, with two *white bands*, situated approximately 1,5 miles SSW of the point. The light is exhibited at an elevation of 35 m. Radar reflectors disposed around the tower provide good radar contact in the form of a star pattern. ENE of the lighthouse at approximately 3.3 cables is a radar beacon situated at the end of a wooden jetty. There are three rectangular buildings close northward of the lighthouse. When a ship is approaching from the southward it should be borne in mind, however, that the mobile tower crane, 65m high, and the other cranes on the wharf in Walvis Bay harbour give good radar pictures which usually appear first on the screen. These should not be confused with the lighthouse pattern.

10. A radar responder beacon is installed at the lighthouse, which causes the morse code letter "D" to be exhibited beyond the station on radar screens. The normal range at which the letter will appear is 12 miles, depending on line of sight conditions. On one occasion an extreme range of 28 miles was reported.

11. A fog signal (Morse Code letter "P") is sounded from an electric nautophone established in a steel lattice tower 2000 m northward of the lighthouse.

12. Aquaculture Fish Farm Areas have been established as indicated on the charts. Navigation in these areas are prohibited.

13. Bird Rock, also known as "Winter's Folly", which lies some 5 miles east of Pelican Point and 2 cables offshore, is a reef upon which an enterprising man named Adolf Winter built a solid wooden platform in 1930. Five 15 m high pylons support a cableway between the island and the mainland. One pylon is close to a landing stage on the island, one is on the mainland and the remaining three are in the water. In 1932 flights of birds started using the platform for nesting and, since then, eight to eleven hundred tonnes of guano have been gathered from it every year.

14. Several modern holiday resorts have been built along the beaches between Swakopmund and Walvis Bay, especially at Langstrand, Dolfynstrand and Afrodite Beach, which are conspicuous from seaward.

15. The town of Walvis Bay faces NW on to the bay and its frontage begins where a breakwater extends in a WSW direction for 4.5 cables. This breakwater provides protection for the NE end of the fishing harbour wharf which stretches for a further 1.5 miles to the Synchronlift site (see below). Several fish factories all with their own jetties, face this wharf. Towards the SW end of this wharf a conspicuous radio mast 30 meters high is situated on top of a security company building. The Tanker Berth, eight numbered berths and a rubble wall, leading to the Walvis Bay Yacht Club, follow for 1.3 miles. The Walvis Bay Yacht Club (WBYC) buildings are situated on the eastern side of the entrance to the shallow lagoon at the head of the bay, indicated by a prominent red and white banded lookout tower.

16. In the center of the town the Roman Catholic church tower, 38 m high, is conspicuous. It is surmounted by a cross which is illuminated at night. Close NE of the tower there is a micro-wave lattice mast, 70 m high, exhibiting *red air obstruction light* half way up and at the top of the mast. (This should not be confused with the 65m Mobile Tower Crane). Two conspicuous White Water Towers are situated approximately 7.5 cables SE and 2 cables NW respectively of the Roman Catholic Church.

17. The Tanker Berth, 235 m long, lies in a north-south direction and is connected to the shore by a catwalk 320 m long. Tankers up to 192 m in length can use it but their displacement is limited to about 45 000 tonnes. The depth alongside is 10.0 m, and in the dredged approach channel it is 14.4 m and 14 m respectively as indicated on the chart.

18. A Synchronlift is situated at the SW end of the fishing harbour quay. It is capable of handling vessels whose dimensions do not exceed the following:

- a. Length overall - 79 m
- b. Beam - 12 m
- c. Draught - 6 m
- d. Displacement - 2 030 tonnes

- e. Maximum concentrated loading - 45 tonnes per metre of keel length

19. The Repair Jetty is associated with the synchrolift and lies close NE of it. The SRIN (Sea Rescue Institute of Namibia) call sign DZS is situated close southward of the tanker berth.

20. The two floating docks, Namdock 1 and Namdock 2, are anchored between the Tanker berth and Etosha factory. Namdock 1 has a length over keel block of 139.5 m, width at entrance of 23.5 m, maximum vessel draft of 5.8 m and lifting capacity of 8 000t. Namdock 2 has the same capacity, apart from her capability to handle vessels with a maximum draft of 7.2 m.

21. A Small Craft Harbour, to accommodate tugs, pilot boats and other harbour craft, is situated close NE of the main quay. There is a dredged depth of 6 m in this harbour.

22. A Container Terminal is located at the NE end of the Main Quay, consisting of numbers 1, 2 and 3 berths, which is 479 m long with a depth alongside of 14 m, and berths 4 to 8, which is 926 m long with a clear depth of 10.6 m alongside.

23. The Fishing Harbour flanking the fish factories NE of the Tanker Berth, and the approach channel thereto, have been maintained to 6.5 m. The seaward edges of the harbour and the channel are marked by light buoys. A new jetty, 204 metres in length and 16.5 metres wide has been built in the NE corner of the harbour. A new slipway lies just east of this jetty.

CURRENTS

24. During periods of strong SSW winds, a counter current sets into the bay in a clockwise direction. The normal flow of the Benguela Current is increased and it sweeps past Pelican Point towards Swakopmund, recurving towards the coast, continuing southward past the harbour, finally dissipating on the northward run along the eastern shore of the peninsula. It is strongest in the vicinity of the Spit Buoy.

25. A tidal stream of between a half and one knot runs in a SW direction on the flood across the approach channel and past the Tanker Berth and Hofmeyer Quay. On the ebb, the stream is reversed in direction and may occasionally attain a rate of 4 knots at springs when running out from the lagoon when it is flooded.

26. During northerly blows a surge and lift is sometimes experienced along the main quay. The swell is seldom more than 0.6 m in height, but the range action can be troublesome for ships moored alongside, causing them to part their moorings. Berths 4 to 8 are affected by these conditions more than berths 1 to 3. The Tanker Berth is also subject to range action under northerly weather conditions.

Chart SAN 73 (INT 2610), 1001 (INT 2611)

1.14 DIRECTIONS FOR ENTERING HARBOUR

1. The entrance to Walvis Bay is not easily distinguished from seaward.
2. Ships approaching from the northward are advised to sight Swakopmund first, as this town is conspicuous. The sun shining on the roofs of its buildings frequently makes them visible before the land is sighted if the weather is at all misty. In foggy weather the buildings and the two piers provide a good radar target.
3. Ships approaching from the southward will, if the weather is clear, see the town buildings over the peninsula, and no trouble should be experienced. In foggy weather these buildings and the cranes on the wharf give a strong radar echo which, as previously stated, should not be confused with the pattern given by the lighthouse complex.
4. Owing to the possibility of the mud island phenomenon recurring and the probability that Pelican Point is extending, ships should not pass between it and the Spit light-and-bell-buoy. They should pass to about 5 cables to the north of this buoy on a Easterly course, altering course for the Pilot Boarding Position when the Roman Catholic Church Tower bears 175°.
5. The entrance to the Main Channel is indicated by the lit Fairway buoy 7 cables to the north of it. The channel, maintained to a depth of 14.4 m and 14 m respectively, is well buoyed as indicated on the chart, most of the buoys being fitted with radar reflectors. After the buoys have been on station for any length of time, they all tend to assume a white appearance from the droppings of seabirds.
6. In addition to the buoys, the Approach Channel is marked by leading lights bearing 183°. The rear green light is exhibited at an elevation of 32 m from a lattice tower, and the front red light is on an elevation of 21 m on the roof of the ore loading installation shed at No. 3 berth.

7. The Fisheries Channel is marked by port and starboard hand buoys and is maintained to a depth of 6.5 metres.
8. Anchoring is prohibited inside a circle with radius of 7 cables round the Fairway buoy.
9. Transit lights bearing 246° mounted on steel platforms erected in the shallows to the SW, mark the centre line of the dredged area alongside berths 4 to 8 of the Main Quay.
10. During the winter months, as there is a chance of fog or mist, if wanting to proceed up the Main Channel, where pilotage is compulsory, ships should contact Walvis Bay Port Control on VHF Channel 16, working Channel 12, giving at least one hour's confirmation of arrival. In addition, ships should contact Port Control when 12 miles north or south of Pelican Point Lighthouse depending on their direction of approach. The Pilot Boarding Place is 5 cables NNW of the Fairway buoy.
11. The limits of the port are as indicated on the relevant charts. This port area together with the foreshore therein and the jetties, harbour works and harbour lands are controlled by the Namibian Ports Authority (NAMPORT).
12. Anchorage: Vessels may anchor at Anchorage areas No.1, No.2 and No.3, as indicated on the charts, and as advised and directed by Port Control. The holding ground of mud is generally considered to be good, but it has been known for vessels to drag in a 20 – 25 knot westerly wind. Ships should avoid anchoring in the vicinity of the spoil ground 1.3 miles N of the Spit buoy and the spoil and foul ground SSE of the Fairway buoy, where there is a wreck with 6 m of water over it. A further spoil ground 3.5 miles SSW of the Fairway buoy also exists.

1.15 PORT FACILITIES

1. There is a plentiful supply of fresh water for all purposes. This originates from a well sunk to the underground bed of the Kuiseb River. It can be supplied to ships alongside at the somewhat slow rate of 15 tonnes an hour. In an emergency it can be supplied to ships at anchor by tugs up to a maximum of 50 tonnes. At the tanker berth, water can be taken aboard at the rate of 10 tonnes an hour.
2. Fresh, frozen and dry provisions are readily available, and fish is plentiful.
3. There are four tugs, two large of 32 and 23 tonnes bollard pull respectively and 2 small tugs of 11 and 8 tons bollard pull, as well as 2 launches. The sea-going tugs are equipped with radar, VHF radio telephone, direction-finding apparatus and salvage and fire-fighting appliances.
4. Light marine diesel oil is available through pipelines at berths 1 to 5 till bollards 47 to 48.
5. Normal running repairs for deep sea vessels can be undertaken.
6. There are ample storage facilities for cargoes, as well as refrigerated storage, in the harbour area.
7. Cranes. Between Nos. 1 and 3 Berths there are 5 mobile cranes of 80 to 104 ton capacity. Between Nos. 4 and 8 Berths there are seven 4 ton cranes plus a 100 ton mobile crane. There are also two 25 ton overhead stacking cranes available. There are also numerous mechanical appliances available for handling cargo such as shunting tractors, fork lift trucks, haulers, trailers, front-end loaders, reach stackers and RTGs.
8. De-ratting exemption certificates can be issued.
9. In 2010 the port was used by 1 556 vessels with a total of 16 959 390 grt.

1.16 TOWN OF WALVIS BAY

1. The harbour was first discovered by Bartolomeu Dias in 1486, who named it the Bay of our Lady Immaculate. Early in the 16th century it was called Bahia da Baleas (Bay of Whales). After this it became progressively known as Walfisbaai (Dutch), Walwich Bay (British), Whale Bay (American), Walfisch Bucht (German) and various others until finally the present English and Afrikaans names were adopted. The enclave of Walvis Bay, 969 square kilometres, was annexed by Britain in 1879, and formed an integral part of the RSA until 28 February 1994 when it was handed over to Namibia.
2. The town had, in 2010, a population of just over 65 000. It is the centre of a large fishing industry.
3. There is a large modern hospital. The climate is healthy and there is no malaria.
4. The principal exports are salt, copper, lead and vanadium ores, and fish products.
5. The main imports are wheat, maize, sugar, foodstuffs, plant and machinery, chemicals, fuel, gas, oil and other petro-

leum products.

6. The town is connected to the Trans Namib Railway system, and there are good roads to Swakopmund and Windhoek.
7. There is an airport within 17 km of the town.

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