Hook Island Underwater Observatory

Other Names	N/A	
Street Address	Hook Island	Hook Island
Title Details/ GPS Coordinates	4HR1022	

Historical Context

Hook Island was first settled in 1910 when Arthur Abell established timber getting in the north-west corner of island. The island developed slowly, however, suggestions that a tourist resort was going to be constructed c.1930-1931 prompted Monty Embury to obtain a special 30 years lease over the entire island. The lease was forfeited on 1 August 1936, the same year that the island was declared and gazetted a National Park.

In 1956 Frank Lucas began negotiations with the Queensland State Government to obtain a lease on the island. In 1959 a lease was approved over a small area of shoreline on the south-east headland of Hook Island opposite the northern tip of Whitsunday Island. Lucas, who had previously worked in the Torres Strait pearling industry, became an advisor to Vince Vlassoff in Cairns when Vlassoff was having the Green Island Underwater Observatory constructed in 1954. This inspired Lucas to investigate the possibility of establishing another observatory along the coast of Queensland. After exploring a number of sites, he chose Hook Island to pursue his vision. By 1965 the construction of the underwater observatory was underway using Lucas' design. The steel underwater body, entrance and exit tubes were constructed in Mackay and preliminary surveys of the sea floor were undertaken. In 1967 the underwater body was towed to Hook Island where it was winched onto the beach for further work. This additional work incorporated the welding of 300X150 millemetre rolled steel joist beams to the base of the body, which protruded approximately 3.5 metres beyond the sides of the underwater body. Simultaneously 550 tons (498.9 tonnes) of concrete blocks were cast with rebated bottoms. These were designed to allow the blocks to sit neatly over the RSJs and secure the structure onto the seafloor.

To create a level seafloor, blasting was undertaken and reinforced concrete piles were driven in. A concrete slab was poured around and over the tops of the piles so as to form a base. The main structure was then floated to the site, flooded and jockeyed into position on the seafloor slab. The valves were then opened and flooded which allowed the structure to settle. Concrete ballast blocks were lowered into position over the RSJs and were placed in a double layer with the top of the upper layer located just below the level of the observatory windows. The body was then pumped out. Preparations also included sinking 200 old car bodies around the structure to provide a habitat for fish and coral.

The base of the observatory measured 24 feet (7.3 metres) by 14 feet (4.2 metres) and was installed 30 feet (9.1 metres) below high tide. Spiral staircases were installed in each of the two 10 feet (3 metres) wide tubes providing access to the viewing area. Jet air-conditioning with fresh air changing every three minutes provided the underwater section with pleasant surroundings. The cost of the base of the observatory is estimated to have cost over £300,000.

While the observatory was under construction, Lucas also developed a business plan. This resulted in the formation of Great Australia Coral Reef Observatories Pty Ltd in 1966 of which Lucas was managing director and Lindsay Heiser, a Brisbane solicitor, was company secretary. Planning also involved obtaining two special leases from the Queensland Government for a period of 30 years from 1 August 1966. The SL30384 lease encompassed 22 acres (8.9 hectares) of land, including two small bays and beaches to the east and west of the observatory. The SL30383 lease comprised 235 square metres of sea-bed which is where the observatory is located. At the time of completion in 1969, Lindsay Heiser acquired a majority of the shares and soon took over the control and management of the Great Australian Coral Reef Observatories Pty Ltd. By May 1969 the underwater observatory was complete. It was described by a member of the Promotional Council for the area as 'the greatest tourist drawcard ever to be established in the Whitsunday area'. The observatory was officially opened on 13 November 1969 by the then Minister for Tourism, Mr Herbert. At the time of the official opening the underwater observatory was not connected to land but had a floating pontoon and staircase which provided access to the site. This was rectified by 1970.

On 17 January 1970 Cyclone 'Ada' struck the coast and decimated the coral within the viewing area. Damage to the observatory included the breakage of the windows above sea level, the loss of the adjustable landing platform on the seaward side and its hinged walkway. However, the underwater section and a portion of the new jetty remained intact.

Hook Island's popularity as a tourism destination was heavily influenced by the promotion of the observatory during Heiser management. The Heiser family continued to manage the company and the island until 1980 when John Hannay of Mackay of Oriental Express (Transport) Pty Ltd purchased the lease in December 1980.

During the 1980s, the island's resort facilities were expanded, and the observatory continued to be a major tourist attraction. However, financial difficulties saw the management change hands a number of times between 1981 and 1990s. Since the 1990s, the lease was been held by a number of other tourism operators.

Due to aging displays and general wear and tear, the observatory closed c.2009-2010. Cyclone Anthony in 2011 caused additional damage to the observatory.

Physical Description

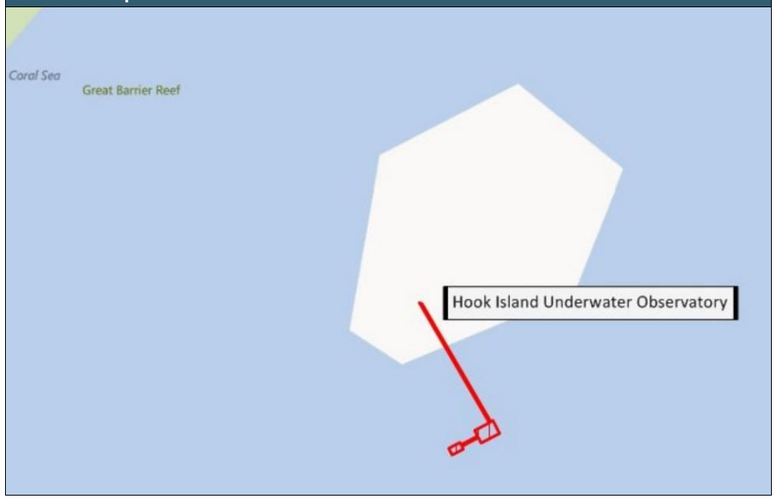
The Hook Island Underwater Observatory is located off the south east headland of Hook Island within a Special Lease area of 235 square metres. The Underwater Observatory is accessed either by land along a timber jetty which connects with stairs which in turn leads to a walking track across to Hook Island Resort or by sea from a small wharf attached to the jetty at its Observatory end.

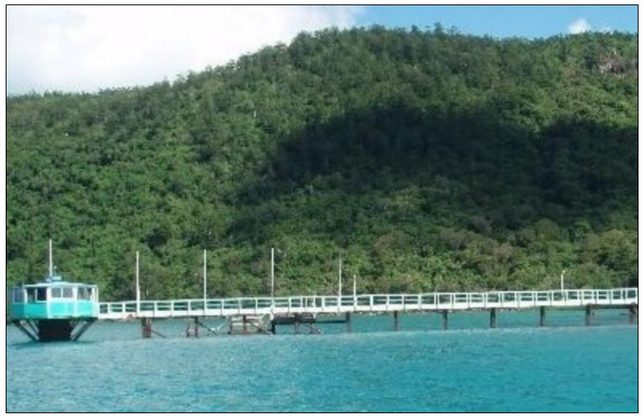
The Observatory is comprised of an above sea level section and an underwater section. These are connected by two metal tubes which provide access between the two sections. The above sea level section is an irregularly shaped rectangle constructed of timber and metal, with a low hipped roofline. The entire structure from mid wall height has aluminium

Heritage Significance

Criteria	Definition
A	*The place is important in demonstrating the evolution or pattern of the region's history.*
Statement	The Hook Island Underwater Observatory is important in demonstrating the evolution of reef based-tourism activities in the Whitsundays, particularly during the 1960s and 1970s. As a purpose-built marine observatory, it has attracted both local and international visitors and is significant for its contribution to our understanding of the development of tourism in the region.
B	*The place demonstrates rare, uncommon or endangered aspects of the region's cultural heritage.*
Statement	The Hook Island Underwater Observatory is unique as the region's only also a rare example of early tourist facilities in the Whitsundays.
F	*The place is important in demonstrating a high degree of creative or technical achievement at a particular period for the region.*
Statement	The Hook Island Underwater Observatory is significant as an intact, innovative and purpose-built underwater marine observatory that provided tourists with access to observe an underwater environment in a comfortable and safe structure.

Location Map





Source: Department of Environment and Heritage Protection.

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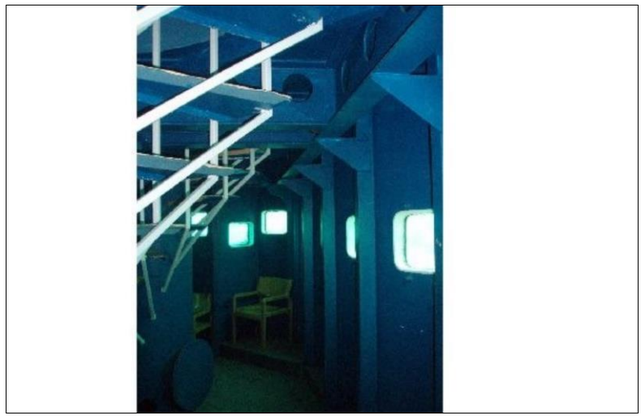

Source: Department of Environment and Heritage Protection.

framed sliding glass windows. Two circular ventilation shafts protrude from the roof, each of which are aligned with the access tubes that join the two sections. Each ventilation shaft is capped and has a light attached. The entire upper section is balanced on the two metal tubes with RSJs providing stabilisation being attached to the outer under rim of the structure and anchored to the tubes. Internally the upper section has timber flooring and the ceiling is lined with hessian.
Unmaintained displays are located on top of specifically constructed timber frames; these consist of ponds lined with shell grit. Several glass showcases provide information on various aspects of the Whitsunday environment and the metal tubes have murals depicting sea life painted around them. The two metal tubes connecting the upper section with the lower are of BHP Port Kembla steel; a sliding door provides access to the lower section which is reached by way of circular stairs (19 steps) that wind downwards within the tube. Entry is via one tube with exit via the other tube. Within each of the tubes is a ventilation shaft and once within the underwater section the stairs wind around them attached by steel struts.
The underwater section of the observatory is comprised of steel and has thirty-six viewing portholes with rounded corners. The flooring is carpeted, with step up sections at each of the portholes provided to accommodate viewing the corals and sea life outside.

Integrity	Fair	**Condition**	Poor
Statutory Listings	No statutory listings		
Non-Statutory Listings	No non-statutory listings		
Inspection Date	Place not inspected.		

References
DERM. State Wide Survey Draft Research Report, 2007.