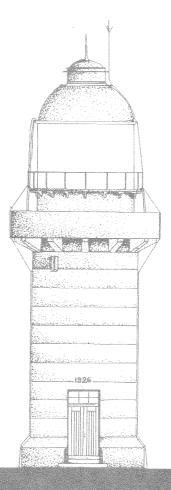
# Eclipse Island LIGHTHOUSE



by Nuala Scott

# ECLIPSE ISLAND LIGHTHOUSE Albany Western Australia

Nuala Scott



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# **ALBANY TOWNSITE & COASTAL AREA**

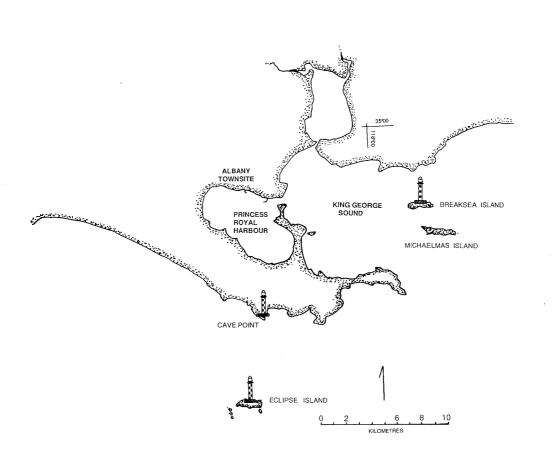


Fig 1 Map of Albany Town Site and Coastal Areas Drawing: N. Scott

# INTRODUCTION

On a windswept, lonely part of the south Western Australian coast, a small island was to become the focal point for shipping which passed around the southern coast of Australia. For over 50 years the Eclipse Island Lighthouse shone out its brilliant warning signal to aid the passage of these vessels.

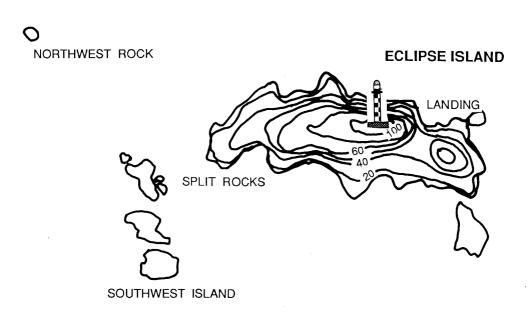
As early as 1912 recommendations were put forward stating the need for a light to replace the existing light on Breaksea Island. The light from the Breaksea Island Lighthouse was not visible to shipping coming from the west as its beam was blocked by the prominent Flinders Peninsular. Eclipse Island was much better situated on the coastline for the placement of a lighthouse, but its rugged nature was to create unforeseen difficulties for all who maintained the light.

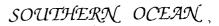
The construction of the Eclipse Island Lighthouse was long overdue. It was not until 1926 that the recommendations were acted upon and the construction of the lighthouse commenced. A single concrete tower placed on the highest point of Eclipse Island provided a base for the light. A brick triplex dwelling was built nearby to house three lighthouse keepers and their families. Their lifestyle proved to be a lonely and dangerous one, a unique existence that will never be repeated.

The Lighthouse operated for fifty years as a manned station until its automation in 1976. Though the signal still shines forth, its dominant position on the coastline has been replaced by a new lighthouse built on the mainland at Cave Point.

This is the story of the Eclipse Island Lighthouse: of the men who ran it, of their families; and of the invaluable support service that provided a life-line to the mainland and the rest of the world.

#### **ECLIPSE ISLAND**





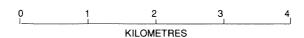


Fig.2. Map of Eclipse Island Drawing: N. Scott

# **ECLIPSE ISLAND**

Eclipse Island lies 8 kilometres S.S.W. from the townsite of Albany, Lat. 350 11'S, Long. 1170 53'E. The island has an area of 160 ha. It is 2.2 kilometres long and measures 1 kilometre at its widest part. The highest point of the island is 108 metres above sea level and it was on this spot that the lighthouse was constructed.

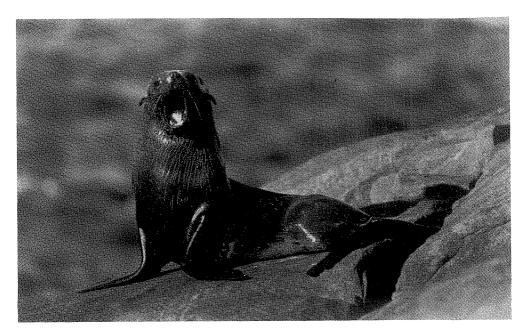
Although the island has a mediterranean climate, with moderate temperatures, its exposed location makes it vulnerable to the ravages of the strong winds that blow constantly in the area. Rain is a common phenomenon, the island having 183 rainy days per annum.

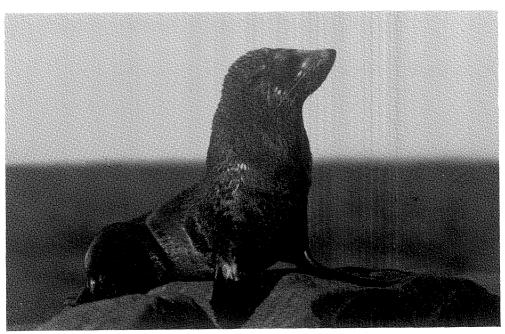
#### **FLORA**

The soil is poorly developed. Over most of the island herbland and heathland predominate. In the sheltered valley on the north eastern side of the island two forms of melaleuca species grow. They reach heights of 1 1/2 and 3 metres depending on the species. An introduced species, the Arum Lily, also flourishes on this sheltered slope. This presumably spread from one of the lighthouse keepers' gardens. The Arum Lily's presence on the island has created ecological problems; dying off in summer it leaves much bare soil exposed and susceptible to erosion.

#### **FAUNA**

Seals and Sea Lions are both present on Eclipse Island. Sea Lions were only reported as casual sightings by the lighthouse keepers whereas Fur Seals exist in larger numbers. In 1975 seventy Fur Seals were counted in the gorge at the north east end of the island. Their presence on Eclipse Island is extremely important for the continued existence of this species, as their numbers have declined both in distribution and abundance in WA





Figs.3 Seals on Eclipse Island Photographs: E. Smidt

Lizards are the most numerous reptiles on the island with four species present; the Marbled Gecko, Kings Skink, Salmon-bellied Skink and the Yellow-bellied Skink. These can be seen over most of the island, sunning themselves, or running through the low scrub cover which hides them well. They made wonderful pets for the lighthouse keeper's children.

It is thought that one of the first introduced animals was a type of English Hare which was used as food for the lightkeepers. Rabbits are now numerous and are of a much larger size than normal. They did not create a great problem whilst the lighthouse was manned but have since bred up to large numbers and are causing erosion.

Birdlife on Eclipse Island is limited to species that venture far out to sea. At present the breeding species are limited to five varieties. Four of these: the Little Penguin, the Great Winged Petrel, the Flesh-footed Shearwater and the Little Shearwater are hole nesting birds. The remaining nest breeding bird is the Silver Gull. Other varieties known to visit the island are the White-Faced Storm Petrel, the Red-tailed Tropic bird, the Sooty Oyster Catcher and the Pacific Gull.



**Great Winged Petrel** 

The first bandings of bird species on the island were occurred in 1956 by Mr J. Warham. Dr. P.J. Fullagar (CSIRO) carried out further studies of the birdlife in the 1970's. The Great Winged Petrel was found to inhabit most of the island and in numbers more numerous than any other species. "Densities of up to 23 per 400 square metres were found" even breeding in tunnels "against the

walls of the very noisy electric power generation plant building". A breeding population of between 10,000-15,000 pairs was recorded in 1977.

#### HUMAN PRESENCE

The first recorded sighting of the island was made on Wednesday the 28th of September 1791 by Captain George Vancouver. Aboard his vessel, the *Discovery*, he was "Bound on a Voyage of Discovery to the North Pacific Ocean and Around the World".

George Vancouver recorded in his log:

In the morning of the 28th, we found our progress had been very slow along the coast...we had again the opportunity of observing the sun eclipsed, but were not so fortunate as to notice its commencement, or its greatest obscuration...The land considered on Tuesday night as the eastern most part of the main now appeared to to be an island, beyond which were seen a high rocky bluff point, and a high mountain forming the eastern most land in sight...the land appearing like an island N16W to N24W was now seen to comprehend a cluster of rocky barren isles... Many whales were playing about the ship this morning. He went on to name the barren rocky cluster of isles, by the name of Eclipse Islands.

Sealers later ventured to the island but no permanent settlement was made until 1926 with the construction of the Eclipse Island Lighthouse.

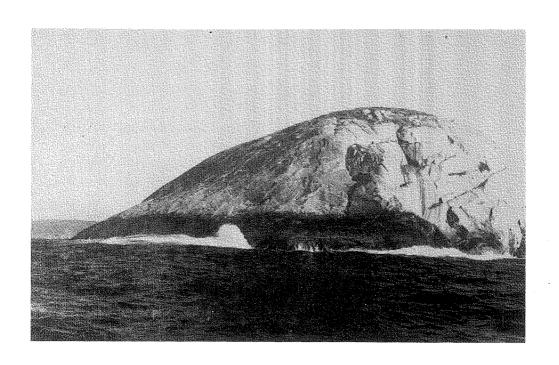


Fig.5. Eclipse Island Cliffs Photograph: E. Smidt

# THE LIGHTHOUSE

The lighting of the coast of Australia had been the responsibility of the various states until 1911. The passing of the Lighthouse Act (1911) allowed the Commonwealth to take over responsibility for all lighthouses and marine marks. However, the states still maintained some local lights, beacons and marine marks established in ports, rivers and harbours. This Act is still in operation.

After the introduction of this new Act, Commander C.R.W. Brewis R.N. studied the coast of Australia from King George Sound to Cambridge Gulf for the Commonwealth Department of Trade and Customs and made his report - "Lighting of the West Coast of Australia, 1912". In it he recommended that "a light on Eclipse Island is very urgently required." It was to be "a dioptric flashing light to be established on the summit of Eclipse Island (347 feet). Attended by 3 lightkeepers. Connected by wireless telegraphy with Albany, distant 15 miles. Also a subsiduary light, red, fixed, showing over Maud Reef."

The lighthouse was not established until 1st July, 1926. A 98ha. reserve on the island was claimed by the Commonwealth Government for this purpose. Men and materials to build the Eclipse Lighthouse were transported to the island on the steam vessel, *Governor Musgrove*. Local men such as Charlie Jackman and Snowy Harrison helped in its construction. An 11m circular, ferro-concrete tower housed the light source which weighed more than 10 tons, measured 4m in diameter and was 3 1/2 m high.

The original light source was built by Chance Brothers and Co. Ltd., Marine and Aerial Lighthouse Engineers and Constructors of Smethwick, Birmingham, England in 1920.

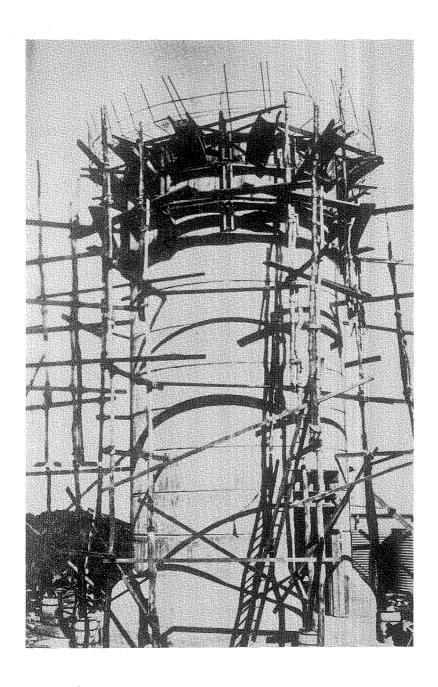


Fig.6. Construction of the Eclipse Island Lighthouse (Courtesy of Albany Residency Museum)

#### **ECLIPSE ISLAND LIGHTHOUSE**

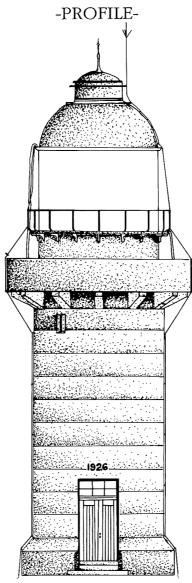


Figure 7. Eclipse Island Lighthouse - Profile, taken from the original plans. (Courtesy Dept. Transport and Communication)
Drawing: N. Scott

# **ECLIPSE ISLAND LIGHTHOUSE**

-SECTION-

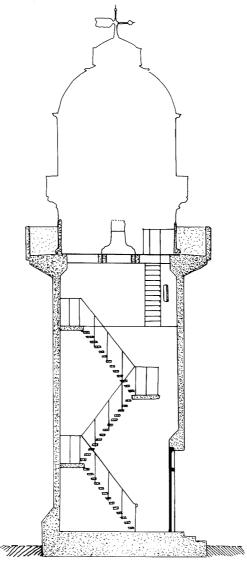


Figure 8 Eclipse Island Lighthouse - Section, taken from the original plans. (Courtesy Dept. Transport and Communication)
Drawing: N. Scott

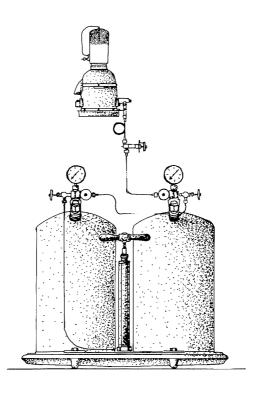


Fig. 9. 'Chance' burners, oil and air containers, pump and fittings. Drawing: N.Scott

The light was powered by vaporized kerosene burning in an incandescent mantle. This light was magnified through revolving lenses which, depending on the number and grouping of their panels, projected a distinctive beam of light in a specific direction and sequence. Each light along a section of coastline had to be easily distinguishable from the next.

The lenses were particularly large, measuring approximately 3m high by 1 1/2m wide. They were mounted on a pedestal which contained the machinery to revolve them. This was then encased in a substantial brass housing for protection from the weather, and placed on top of the tower.

# THE LIGHTKEEPERS

The main responsibility of the lightkeepers was to maintain the burning of the light at all cost. Three lightkeepers and their families were stationed on Eclipse Island; a head-keeper and two assistants. Many different men took these positions in the 50 years that the lighthouse was manned. The men and their families lived in a building a short distance from the lighthouse. Initially the normal working roster for the light keepers was a six hourly shift, seven days a week. The rostered hours were 6am to noon, noon to 6 pm and 6pm to midnight. This was later altered to an eight hourly shift.

A typical example of the log book dated November 1939.

Day & Date	Hour	Wind '	Weather Bar.	. Ther.	Remarks
Monday 9th	6a.m. Noon	SW 4 SSE 3	29858 BG"956	58.5 58.0	Chipping and scraping rails
	бр.m. Mdgt.	SSE 3 E 4	BG"962 BG "982	62.0 60.5	around lantern. Lighthouse duties and lookout. B. Bishop.
Tuesday 10th	6a.m. Noon 6p.m. Mdgt.	ENE5 E 5 E 6 NE 6	OQ"950 BBQZ"896 BQZ "808 BGQ"806	60.0 60.0 62.0 62.0	Filled container Various odd jobs in L.house and around quarters L.house duties and lookout. B. Bishop.
Wednesday 11th	ба.m. Noon бр.m. Mdgt.	ENE6 ENE6 ENE6 ENE6	OQ "736 BGQ"700 GQZ"632 BGQM "596	62.0 61.0 64.0 664.0	Rigged passenger basket Overhauled guy ropes etc. Observed 2 mins. silence L.house duties and lookout. B. Bishop.

An additional task for the keeper on duty was to record the meteorological conditions of the day. In the 1930s this information was forwarded to the Central Weather Bureau in Melbourne. The lighthouse was also used as a Lloyds signal station registering shipping movements. Communication from the island to the mainland was initially through a telephone cable that left the mainland near Cave Point, now known as Cable Beach. This subterranean cable broke and was replaced by a radio which continued to be the main method of communication during the manned life of the light. The keepers called the Pilot Station twice daily, usually at 9am and 3pm, informing the harbour master of shipping patterns. It was by the same method that any groceries and stores were ordered, with the harbour master passing any messages to the local shopkeepers. In the 1930s supplies, groceries or fuel needed had to be ordered weeks ahead as they were transported by boat monthly. It was not until after the 50s that a fortnightly service was commenced. The supplies were landed from a small cove on the north-east end of the island. In the early days a flying fox was used to get the stores to the lighthouse. This was later replaced by a tramway.

Many ex-servicemen were keen to take up positions as lightkeepers after the war, as the work required no prior training. The men were carefully vetted for their compatibility and willingness to work with others. These were necessary requirements given the extreme remoteness of sites. The Head Lightkeeper had absolute authority. His duties included the maintenance, repair and tidiness of the entire station. This also included the enforcement of dress standards. The lightkeepers building initially contained little furniture and the only heating was by a wood stove, but the amenities gradually improved during the life of the lighthouse as furniture was added and gas installed.

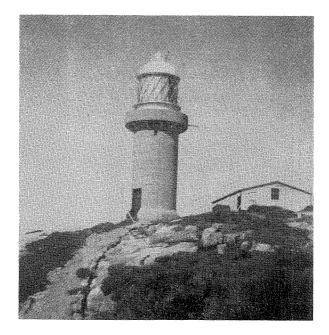


Fig 10 Eclipse Island Lighthouse Photograph: A. Bentley

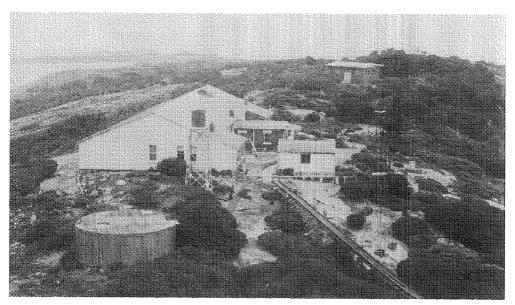


Fig. 11 Triplex Building and Tramway
Photograph: G. Walker

The families of the lightkeepers suffered particular hardships. The children's schooling was a traumatic problem in the years before correspondence school began. Many of the children were sent to live in Albany with friends and relatives to enable them to attend local schools. This was hard on children and adults alike as it was difficult to arrange transport home during the school holidays and often the parents would see their young children only once a year. The problem of children's schooling and their final placement in annual education was recognised and an the workforce allowance was paid to the keepers. They were also notified of any Commonwealth Public Service Examinations that were to take place in case their children wished to undertake the exam for a possible future Government position. This was little comfort for the years of separation.

Another recurring problem encountered by the lightkeepers was the constant lack of stored water on the island. In 1955 the supply of two 20,000 gallon concrete water tanks was proposed and costs were calculated but it was not until a severe shortage occurred in 1957 that any further action was taken. At that time the situation became so desperate that this telegram was sent.:

ECLIPSE ISLAND WATER SUPPLY ONLY 1500 GALLONS ON 9TH. NO GOOD RAINS LIKELY IN FORCASTABLE FUTURE SO ANTICIPATE SITUATION WILL BECOME ACUTE SHORTLY STOP.

SIX ADULTS AND SIX CHILDREN ON ISLAND STOP.
PLEASE ADVISE BY TELEGRAM WHETHER FAMILIES
SHOULD BE EVACUATED OR ATTEMPTS MADE TO
SEND WATER IF SITUATION BECOMES CRITICAL
STOP. LATTER WOULD BE DIFFICULT AND VERY
COSTLY.

Luckily for all involved heavy rains were experienced three days later.

Although tanks were then constructed the water problems did not cease. During the 1960's the tanks were constantly beleaguered by leaks. In 1968 new fibreglass tanks were erected. This did not solve the problem of the water supply entirely, however, as in December 1972 another severe water shortage developed. This critical situation was not alleviated until supplies were brought to the island by the *Cape Don* on the 19th January 1973.

Eclipse Island was a remote location: life was lonely and the isolation from the mainland immense. It took a special type of person to enjoy this work. Many of the men took an active interest in the island. Fishing was one of the most favoured pastimes of the keepers as edible fish were plentiful in the deep waters and provided a welcome source of fresh food.

It was lightkeeper A. Blythe who made the earliest recordings of the breeding seabirds on the island. In 1938 he forwarded specimens of the Little Shearwater to the W.A. Museum, this was followed up by his successor A.V. Newman, who recorded details of that species for the next three years.

Other tasks were less welcomed. It was in July 1937 that lightkeeper B. Bishop wrote to the President of the Zoological Gardens in Perth in reply to a request to catch additional seals for their display:

In answer to yours dated 23.7.37 I have to advise you that the staff at Eclipse cannot comply with your request as to the catching to forwarding of seals. We are all of the opinion that the work is too dangerous. Even after capture it is no light work getting them to the landing owing to the rugged nature of the island. On the last occasion we caught seals the three of us suffered numerous bruises and abrasions to say nothing of torn clothes etc. I trust you will agree the conditions justify our refusal.

# THE SUPPLY SERVICE TO THE ISLAND

Regular supplies to the island had to be maintained. This was an extremely dangerous task as there was no suitable harbour. The dark granite cliffs which surround the island drop down 40 to 50m from sea level to the sea bed below, providing difficult anchorage. A large boat could not safely approach the island, so the supply boat carried a small tender which was rowed close to the shore and from which any transfer of goods and passengers took place.

From a small cove on the north-east end of the island a landing was constructed approximately 15m above sea level. It was here that a derrick and winch house were built. The derrick had a free arm that swung out over the water and lowered a net or basket to a waiting dinghy. The net was filled with cargo whilst passengers were generally placed in the wicker basket. Initially the basket was made of solid wicker cane about 90cm square but this was difficult to climb into and balance on the dinghy. The alternative was a ladder that could be lowered down the rock face. This was considered too dangerous as the dinghy could be holed by the metal ladder as the swell dropped and suddenly rose again. In 1952 Arthur Bentley took over the run. He insisted that passengers should hold on to the rope that supported the net full of cargo and be lifted up with the load for their own safety.

A solution was found to this difficult problem, when in 1956 a collapsible basket was installed. It was intended to make life much easier for passengers as the sides lay flat on the dinghy and access was much simpler; however it created more problems as the large swells common around the island caused the dinghy to rise and fall dramatically and the sides of the basket to flip up suddenly as the dinghy dropped, catching the passengers unawares. The collapsible canvas basket proved too frightening for the passengers and eventually a solid cane basket with a door was installed.

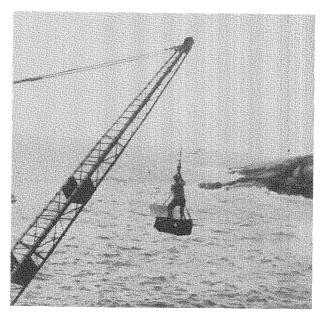


Fig. 12. Winching people up to the island on the net with a load of supplies. Photograph: A. Bentley

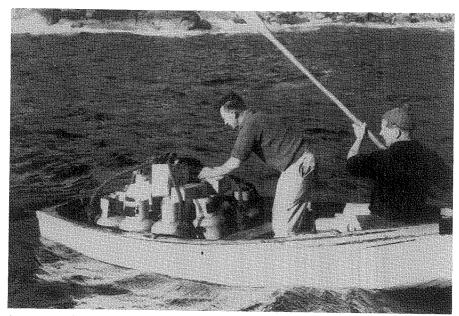


Fig 13 Arthur Bentley supplying gas bottles to the island on 22/8/1962. Photograph: A. Bentley

There were two types of supply services to Eclipse Island. The Commonwealth Government provided large ships to visit the island annually. They transported major bulk items for the continued running of the light and provided a service facility for major maintenance and repairs.

A local service provided items needed for the daily survival of the lighthouse keepers and their families, their transportation needs and their main contact with the rest of the world .

#### THE GOVERNMENT SERVICE

In the years following the construction of the light the Commonwealth Government's annual supply service provided goods such as bulk kerosene to keep the light burning and firewood to be used by the lightkeepers for heating and cooking. Vessels such as the *Governor Musgrove* and *Kyogle* were used. These early vessels were replaced in later years by ships built specifically for this run. They included a series of vessels named the "Cape" ships. The *Cape Otway* and *Cape Don* were the first of the line.

In 1970 the *Cape Don* was used to lay a mooring for the island. At this time the derrick was also moved to a more suitable position. In 1971 during work on the island two men from the *Cape Don* were being lifted in the basket up to the island when the cable holding the basket came off the arm of the derrick. The men plunged helplessly to the rocks below. One man was killed, the other severely injured. This incident was the first major tragic accident in the history of the lighthouse. This excellent safety record is a mark of the skill and tenacity of all the people who lived and worked on Eclipse Island.

#### THE LOCAL SERVICE

A brave and determined group of men were given the task of providing food, supplies and transport to the lightkeepers. This role was carried out by a number of different men and their vessels. Initially they undertook a monthly service to the island. In later years a fortnightly service was introduced. These men were on constant standby in case of an emergency or the need for an urgent supply. This created constant stress on their own families and many planned functions were missed. In the back of their minds was always the knowledge of the turbulent seas and the treacherous King Waves renowned in the Albany area.

The *Awhina*, a 105' steam tug belonging to Armstrong & Waters, and the *Waratah*, a 50' schooner belonging to V. Farley, were used for this service until 1928. The *S.T. Bonthorpe* an ex-trawler, belonging to the Albany Tug Co., serviced the island from 1928 until 1939 when she went to the Fremantle area for use as a minesweeper.

The journey out to the island was long and dangerous in bad weather. The department did its best to ensure that there were no unecessary trips. This letter was sent by Mr J.J. Airey of the Transport Department to the Albany Tug Co. on 8th February 1935.

The Head Lightkeeper is in communication with the Harbour Master by wireless telephone and will do all in his power to assist you in the matter of supplying information as to the force and direction of the wind, the state of the sea disturbance, and any other weather conditions at the island, in order that fruitless trips will not be made to the island.

In 1939 Stan Austin and his father were given the contract for the run. At this time they also carried out the ships lines for vessels mooring at Albany Harbour, transported ships' agents to their waiting vessels, and customs' agents and agricultural protection personnel to vessels awaiting a berth. This extra responsibility suited them well. They used their vessel *Dauntless* and later *Kestral* for the run. The *Kestral*, a 30ft. yacht, can still be seen plying the waters around Albany today. A 12ft. tender would be pulled behind the yacht as there was limited space on board. This slowed the progress of the vessel and an average voyage would take about 5 hours.

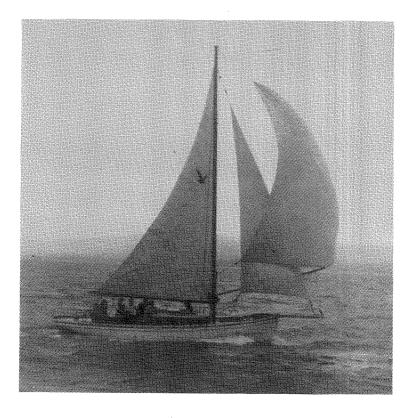


Fig. 14 The *Kestral*.
Photograph: S. Austin

Stan Austin carried out this service until 1952 on a monthly basis. The Austins collected groceries from Allan Hill Grocers, and meat from Cobley & Co Butchers of Albany. The lighthouse keepers would place orders for all sorts of commodities and these shop keepers would try to find whatever they required.

Mechanics would come down from Perth four times a year to service the light. The Austins would take them on their normal run or make a special trip for them. No matter how urgent a job or supply, the weather always acted as a constraining influence. Landing was impossible due to rough weather, the island then became totally isolated.

From 1952-69 Arthur Bentley's 32ft. launch, the *Warrior*, was used. She carried the captain and a crew of two or three, the number depending on cargo size and the number of passengers. Due to the dangerous nature of the landing, one person was needed just to assist the passengers into the basket. The *Warrior* could carry more stores than the *Kestral* and the dinghy could be carried aboard, making the voyage to the island easier.

All sorts of cargos were landed on the island. The *Warrior* carried such things as a 25,000 wt of cable and the replacement legs for the flying fox which consisted of 28ft. lengths of jarrah. Large items such as these were floated to the island before being winched up the rock face. Not an easy task! In 1960 gas for cooking and heating water was installed on the island and the cargo included twelve large gas bottles and ten 44 gallon drums of fuel.

Arthur Bentley discontinued the service in 1970. Graham Auguston and Co. in their 35ft. ply launch *Peters Hope* took over the run for a year until Don Pearson, who was to follow them, completed the building of his boat *Leah*.

The *Leah* was a 40ft. steel-hulled vessel. She was more modern than any other vessel which had been used on the run. She was equipped with two engines and a toilet, - sheer luxury! The journey to the island would take 2 1/2 hours. Don Pearson would leave at 3am on a Friday morning, loading up with groceries on the Thursday night. However, the meat was collected just before leaving. He was given a key to the local butcher's shop and would venture into the cool room in the early hours of the morning to collect the order.

At this time Don Pearson was paid \$225 per trip plus \$10 per hour waiting time if someone was dropped off at the island. The men would enjoy waiting as it was useful fishing time.

In 1970 a mooring was put down, and a new derrick fitted. The arm on the new derrick was not long enough to allow the vessel to be tied to the mooring and be suitably placed to receive the basket, so the arm of the derrick had to be used at a wider angle than usual. The front of the vessel was tied to the mooring, the back was swung around and tied off to a hook on the island and only then could the basket land safely on the deck.

The Leah continued the run until 1976 when the station was demanned and the light automated.



Fig 15 The *Leah* . Photograph: S. Austin

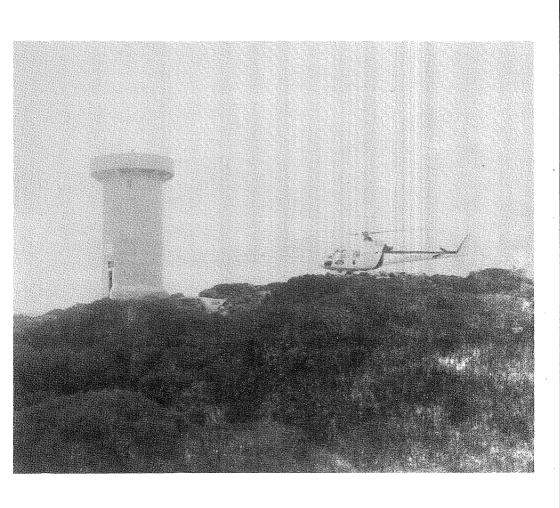


Fig.16 Tower and Helipad Photograph: G. Walker

#### CLOSURE AND AUTOMATION

In 1976 the light was replaced by an acetylene apparatus and automated. The station was demanned and the houses declared surplus. A massive operation was launched to clean up the island, leaving it as environmentally sound as possible. A helipad was constructed and the light is now serviced by helicopter twice yearly.

The size of the Commonwealth reserve has been limited to a small area around the base of the light and the heliport. What remains is the tower base with a small light on top. Two of the last lightkeepers were Mr Martin and Mr Kerrod. Mr Martin gave up the profession whilst Keeper Kerrod was transferred to the Leeuwin Lighthouse. Lightkeepers are still employed in three lighthouses around the state where the Transport Department considers it is warranted by the tourist value.

While the optic was being dismantled, its historic significance was recognised, and Brian Lawrence, the town's Tourism Officer at that time, organised for it to be landed at Albany instead of Fremantle as had been intended. Subsequently the optic was offered by the Commonwealth Department of Transport to the Western Australian Museum for the people of Western Australia.

In 1986, as part of the 'Albany Tomorrow' programme, the State Government provided \$300,000 for the construction of a special-purpose building so that the lenses and lamps could be displayed to their full potential. The building, which was opened on 2 January 1989, is part of the Albany Residency Museum complex and commemorates an important stage in the history of Albany.

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