



# Cape Schanck Lightstation

**150th Anniversary**

**June 2009**

## Cape Schanck

Cape Schanck is on the eastern most point of a triangle of lights for the busiest area of Bass Strait.

Cape Otway and Cape Wickham on King Island are the other points of the triangle.

Early navigators thought that Tasmania was part of the mainland, and during the first years of Australian settlement ships sailed south of the island en route to Sydney.

In 1798 George Bass and Mathew Flinders proved that Tasmania was an island by sailing through the strait from East to West and rounding Tasmania in the *Norfolk*.

Cape Schanck was named by Lieutenant James Grant, RN, in March 1801 when he was making, in the *Lady Nelson*, the first full survey of the coastline after Bass and Flinders had proved the strait existed three years previously.

Grant named the 30 metre high headland after Captain John Schanck, inventor of the sliding keel with which the *Lady Nelson* was fitted.

On 3 May 1802, Flinders described Cape Schanck as 'a clifly head with three rocks lying off, the outermost of which appears at a distance like a ship under sail'.





## History

In the early 1800s large ships rarely took a chance on using Bass Strait because of the dangers involved and the lack of adequate navigational guidance.

With the establishment of Melbourne and the Port Phillip district in 1835, there was a rapid increase in shipping using Bass Strait.

By 1850 Victoria had 76,000 European inhabitants and six million sheep.

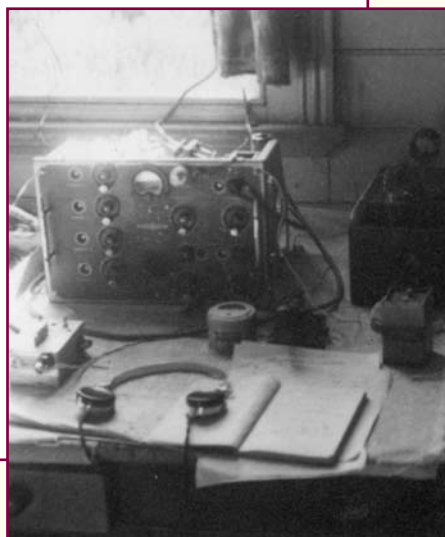
Although many had come overland from the northern districts, sea was the chief means of access. Overseas shipping was forced to call with passengers, cargoes and mails. Trade between Van Diemen's Land and the mainland was strong.

The main east-west shipping lane was through the northern reaches of Bass Strait, which was relatively free of islands, but ships which ventured into the southern reaches ran great risks.

In 1845 a committee inquiring into the best positions for lighthouses in Bass Strait recommended that lights be built on Cape Wickham, Cape Otway, Deal Island and Gabo Island.

The committee also recommended that lights be placed, at a later date when funds were more readily available, on Cape Schanck, to assist coasting vessels bound for Port Phillip, and on the south-western point of King Island.

The Commonwealth acquired Cape Schanck lightstation on 1st July 1915 when the Commonwealth Lighthouse Service assumed responsibility for all ocean lighthouses.







**Victorian Government Gazette**

**Tuesday May 31 1859**

**NOTICE TO MARINERS  
REGARDING THE CAPE SCHANCK LIGHT**

The light will be catadioptric - 1st class. Fixed and flashing white light, showing a bright flash every two minutes.

The light for a distance of eight miles upwards will appear as a steady light for the space of one minute, be suddenly eclipsed for the space of 25 seconds, then exhibit a bright flash for 10 seconds and be again eclipsed for 25 seconds when the steady light will re-appear.

When a vessel is within about six miles eclipses will be scarcely observable - a continued faint light being at that distance in clear weather, visible between the intervalls of the bright flashes.

The light will be 328' above mean level of sea, be visible 23 miles.

The tower is circular, built of stone and painted red.

Reef to southward of Pulpit Rock lies SSE 7 cables length from lighthouse - give it a wide berth.

It will be exhibited on the evening of 30th June 1859, and every night there after.



## Building

Completed in 1859, the tower, built of locally quarried limestone and painted white, is 21 metres high and with a focal plane 100 metres above sea-level.

An unusual feature of the tower is its stone stairway, as most stairways in southern Australian lighthouses were made of wrought-iron or cast-iron. Due to the softness of the stone, the stairs have been protected with a layer of lead which resembles a carpet. It is one of only three pre 1863 Australian lighthouses with a spiral stone stair.

The interior of the lantern room is remarkable for its varnished timber (South American mahogany) panelling and brass fittings, which have been kept in good order.

AMSA consider this lantern room to be the most original of all its lighthouses.

The present optic, a Chance Brothers first-order lens system, was installed in 1915 and is still in operation. An interesting and unusual feature of this light is the shutter arrangement that is still in use for providing a sharp light cut off at the sector edges.

The original clockwork mechanism, powered by descending weights, is also still in place and in working condition although the lens is today turned by small electric motors. It rotates on the original mercury bath containing 11.7 litres of mercury.

The light source is a 120-volt 1000-watt tungsten-halogen lamp producing a short flash of 1.7 million candelas visible for 27 nautical miles. This produces the lighthouse signature code as the Morse code letter 'N'. The light is also fitted with a red sector which indicates the location of inshore shipping hazards towards Western Port and Phillip Island.

Power is supplied from mains power with a diesel-electric standby generator.

Renovation of the tower and other buildings began in the late 1970s and included the rendering of the internal walls. Refurbishing the lantern was completed in 1984.

Ongoing maintenance continues at the site during six monthly scheduled visits.







## Keepers

Three keepers and their families originally lived at the Cape Schanck lighthouse. The head keeper had two assistants. Of the 106 listed keepers many were former mariners and head keepers were usually retired ship masters.

Life revolved around night watches which were divided into three periods, one for each man. During each watch the keeper had to wind the clockwork 74 rotations approximately every 45 minutes and pump kerosene to the burner.

Light-keeping remained a strict discipline until well into the twentieth century. No familiarity between a head keeper and his assistants was tolerated.

Cleaning the equipment regularly was part of the strict discipline enforced from the earliest days of lightkeeping, because lives depended upon the light's efficiency:

*'Glass lenses or prisms should be made clean every day, being first cleaned of dust by a soft brush and then rubbed with a soft chamois skin, free from anything that would injure the polish of the glass. The brasswork of the lamp should be kept clean by polishing with a fine rotten stone.'*

Because of its close proximity to Melbourne it was known affectionately by keepers as the retirees light and families at the Cape Schanck lighthouse did not experience the hardships of extreme isolation as suffered by families at other lightstations, such as Cape Otway or Wilsons Promontory.

Nevertheless, stores were forwarded twice a year on the supply vessel to *Dromana Pier* and then over road until 1939.

These days the lighthouse is automated, as are all Australian lighthouses.







## National Estate

Cape Schanck was listed on the Register of the National Estate on 21st October 1980 with the following Statement of Significance:

Cape Schanck Lighthouse and Keepers' Quarters, is significant as a substantially intact lightstation and one of the oldest substantial groups of lightstation buildings in Australia. The lighthouse is significant for its construction features.

It is built of stone with a decorative bracketed gallery, rock face base course, tapered window and door openings and rare stone spiral staircase.

The Keepers' Quarters (Assistant Keepers' Quarters and Museum and Engine Room) are significant as a relatively intact group of quarters.

The buildings demonstrate the typical configuration of lighthouse quarters buildings.

The lightstation location and its contrast between the substantial man made tower and house establishment, with the exposed, dramatic and remote location is significant for its considerable aesthetic power.

The lightstation is significant for reflecting the maritime history of the colonial era and for its contribution to the development and establishment of aids to navigation in Victoria.







## Recent times

The Australian Maritime Safety Authority (AMSA) was established in January 1991 as a statutory authority to enhance efficiency in the delivery of safety and other services to the Australian maritime industry.

Under legislation, AMSA coordinates Australia's national and international responsibilities in relation to maritime safety, protection of the marine environment and maritime and aviation search and rescue.

AMSA also coordinates Australia's involvement in world maritime forums.

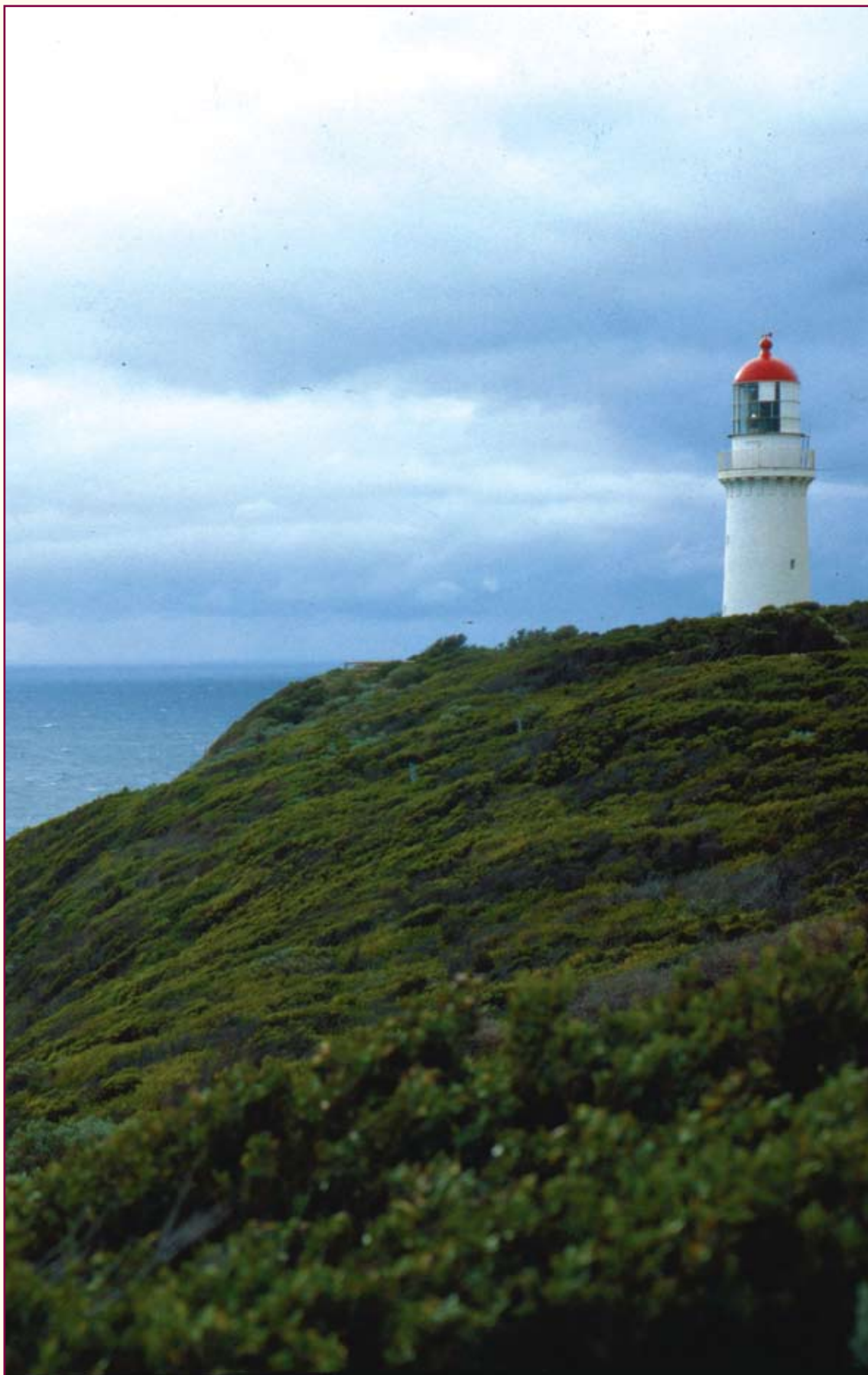
Management of AMSA is the responsibility of an eight member Board of Directors, including the Chief Executive. Members are drawn from industry and Government and bring appropriate skills and expertise to the conduct of AMSA's important commercial and safety functions.

Cape Schanck Lightstation is one of a network of over 470 aids to navigation maintained by AMSA around the 37,600 kilometres of Australia's coastline.

These aids to navigation are funded by the commercial shipping industry through the Marine Navigation Levy.

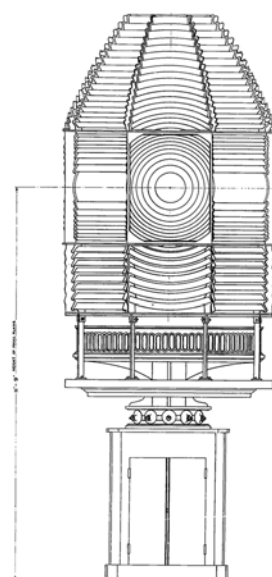


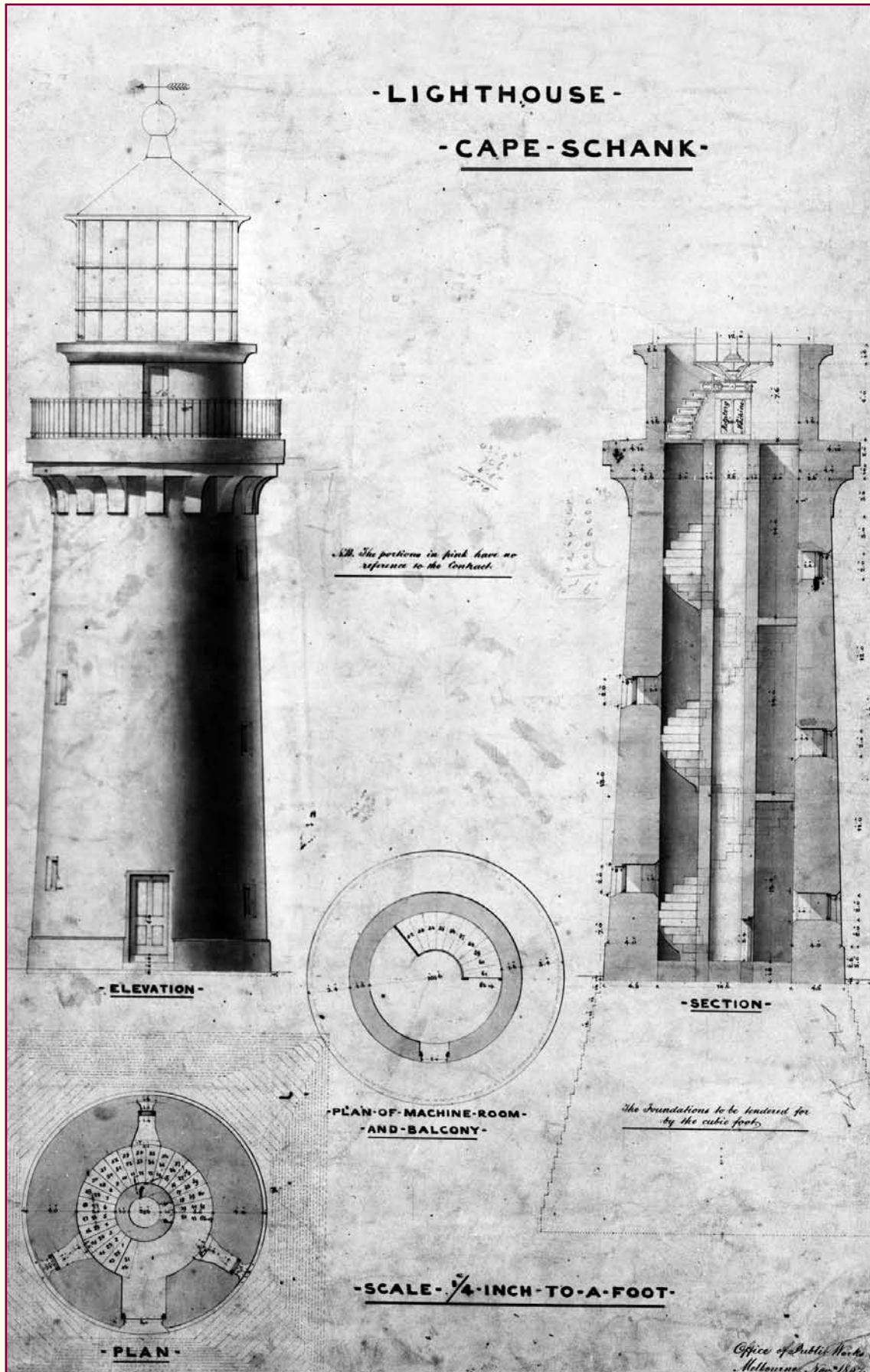




## Aids to Navigation Schedule ANS353-01

IALA AVAILABILITY	
CATEGORY:	1
POSITION:	Latitude: 38° 29.5720' S Longitude: 144° 53.1890' E Datum: WGS84
CHARTS:	AUS 788, 350
DAYMARK:	White stone tower and lantern with red cupola, 21 metres high.
CHARACTER:	Morse: "N" ( – • ) in 22.5 secs Long flash: 10.8 sec Eclipse: 5.8 sec Short Flash: 0.1 sec Eclipse: 5.8 sec
COLOUR OF LIGHT:	White, Red
SECTORS: (TRUE BEARINGS FROM SEAWARD)	Red: Shore - 290° White: 290° - 130° (200°)
LANTERN:	Chance Bros 12' diam; Drg. CN9-157
LENS:	Chance 920mm fr catadioptric, alternate 45° flash panels and drum lens segments; Drg CN9-158
LENS SPEED:	1 revolution every 90 seconds (2/3 rpm)
PEDESTAL:	RP3B: Twin Motor/Gear Box drive unit, Motorgear box units: C. Alger and Son TMCX, 3.66 RPM left-hand sprag clutch. Refer Drg CN9-455)
SHUTTER	
ARRANGEMENT:	Provides sharp light cut off at sector edges red/white at 290° TBFS white/obscuration at 130° (T.B.F.S.)
LIGHT SOURCE:	Lamp: 120V, 1000W, T.H., 3000hr Lampchanger: UVLA 590 Lantern Control SWBD: LS9 RM Daylight Control Switch: NAB1 Speed Sensor: Belltron 7021
POWER SOURCE:	Main Supply: 240V AC mains Standby Supply: Single Diesel/Alternator Engine: Lister Type ST3 Alternator: Dunlite: 12kVA Engine Control SWBD: EC8 Battery Control SWBD: ELV1, 24V control
REMOTE MONITOR:	Autodialler: EDAC SMS85 GSM Modem: ETM 9300-1 Modem ESN: N/A Telephone Number: 0448 252 290 Data Number: 0438 741 919 Power Supply: Common to Light
STRUCTURE:	Round Stone Tower, 13m high to balcony Refer Drg CN1-113
INTENSITY:	Long Flash: white: 90,000 cd; red: 22,000 cd Short Flash: white: 1,700,000 cd; red: 430,000 cd
ELEVATION:	100 metres
RANGE:	Nominal: Long Flash white: 19 nmiles red: 16 nmiles Short Flash white: 27 nmiles; red: 23 nmiles Geographical: 25 nmiles









Produced by the Australian Maritime Safety Authority  
to celebrate 150 years of operation of the  
Cape Schanck lighthouse, June 2009.



Australian Government  
Australian Maritime Safety Authority

